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REMEDIAL INVESTIGATION REPORT SITE 1 NCBC GULFPORT MS
1/1/2010
TETRA TECH NUS

Comprehensive Long-term Environmental Action Navy

CONTRACT NUMBER N62467-04-D-0055



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Remedial Investigation Report for Site 1 (Disaster Recovery Area)

Naval Construction Battalion Center
Gulfport, Mississippi

Contract Task Order 0065

January 2010



NAS Jacksonville
Jacksonville, Florida 32212-0030

**REMEDIAL INVESTIGATION REPORT
FOR
SITE 1 (DISASTER RECOVERY AREA)**

**NAVAL CONSTRUCTION BATTALION CENTER
GULFPORT, MISSISSIPPI**

**COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT**

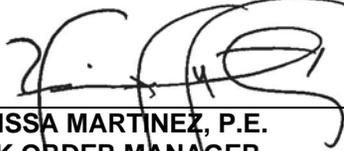
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JANUARY 2010

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PROFESSIONAL CERTIFICATION
Remedial Investigation Report
Site 1 (Disaster Recovery Area)
Naval Construction Battalion Center
Gulfport, Mississippi

This document that describes the Remedial Investigation for Site 1 (Disaster Recovery Area), Naval Construction Battalion Center, Gulfport, Mississippi, has been prepared under the direction of a Mississippi-registered professional engineer. The work and professional opinions rendered in this report were conducted or developed in accordance with commonly accepted procedures consistent with applicable standards of practice. If conditions are determined to exist that differ from those described, the undersigned professional engineer should be notified to evaluate the effects of additional information on the assessment described in this report. This report was developed specifically for the referenced site and should not be construed to apply to any other site.

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January 7, 2010

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ACRONYMS

2,4,5-T	2,4,5-trichlorophenoxyacetic acid
2,4,5-TP	Silvex
ACH	Age-dependent Adjustment Factor
ATSDR	Agency for Toxic Substances and Disease Registry
ASL	above screening level
AWQC	Ambient Water Quality Criteria
BCF	bioconcentration factor
BHC	benzene hexachloride
bls	below land surface
BNA	base/neutral/acid
BSL	below screening level
C	carcinogen
Cal EPA	California Environmental Protection Agency
CCI	CH2MHill Constructors, Inc.
CERCLA	Comprehensive, Environmental Response, Compensation, and Liability Act
CH ₄	Methane
CLEAN	Comprehensive Long-Term Environmental Action Navy
cm	centimeter
cm ²	square centimeters
CO	Carbon monoxide
CO ₂	Carbon dioxide
COC	chemical of concern
COPC	chemical of potential concern
CSF	cancer slope factor
CSM	Conceptual Site Model
CTE	Central Tendency Exposure
CTO	Contract Task Order
DAevent	dose per event
DAF	dilution/attenuation factor
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DI	deionized
DPT	Direct-push technology
Eco SSL	Ecological Soil Screening Level

ACRONYMS (CONTINUED)

EDB	Ethylene dibromide
Eh	oxidation reduction potential
EPC	Exposure Point Concentration
ESV	ecological screening value
ft	feet/foot
ft/day	feet per day
ft/ft	feet per foot
FS	Feasibility Study
GVC	groundwater volatilization criteria
H ₂ S	hydrogen sulfide
HEAST	Heath Effects Assessment Summary Table
HHRA	Human Health Risk Assessment
HI	hazard index
HLA	Harding Lawson Associates, Inc.
HQ	hazard quotient
IAS	Initial Assessment Study
ILCR	Incremental Lifetime Cancer Risk
IRIS	Integrated Risk Management System
Kd	distribution coefficient
kg	kilogram
Koc	organic carbon coefficient
Kow	octanol/water coefficient
L	liter
LEL	lower explosive limit
LOAEL	lowest observed adverse effects level
MCEQ	Mississippi Commission on Environmental Quality
MCL	maximum contaminant level
mg	milligram
µg/kg	micrograms per kilogram
mg/kg	milligram per kilogram
µg/L	micrograms per liter
MDEQ	Mississippi Department of Environmental Quality
MI	mobility index
N	noncarcinogen
NAVFAC SE	Naval Facilities Engineering Command, Southeast

ACRONYMS (CONTINUED)

NCBC	Naval Construction Battalion Center
NCF	Naval Construction Force
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEESA	Naval Energy and Environmental Support Activity
NFESC	Naval Facilities Engineering Service Center
ng/kg	nanograms per kilogram
NOAA	National Oceanic and Atmospheric Administration
NOAEL	no observed adverse effects level
NTX	no toxicity criteria
NUT	essential nutrient
OCBE	Octachlorinated-biphenyl ether
OPC	Office of Pollution Control
OPPTS	Office of Prevention, Pesticides, and Toxic Substances
ORNL	Oak Ridge National Laboratory
OSWER	Office of Solid Waste and Emergency Response
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PEC	probable effect concentration
PID	photoionization detector
ppm	part per million
PVC	polyvinyl chloride
PWS	Public Water Supply
RA	Remedial Action
RAGS	Risk Assessment Guidance for Superfund
RBC	risk-based concentration
RCRA	Resource Conservation and Recovery Act
RfC	reference concentration
RfD	reference dose
RI	Remedial Investigation
RME	reasonable maximum exposure
ROICC	Resident Officer in Charge of Construction
RSL	Regional Screening Level
S	solubility
sat	soil saturation concentration
SDWA	Safe Drinking Water Act

ACRONYMS (CONTINUED)

SLERA	Screening Level Ecological Risk Assessment
SMDP	Scientific Management Decision Points
SQUIRT	Screening Quick Reference Tables
SSL	soil screening level
SVOC	Semivolatile organic compound
SWL	static water level
TAL	Target Analyte List
TCL	Target Compound List
TEC	threshold effects concentration
TEF	toxicity equivalency factor
TEL	threshold effect level
TEQ	toxic equivalency quotient
TPH	total petroleum hydrocarbon
TRG	Target Remediation Goal
TRV	toxicity reference value
TtNUS	Tetra Tech NUS, Inc.
UCL	Upper confidence limit
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
VDEQ	Virginia Department of Environmental Quality
VF	volatilization factor
VSAP	Verification Sampling and Analysis plan
VOC	Volatile organic compound
VP	vapor pressure

EXECUTIVE SUMMARY

The primary objective of this Remedial Investigation (RI) was to provide data to evaluate current environmental conditions and guide the selection of a remedy that is protective of human health and the environment at Site 1 (Disaster Recovery Area), Naval Construction Battalion Center (NCBC) Gulfport, Mississippi. To achieve this primary objective, an RI including a geophysical survey and multi-phase sampling events from various media were conducted. Environmental samples were collected and analyzed during this RI to:

- Determine the extent of the waste disposal area.
- Identify the types of materials disposed of in the landfill and the potential chemicals of concern (COCs).
- Determine the extent and sources of mobile contaminants in soil and groundwater.
- Assess the potential impact to media including surface water and sediment and the surficial aquifer.

SITE BACKGROUND

Site 1 is an approximate 9 acres former landfill facility located north of 7th Street and east of Colby Avenue. The Site 1 landfill was in operation from 1942 to 1948. This area has most recently been used as a mock disaster recovery training village and as a training facility.

Site 1 was used as a landfill and was reportedly the primary area for waste disposal on base. Wastes were placed in unlined trenches at or near the groundwater table. The landfill, which operated from 1942 until 1948, received wastes generated at the base, mainly from public works shops and the supply department. Waste fuel, oil, solvents, paint, and paint thinners, reportedly in 55-gallon drums in many cases, were transported to the site and buried in the trenches (Envirodyne, 1985).

According to available information, waste was disposed of in trenches and then buried. Reportedly, the trenches were deeper than 8 feet and standing water was present in the open trenches. The waste disposal area at Site 1 was covered with soil when disposal activities ceased in 1948. Additional fill has been added over the years as parking lots and roads have been constructed over the surface.

PREVIOUS INVESTIGATIONS

The following previous environmental investigations have been conducted at Site 1:

1985 Initial Assessment Study (IAS) of NCBC Gulfport

The IAS identified and evaluated sites at NCBC Gulfport that were potential threats to human health and the environment. The IAS identified that waste disposal had occurred at Site 1 with the potential to impact human and ecological receptors. The IAS also discussed the excavation of the drums found in the southwestern corner of Site 1 and recommended a confirmation study.

1987 Confirmation Study

A Confirmation Study, which included a geophysical survey, surface water and sediment sampling, and monitoring well installation and sampling, was performed to confirm the data gathered from the IAS. Geophysical data suggested that native soil had been disturbed by excavation and disposal activities and identified several small magnetic anomalies. Four surface water samples were collected and low levels of oil and grease were detected. Composite sediment samples were collected from the Colby Avenue ditch, the southern Catfish Pond, and the northern Catfish Pond. Chromium was reported in several of the sediment samples. Three monitoring wells were installed and sampled with reported concentrations of volatile organic compounds (VOCs), base/neutral/acid (BNA) extractable organics, and cadmium less than laboratory detection limits. Chromium and lead were detected in each of the groundwater samples, at concentrations less than current Target Remediation Goals (TRGs).

1997 Field Verification Action

A Field Verification investigation was done at Site 1 to identify potential contamination. Direct-push technology (DPT) was used to collect subsurface soil samples at boring locations based on the geophysical survey completed in 1995. Thirty-three (33) soil borings were advanced at six of the anomalies. Dioxins and furans were reported in each of the soil samples collected for the Field Verification Action. Arsenic was detected at concentrations exceeding the unrestricted TRG in one or both sample intervals at 28 of the 33 soil boring locations.

1999 Groundwater Monitoring Report

Two downgradient monitoring wells were installed at Site 1 as part of the base-wide groundwater investigation. Low levels of dioxins and pesticides were detected in groundwater samples from Site 1.

FIELD INVESTIGATION

Site 1 RI field activities included the following:

- Geophysical investigation
- Soil-gas survey
- DPT soil and groundwater screening
- Surface water and sediment sampling
- Monitoring well installation and sampling
- Subsurface soil sampling
- Surface soil sampling

The screening criteria used to evaluate the nature and extent of contamination in environmental media at Site 1 included the Mississippi Department of Environmental Quality (MDEQ) Tier 1 TRGs and United States Environmental Protection Agency (USEPA) human health and ecological criteria. The potential impacts of contaminants identified at Site 1 to human and ecological receptors were evaluated in the human health risk assessment (HHRA) and the screening-level ecological risk assessment.

SITE HYDROLOGY

Surface water at Site 1 is found in ditches on the eastern and western sides of the site. The drainage ditch on the western side of the site receives surface water runoff from most of the disposal area identified at Site 1 and discharges to Canal No. 1 on the northern side of 8th Street. The canal on the eastern side of Site 1 receives limited runoff from the eastern part of Site 1 and flows to the north and discharges south of 28th Street at Outfall 3.

Groundwater elevations measured in September 2008 indicated groundwater flow in the shallow zone shows a north-south oriented divide near the middle of the site, with groundwater flow to the northwest to the west of the divide, and to the northeast to the east of the divide. Groundwater elevation data from the three deep zone wells was plotted and the groundwater flow direction is estimated to be to the northwest.

Groundwater flow velocity in the shallow surficial aquifer in the western part of Site 1 was 0.24 feet per day (ft/day). Groundwater flow velocity in the shallow surficial aquifer in the eastern part of Site 1 was 0.16 ft/day. The groundwater flow velocity in the deep surficial aquifer at Site 1 was 0.09 ft/day.

NATURE AND EXTENT OF CONTAMINATION

The release of contaminants at Site 1 appears to have resulted from routine aircraft maintenance operations. The time of disposal or accidental releases is unknown.

SOIL ASSESSMENT

The following chemicals were retained as surface soil chemicals of potential concern (COPCs) for the risk assessments:

- Direct Exposure (carcinogen) – dieldrin and arsenic
(non-carcinogen) – aluminum, antimony, cobalt, iron, and manganese
- Leaching to groundwater – tetrachloroethene, benzo(b)fluoranthene, Aroclor-1260, aldrin, alpha chlordane, benzene hexachloride (BHC) isomers, dieldrin, heptachlor epoxide, antimony, arsenic, chromium, cobalt, iron, lead, manganese, and selenium
- Ecological Receptors – aldrin, gamma BHC, dieldrin, endrin aldehyde, aluminum, antimony, copper, iron, lead, manganese, selenium, vanadium, and zinc

The following chemicals were retained as subsurface soil COPCs for the HHRA:

- Direct Exposure (carcinogen) – Aroclor-1242 and arsenic
(non-carcinogen) – aluminum
- Leaching to groundwater – alpha chlordane, Aroclor-1242, beta BHC, delta BHC, dieldrin, heptachlor epoxide, arsenic, chromium, and iron

GROUNDWATER ASSESSMENT

Groundwater characterization samples collected at Site 1 were analyzed for Target Compound List (TCL), Target Analyte List (TAL), and Appendix IX analytes. Groundwater delineation samples were collected using DPT and analyzed for selected VOCs.

The following chemicals were retained as groundwater COPCs for the HHRA:

- Direct Exposure (carcinogen) – tetrachloroethene, trichloroethene, naphthalene, and arsenic (non-carcinogen) – iron, manganese, and thallium
- Volatilization from groundwater – tetrachloroethene and trichloroethene

The interaction between the layers of sandy and clayey silt and the contaminants at the site appears to have created a vertical barrier to migration. Although not a true aquaclude, these lower permeability layers restrict the movement of contaminants such that the containment strategy of a soil cover should be effective in reducing future migration of contaminants and will be evaluated in the Feasibility Study (FS).

SURFACE WATER AND SEDIMENT ASSESSMENT

The concentrations of organic compounds [VOCs, semivolatile organic compounds (SVOCs), pesticides, polynuclear aromatic hydrocarbons (PCBs), and herbicides] reported in the surface water samples collected at Site 1 were less than the human health screening criteria; therefore, none of the organic compounds were retained as COPCs for the HHRA.

Arsenic was detected in one surface water sample at a concentration greater than the regional screening level (RSL) tap water criteria and is retained as a COPC in the HHRA.

Aluminum, iron, and lead were reported in Site 1 surface water samples at concentrations greater than the ecological screening values (ESVs) and are retained as ecological COPCs.

The following chemicals were retained as sediment COPCs for the risk assessments:

- Direct Exposure (carcinogen) – benzo(a)pyrene, benzo(b)fluoranthene, and arsenic (non-carcinogen) – aluminum, iron, and manganese
- Ecological Receptors – chrysene, fluoranthene, phenanthrene, pyrene, bis(2-ethylhexyl)phthalate, and chlordane

These results suggest that the contaminant levels reported in Site 1 surface water and sediment samples reflect base-wide conditions and do not result from releases from the landfill at Site 1.

MEDIA TO AIR MIGRATION PATHWAY

USEPA groundwater volatilization criteria (GVCs) have been established for many of the VOCs detected in groundwater at Site 1. Tetrachloroethene and trichloroethene were detected in one or more groundwater samples at concentrations greater than the default criteria, indicating the potential for migration and accumulation of vapors from the groundwater into the atmosphere.

HUMAN HEALTH RISK ASSESSMENT

Estimated risks for construction/excavation workers and adult trespassers were less than or equal to USEPA and MDEQ risk management benchmarks. The risk evaluation indicated that risk estimates for the site maintenance worker and adolescent trespasser were marginally greater than the MDEQ benchmark. The total ILCR for the site industrial worker exceeds the MDEQ cancer benchmark, the risk estimate is within one order of magnitude of the MDEQ benchmark and is primarily due to PCBs and dieldrin in soil contamination hot spots.

The risk evaluation also indicated that potential adverse health effects may be associated with the hypothetical future residential use of groundwater. The maximum detected concentration of tetrachloroethene in groundwater exceeded the Oak Ridge National Laboratory (ORNL) RSL for tap water, and the maximum concentration of arsenic in groundwater exceeded both the ORNL tap water RSL and the MDEQ groundwater TRG. The residential groundwater use scenario is evaluated to be conservative. The groundwater at Site 1 is not currently used as a source of drinking water and there are no plans to develop this resource in the future.

Residential cancer risk estimates slightly exceeded the MDEQ benchmark for soils (for both adult and child residents) due to dieldrin, arsenic, and PCBs. However, arsenic is within published background levels for soil. Sediment also exceeded the MDEQ cancer benchmark for the child resident only due to arsenic. Residential risks estimated for surface water did not exceed USEPA and MDEQ risk management benchmarks.

ECOLOGICAL RISK ASSESSMENT

Analytical data from surface soil samples collected at the site, and sediment and surface water samples collected from ditches on the eastern and western edges of the site, were evaluated in the ecological risk assessment.

VOCs and SVOCs in surface soil do not pose risks to ecological receptors. Several organochlorine insecticides were detected in surface soil samples. Concentrations tended to be low, and impacts to ecological receptors from these compounds are not expected. Concentrations of metals tended to be low and pose negligible potential risks to soil invertebrates and plants.

A low level of potential risk from exposure of benthic invertebrates to toluene may be present, but overall risk to benthic invertebrates from exposure to VOCs is considered negligible. Likewise, the low levels of VOCs detected in surface water do not appear to represent a potential risk to aquatic organisms. Concentrations of most metals tended to be low and pose negligible potential risks to aquatic and benthic organisms. Iron concentrations in surface water indicate potential risk to aquatic organisms.

Maximum exposure food chain HQs exceeded 1.0 for arsenic, lead, and zinc. In the average concentration scenario, all food chain HQs were less than 1.0; therefore, site-related impacts to receptors from COPCs in surface water and sediment are not expected.

CONCLUSIONS

Based on the results of the RI, an FS using Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) guidelines is recommended for Site 1. As discussed throughout this report, Site 1 meets the requirements of the presumptive remedy framework for municipal and military landfills. Therefore, the primary remedial strategy for Site 1 will be containment of the disposal area with a soil cap meeting state and USEPA requirements to prevent exposure to site soil.

The containment strategy should focus on three areas: (1) soil cover to prevent direct exposure to landfill materials; (2) elimination of the potential for mechanical disturbance of the cover during site operations; and (3) minimization of erosion of surface soil.

Based on the locations and types of chemicals detected during this investigation, interim removal or time-critical actions will not be required. After the above actions are taken, there will be a low likelihood for the migration of contaminated media, and the local population will not be exposed to contaminants in subsurface soil and groundwater at the site if current base operations and restrictions are maintained.

The FS will incorporate the presumptive remedy strategy including the soil cover to prevent recontamination in the future. The current soil cover is not likely to be adequate for permanent site closure under either MDEQ or USEPA regulations. Long-term monitoring and maintenance of the soil cover will be required.

1.0 INTRODUCTION

Tetra Tech NUS, Inc. (TtNUS) under contract to the United States Department of the Navy, Naval Facilities Engineering Command Southeast (NAVFAC SE), has prepared this Remedial Investigation (RI) Report for Site 1, Naval Construction Battalion Center (NCBC) Gulfport, located in Gulfport, Mississippi, under the Comprehensive Long-term Environmental Action Navy (CLEAN) IV Contract No. N62467-04-D-0055, Contract Task Order (CTO) 0065. Site 1, Disaster Recovery Disposal Area, is a former landfill located in the northwestern part of NCBC Gulfport.

1.1 PURPOSE OF REPORT

A broad framework for the RI and selection of the remedy process has been created through the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) by the United States Environmental Protection Agency (USEPA). The RI process (USEPA, 1991a) details the methodology that the Superfund program has established for characterizing the nature and extent of risks posed by uncontrolled hazardous waste sites and for evaluating potential remedial options.

The overall objectives of the RI process are:

- To adequately characterize the nature and extent of contamination at the site.
- To define the site dynamics, including contaminant migration pathways, transportation mechanisms, and potential receptors.
- To determine the site risks to human and ecological receptors.

USEPA has established the presumptive remedy framework for achieving each of these objectives while at the same time streamlining both the RI and remedy selection processes. Achieving these objectives will provide the basis for a remedy selection that is protective of human health and the environment. The proportion, distribution, and nature of the wastes present at Site 1 fit the parameters for the application of a containment presumptive remedy. Those characteristics are:

- Risks are low-level except for hotspots.
- Waste types are generally household, commercial, nonhazardous sludge, and industrial solid wastes.

- Lesser quantities of hazardous wastes are present as compared to municipal-type wastes.
- Low-hazard military-specific wastes may be present (low-level radioactive materials, decontamination kits, munitions hardware).

High hazard military wastes would preclude the use of presumptive remedy. Those waste types would include munitions, chemical warfare agents, and high-level radioactive wastes.

1.2 PRESUMPTIVE REMEDY PROCESS

Based on historical patterns of remedy selection for common categories of sites, including landfills, USEPA encourages the use of presumptive remedies (USEPA, 1993f) to increase consistency in remedy selection and to streamline the remedial action process. Prior to preparation of the Site 1 RI Work Plan, it was determined that a presumptive remedy for Site 1 was the best course of action based on the characteristics of the materials in the landfill and low concentrations of contaminants in the surficial aquifer (HLA, 1999). Based on USEPA guidance, a containment remedy involving a soil cover was incorporated into the site strategy to be consistent with USEPA guidance including Presumptive Remedy for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Municipal Landfills (USEPA, 1993f), amended by the Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills (USEPA, 1996c), and MDEQ policy requiring a soil cover (containment) for this category of landfill as outlined in Mississippi Commission on Environmental Quality (MCEQ) Solid Waste Management Regulations (MCEQ, 2005).

1.3 INVESTIGATION USING PRESUMPTIVE REMEDY STRATEGY

The presumptive remedy process for landfills includes a streamlined approach to site characterization based on the remedial actions most likely to be selected. Site characterization for municipal landfills is expedited by focusing primarily on the information needed to sufficiently assess and address risks posed by the site. Therefore, there is less emphasis on extensively characterizing the soil and groundwater within the landfill disposal area and more of a focus on collecting pertinent data that satisfy the application of a containment presumptive remedy.

1.3.1 Landfill Contents

A complete characterization of the landfill's contents is generally not necessary because the landfill contents will be contained. However, certain landfill properties, such as vertical and lateral extent of the disposal area, age of the landfill, and disposal patterns, can influence the cover type.

1.3.2 Groundwater/Leachate Contamination

The characterization of site geology and hydrology will affect decisions on capping options as well as the monitoring and potential treatment of groundwater. Precipitation, groundwater-to-surface water recharge rates, and water table fluctuations can influence groundwater contamination plumes and leachate quantity. This characterization also includes assessing the impact to other potential receiving media such as the surface water and sediment and the surficial aquifer.

1.3.3 Hot Spots

Hot spots consist of highly toxic and/or highly mobile material and present a potential principal threat to human health or the environment. The presumptive remedy encourages the treatment of hot spots when this remediation would significantly reduce the risk posed by the overall site.

1.3.4 Baseline Risk Assessment

A baseline risk assessment was conducted to determine whether Site 1 poses risks to human health and the environment and to demonstrate that the containment presumptive remedy will address pathways and COCs.

This streamlined investigation framework is one area where the presumptive remedy methodology differs from the traditional RI approach. The Site 1 RI included sampling in and around the landfill disposal area to determine if the landfill contents meet the municipal landfill-type waste definition in Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills (USEPA, 1996c).

1.4 SITE BACKGROUND

NCBC Gulfport is located in the western part of Gulfport, Mississippi, in the southeastern part of Harrison County, about 2 miles north of the Gulf of Mexico (Figure 1-1). The property for the installation was acquired in April 1942 and occupies approximately 1,100 acres. NCBC Gulfport has an average elevation of 30 feet above sea level. Nine sites at NCBC Gulfport, including Site 1, were identified in the Initial Assessment Study (IAS) as potential threats to human health or the environment (Envirodyne, 1985).

The primary mission of NCBC Gulfport is to support military readiness for four battalions of the Naval Construction Force (NCF) and the storage and maintenance of pre-positioned War Reserve Material Stock. The NCF support consists of mobilization and logistics support for both homeport services and deployed support. Approximately 5,000 military and 1,600 civilian personnel are assigned to, or employed by, the base.

1.4.1 Site Description

Site 1 is a former landfill facility (in operation from 1942 to 1948) encompassing approximately 9 acres, although the areal extent of the waste disposal is smaller. The site is located north of 7th Street and east of Colby Avenue (Figure 1-2). This area has most recently been used as a mock disaster recovery training village and as a training facility.

Waste was disposed of in trenches and then buried. Reportedly, the trenches were deeper than 8 feet and standing water was present in the open trenches.

The waste disposal area at Site 1 was covered with soil when disposal activities ceased in 1948. Additional fill has been added over the years as parking lots and roads have been constructed over the surface. Buildings at Site 1 are intermittently occupied, and it is unknown if any of the buildings were constructed on top of the disposal trenches. The recapitalization plan for NCBC Gulfport will significantly alter the location and number of buildings at and near Site 1 through 2009.

Surface water is conveyed to ditches along the eastern and western boundaries of the site. Groundwater flow in and around Site 1 is to the northwest. There are no reports of the disposal of ordnance, radiological material, or biological/chemical warfare agents at Site 1.

1.4.2 Site History

Site 1 was used from 1942 to 1948 as a landfill and was reportedly the primary area for chemical waste disposal on base. Wastes were placed in unlined trenches at or near the groundwater table. The landfill received chemical wastes generated at NCBC Gulfport, mainly from public works shops and the supply department. Waste fuel, oil, solvents, paint, and paint thinners, many reportedly in 55-gallon drums, were transported to the site and buried in the trenches (Envirodyne, 1985).

In 1984, during water line repairs in the southwestern corner of Site 1, four or five rusted 55-gallon drums were excavated. The drums were highly deteriorated, and the drum contents were described as tar-like with a strong odor similar to burnt plastic. The drums were transported to the concrete foundation of former Building 271 (later designated Site 9) for storage pending analytical results of the drum contents. The sample of drum contents was analyzed for hazardous waste characterization for metals and volatiles and for flammability, reactivity, and corrosiveness. The material sampled from the drums contained xylene, toluene, 1,2-dichloroethane, and low levels of arsenic and lead.

1.4.3 Previous Investigations

The following previous environmental investigations have been conducted at Site 1:

1985 Initial Assessment Study of NCBC Gulfport

The IAS, carried out by Envirodyne (1985) under the Naval Energy and Environmental Support Activity (NEESA), identified and evaluated sites at NCBC Gulfport that were potential threats to human health and the environment. The IAS included the following:

- Records search
- On-site survey
- Site ranking
- Outline for a subsequent Confirmation Study

The IAS identified that waste disposal had occurred at Site 1 with the potential to impact human and ecological receptors. The IAS also discussed the excavation of the drums found in the southwestern corner of Site 1 and recommended a confirmation study.

1987 Confirmation Study

The Confirmation Study was conducted by HLA (1987) and included a geophysical survey, surface water and sediment sampling, and monitoring well installation and sampling.

The geophysical survey collected very low frequency electromagnetic data which detect variations in soil conductivity, and magnetometer data which measure variations in the total magnetic field associated with magnetic objects. The grid spacing for this survey was 50 feet. More than half of Site 1 exhibited very low frequency values greater than the background value, suggesting that native soil had been disturbed by excavation and disposal activities. The magnetometer data identified several small magnetic anomalies.

Four surface water samples were collected during the Confirmation Study from the ditch on the western side of Site 1 adjacent to Colby Avenue, from the southernmost Catfish Pond adjacent to the northern edge of Site 1, from the northernmost Catfish Pond, and from an isolated ditch located near the center of Site 1 in the disaster recovery training area. The surface water samples were analyzed for selected metals (cadmium, chromium, and lead), oil and grease, total organic carbon, total organic halides, and chemical oxygen demand. Concentrations of metals in the surface water samples were less than laboratory detection limits. Low levels of oil and grease were detected in the surface water samples.

Composite sediment samples were collected from the Colby Avenue ditch, the southern Catfish Pond, and the northern Catfish Pond, and a sediment grab sample co-located with the surface water sample was collected in the ditch near the center of Site 1. The sediment samples were analyzed for selected metals, oil and grease, total organic carbons, total organic halides, and chemical oxygen demand. Chromium was reported in several of the sediment samples. Other metal concentrations were less than laboratory detection limits.

Three monitoring wells were installed and sampled as part of the Confirmation Study. Monitoring well GPT-1-1 was installed in the southwestern part of the site, and GPT-1-2 was installed near the southeastern part of the site. One monitoring well (GPT-01-03) was installed at the northern edge of the site, adjacent to the Catfish Pond. The monitoring wells were screened from a depth of 3 feet to total depths between 25 to 30 feet. The groundwater samples were analyzed for volatile organic compounds (VOCs), base/neutral/acid (BNA) extractable organics, and selected metals (cadmium, chromium, and lead). Reported concentrations of VOCs, BNAs, and cadmium were less than laboratory detection limits. Chromium and lead were detected in each of the groundwater samples, at concentrations less than current Target Remediation Goals (TRG).

1997 Field Verification Action

Morrison Knudsen Corporation conducted the Field Verification Action at Site 1 to determine whether hazardous constituents, particularly dioxin-related compounds, were present in subsurface soil. Direct-push technology (DPT) was used to collect subsurface soil samples at boring locations based on the geophysical survey completed in 1995. Thirty-three (33) soil borings were advanced at six of the anomalies identified as large or major metallic targets (Figure 1-3). Soil samples were collected at each boring location from depths between 3 and 6 feet and 9 to 13 feet and submitted for laboratory analysis. The soil samples were analyzed for VOCs, semivolatile organic compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) metals, dioxins and furans, pesticides, polychlorinated biphenyls (PCBs), and herbicides.

Dioxins and furans were reported in each of the soil samples collected for the Field Verification Action. At one sample location A4-1, the toxic equivalency quotient (TEQ) in the 3 to 5 foot sample [27.6 nanograms per kilogram (ng/kg)] was greater than the unrestricted TRG (4.26 ng/kg), but less than the restricted TRG (38.2 ng/kg) (Figure 1-4).

Arsenic was detected at concentrations exceeding the unrestricted TRG in one or both sample intervals at 28 of the 33 soil boring locations (Figure 1-4). The arsenic concentration in the sample collected from 2 to 4 feet at A3-9 was 455 milligrams per kilogram (mg/kg), which is greater than the restricted TRG of 3.82 mg/kg.

Concentrations of other analytes detected in the soil samples were less than the TRGs. Positive detections from the verification study are provided in Table 1-1 at the end of this section.

1999 Groundwater Monitoring Report

As part of the base-wide groundwater investigation, which focused on dioxins, two downgradient monitoring wells (GPT-01-04 and GPT-01-05) were installed at Site 1 (Figure 1-3). Low levels of dioxins (predominantly the octo-chlorinated congener) and pesticides were detected in groundwater samples from Site 1. All results were less than Maximum Contaminant Levels (MCLs). The initial characterization of the surficial aquifer at NCBC was refined during this investigation. The relationship between surface water and groundwater at the base was also evaluated, and significant interaction between surface water and groundwater was reported.

1.4.4 Presumptive Remedy Investigation Objectives

As discussed in Section 1.3, to achieve the objectives of the presumptive remedy RI, the following information was needed:

- Verify the extent of the waste disposal area
- Identify the types of materials disposed of in the landfill
- Determine the extent and sources of mobile contaminants
- Assess potential impact to receptors
- Evaluate risks posed to human health and local ecology

To collect this information, the RI conducted at Site 1 included the following activities, as described in Section 2.0:

- Geophysical survey
- Passive soil-gas survey for VOCs
- Surface water and sediment sampling
- DPT groundwater screening
- Monitoring well installation
- Groundwater sampling
- Surface and subsurface soil sampling
- Aquifer characterization

1.5 PRELIMINARY RESPONSE ACTION OBJECTIVES

As a first step in evaluating the suitability of containment alternatives, response action objectives were developed. The presumptive remedy response action objectives focus on waste isolation and containment and are as follows:

- Preventing direct contact with landfill contents
- Minimizing infiltration and containment of leaching to groundwater
- Controlling surface water runoff and erosion
- Controlling landfill gas (if necessary)

1.6 REPORT ORGANIZATION

This report consolidates the results of the previous sampling activities summarized above and the RI and includes the following eight sections:

- 1.0 Introduction
- 2.0 Study Area Investigation
- 3.0 Physical Characteristics of the Study Area
- 4.0 Nature and Extent of Contamination
- 5.0 Contaminant Fate and Transport
- 6.0 Human Health Risk Assessment
- 7.0 Screening Level Ecological Risk Assessment
- 8.0 Summary and Conclusions

The following appendices are included with this report:

- Appendix A – Geophysical Survey Report
- Appendix B – Soil Gas Survey Report
- Appendix C – Field Data
- Appendix D – Validated Laboratory Data
- Appendix E – Human Health Risk Assessment Supporting Data
- Appendix F – Screening Level Ecological Risk Assessment Food-Chain Mode
- Appendix G – Previous Investigations

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 14

SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA1102 A1-1	GPTS1BA1109 A1-1	GPTS1BA1202 A1-2	GPTS1BA1209 A1-2	GPTS1BA1302 A1-3	GPTS1BA1310 A1-3	GPTS1BA1402 A1-4	GPTS1BA1410 A1-4	GPTS1BA1502 A1-5	GPTS1BA1509 A1-5
LOCATION												
SAMPLE DATE			19961212	19961212	19961213	19961213	19961213	19961213	19961213	19961213	19961212	19961212
TOP DEPTH (feet)			2	9	2	9	2	9	2.5	10	2	9
BOTTOM DEPTH (feet)			4	11	4	11	4	11	4.5	12	4	11
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	1 J
2-BUTANONE	84500	84500	12 U	12 U	12 U	12 U	12 U	12 U	23 U	13 U	12 U	13 U
ACETONE	7820000	104000000	85 B	6 JB	76 U	14	25 B	23	190 B	15	120	58
BENZENE	887	1360	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
ETHYLBENZENE	395000	395000	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
TETRACHLOROETHENE	11900	18200	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
TOLUENE	38000	38000	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
TOTAL XYLENES	318000	318000	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
TRICHLOROETHENE	5170	7920	6 U	6 U	6 U	6 U	6 U	6 U	12 U	6 U	6 U	6 U
Semivolatile Organics (ug/kg)												
2-METHYLNAPHTHALENE	1560000	40900000	400 U	400 U	380 U	390 U	380 U	410 U	380 U	430 U	390 U	430 U
BENZO(A)ANTHRACENE	875	7840	400 U	400 U	72 J	390 U	380 U	410 U	380 U	430 U	390 U	430 U
BENZO(A)PYRENE	87.5	784	400 U	400 U	76 J	390 U	380 U	410 U	380 U	430 U	390 U	430 U
BENZO(G,H,I)PERYLENE	2350000	61300000	400 U	400 U	51 J	390 U	380 U	410 U	380 U	430 U	390 U	430 U
BENZOIC ACID	313000000	817000000	2000 U	2000 U	1900 U	1900 U	1900 U	2000 U	91 J	50 J	120 J	180 J
BENZYL ALCOHOL	235000000	2040000000	400 U	400 U	380 U	390 U	380 U	410 U	380 U	430 U	390 U	430 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	400 U	60 J	58 J	390 U	380 U	410 U	380 U	200 J	130 J	120 J
FLUORENE	3130000	81700000	400 U	400 U	380 U	390 U	380 U	410 U	380 U	430 U	390 U	430 U
INDENO(1,2,3-CD)PYRENE	875	7840	400 U	400 U	51 J	390 U	380 U	410 U	380 U	430 U	390 U	430 U
N-NITROSODIPHENYLAMINE	130000	1170000	400 U	400 U	380 U	390 U	380 U	410 U	380 U	430 U	390 U	430 U
NAPHTHALENE	194000	247000	400 U	400 U	380 U	390 U	380 U	410 U	380 U	430 U	390 U	430 U
PHENANTHRENE	2350000	61300000	400 U	400 U	65 J	390 U	380 U	410 U	380 U	430 U	390 U	79 J
PHENOL	46900000	123000000	1400	680	970	880	1300	2500	1800	2500	1800	2900
PYRENE	2350000	61300000	400 U	400 U	120 J	390 U	380 U	410 U	380 U	430 U	390 U	430 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 14

SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA1102 A1-1	GPTS1BA1109 A1-1	GPTS1BA1202 A1-2	GPTS1BA1209 A1-2	GPTS1BA1302 A1-3	GPTS1BA1310 A1-3	GPTS1BA1402 A1-4	GPTS1BA1410 A1-4	GPTS1BA1502 A1-5	GPTS1BA1509 A1-5
LOCATION												
SAMPLE DATE			19961212	19961212	19961213	19961213	19961213	19961213	19961213	19961213	19961212	19961212
TOP DEPTH (feet)			2	9	2	9	2	9	2.5	10	2	9
BOTTOM DEPTH (feet)			4	11	4	11	4	11	4.5	12	4	11
Pesticides/PCBs (ug/kg)												
2,4-D	782000	2040000	76 U	76 U	72 U	74 U	72 U	77 U	72 U	81 U	81 U	73 U
4,4'-DDD	2660	23800	3 U	3 U	3.7	3 U	2.9 U	3.1 U	2.9 U	3.2 U	2.9 U	3.2 U
DALAPON	2350000	6130000	1700 U	1710 U	1630 U	1670 U	1630 U	1730 U	1630 U	1820 U	1820 U	1650 U
DICAMBA	2350000	61300000	28 U	28 U	27 U	27 U	27 U	28 U	27 U	30 U	30 U	27 U
DICHLOROPROP	NC	NC	65 U	65 U	62 U	63 U	62 U	65 U	62 U	69 U	69 U	62 U
DINOSEB	78200	204000	45 U	45 U	43 U	44 U	43 U	46 U	43 U	48 U	48 U	44 U
MCPP	78200	2040000	6100 U	6100 U	5820 U	5950 U	5810 U	6170 U	5810 U	6490 U	6500 U	5880 U
Dioxins/Furans (ng/kg)												
1,2,3,4,6,7,8,9-OCDD	4260	38200	163 B	10.4 B	460 B	3.41 B	52.4 B	14.6 B	182 B	3.04 XB	13.8 B	3.56 XB
1,2,3,4,6,7,8,9-OCDF	4260	38200	0.19 U	0.296 U	26.2	0.164 U	0.187 U	0.213 U	8.97	0.438 U	0.175 U	0.245 U
1,2,3,4,6,7,8-HPCDD	426	3820	11.1	0.574 X	70.5	0.629	1.82	1.18 X	10.9	0.35 U	0.447 X	0.616 X
1,2,3,4,6,7,8-HPCDF	426	3820	0.142 XB	0.247 XB	16.4 B	0.211 XB	0.16 XB	0.212 XB	5.63 B	0.178 U	0.249 U	0.227 XB
1,2,3,4,7,8,9-HPCDF	426	3820	0.131 U	0.29 U	1.09 U	0.132 U	0.123 U	0.147 U	0.438 U	0.212 U	0.297 U	0.178 U
1,2,3,4,7,8-HXCDD	42.6	382	0.363 U	0.408 U	0.504 U	0.199 U	0.185 U	0.284 U	0.823 U	0.373 U	0.416 U	0.296 U
1,2,3,4,7,8-HXCDF	42.6	382	0.168 U	0.218 U	5.87 I	0.127 U	0.138 U	0.169 U	0.429 U	0.244 U	0.211 U	0.137 U
1,2,3,6,7,8-HXCDD	103	923	0.234 U	0.263 U	1.32 X	0.128 U	0.119 U	0.183 U	0.53 U	0.24 U	0.268 U	0.191 U
1,2,3,6,7,8-HXCDF	42.6	382	0.131 U	0.171 U	0.621 U	0.1 U	0.108 U	0.133 U	0.336 U	0.191 U	0.165 U	0.108 U
1,2,3,7,8,9-HXCDD	103	923	0.899	0.286 U	0.354 U	0.139 U	0.129 U	0.199 U	0.577 U	0.261 U	0.292 U	0.208 U
1,2,3,7,8-PECDF	85.2	763	0.211 U	0.361 U	0.286 U	0.17 U	0.13 U	0.154 U	0.438 U	0.227 U	0.189 U	0.259 U
2,3,4,6,7,8-HXCDF	42.6	382	0.172 U	0.223 U	0.993 X	0.13 U	0.142 U	0.173 U	0.44 U	0.25 U	0.216 U	0.141 U
TEQ	4.26	38.2	0.70	0.61	2.36	0.36	0.42	0.36	1.04	0.61	0.44	0.50
Inorganics (mg/kg)												
ARSENIC	0.426	3.82	0.4 U*	0.43 B*	0.38 U*	0.39 U*	0.38 U*	1.6 *	0.39 U	0.83 B	0.4 B*	0.54 B*
BARIIUM	5480	14300	7	20.3	0.44 B	0.59 B	6.6	0.73 B	8.4	0.83 B	6.3	0.82 B
CADMIUM	39.1	1020	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.13 B	0.05 U	0.05 U	0.05 U
CHROMIUM	210	450	1.9 *	6.1 *	0.52 B*	5.1 *	2.9 *	3.1 *	4	2.3	3.4 *	1.9 *
LEAD	400	1700	1.1 *	4.2 *	0.49 *	1.2 *	1.5 *	1.5 *	25.9	1.4	1.5 *	0.7 *
MERCURY	10	61.3	0.27	0.04 U	0.04 U	0.04 U	0.05	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.37 U	0.37 U	0.35 U	0.36 U	0.35 U	0.37 U	0.35 U	0.39 U	0.35 U	0.39 U
SILVER	391	1020	0.23 U	0.24 U	0.22 U	0.23 U	0.22 U	0.23 U	0.22 U	0.25 U	0.22 U	0.25 U

Notes:
 * = Surrogate outside of quality control limits
 Bold values = Positive Detections
 Shaded values = Reported value greater than screening criteria
 ug/kg = micrograms per kilogram
 ng/kg = nanograms per kilogram
 mg/kg = milligrams per kilogram
 MS TRGs = Mississippi Target Risk Goals
 B = Chemical detected in quality control blanks
 U = Concentration less than value shown
 X = Co-eluting/nterfering target analytes
 J = Estimated concentration less than quantitation limit
 TEQ = Toxic equivalency quotient

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA1602 A1-6	GPTS1BA1609 A1-6	GPTS1BA1703 A1-7	GPTS1BA1710 A1-7	GPTS1BA1804 A1-8	GPTS1BA1811 A1-8	GPTS1BA1904 A1-9	GPTS1BA1911 A1-9	GPTS1BA11004 A1-10	GPTS1BA11011 A1-10
LOCATION												
SAMPLE DATE			19961213	19961213	19961213	19961213	19961213	19961213	19961214	19961214	19961214	19961214
TOP DEPTH (feet)			2	9	3	10	4	11	4	11.5	4	11
BOTTOM DEPTH (feet)			4	11	5	12	6	13	6	13.5	6	13
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE	1190000	1190000	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	12 U	6 U	6 U	6 U	6 U	2 J	29 U	12 U	6 U	6 U
2-BUTANONE	84500	84500	23 U	12 U	11 U	12 U	11 U	14 U	57 U	24 U	11 U	12 U
ACETONE	7820000	104000000	330 B	12 JB	51 B	9 JB	170 B	22 B	800 B	160 B	120 B	28 B
BENZENE	887	1360	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
ETHYLBENZENE	395000	395000	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	12 U	6 U	6 U	1 J	6 U	7 U	29 U	12 U	11 U	6 U
TETRACHLOROETHENE	11900	18200	12 U	6 U	6 U	6 U	6 U	5 J	29 U	12 U	11 U	6 U
TOLUENE	38000	38000	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
TOTAL XYLENES	318000	318000	12 U	6 U	6 U	6 U	6 U	7 U	29 U	12 U	6 U	6 U
TRICHLOROETHENE	5170	7920	12 U	6 U	6 U	6 U	6 U	3 J	29 U	12 U	6 U	6 U
Semivolatile Organics (ug/kg)												
2-METHYLNAPHTHALENE	1560000	40900000	380 U	410 U	380 U	400 U	380 U	480 U	45 J	400 U	380 U	400 U
BENZO(A)ANTHRACENE	875	7840	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
BENZO(A)PYRENE	87.5	784	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
BENZO(G,H,I)PERYLENE	2350000	61300000	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
BENZOIC ACID	313000000	817000000	110 J	110 J	1800 U	2000 U	48 J	94 J	300 J	43 J	170 U	51 J
BENZYL ALCOHOL	23500000	204000000	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	41 J	60 J	380 U	66 J	380 U	58 J	110 J	65 J	110 U	48 J
FLUORENE	3130000	81700000	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
INDENO(1,2,3-CD)PYRENE	875	7840	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
N-NITROSODIPHENYLAMINE	130000	1170000	380 U	410 U	380 U	400 U	380 U	480 U	380 U	400 U	380 U	400 U
NAPHTHALENE	194000	247000	380 U	410 U	380 U	400 U	380 U	480 U	62 J	400 U	380 U	400 U
PHENANTHRENE	2350000	61300000	380 U	410 U	380 U	400 U	380 U	480 U	94 J	400 U	380 U	400 U
PHENOL	46900000	123000000	1700	3000	1400	1000	3600	2900	5700	760	2500	1500
PYRENE	2350000	61300000	380 U	410 U	380 U	400 U	380 U	480 U	42 J	400 U	380 U	400 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA1602 A1-6	GPTS1BA1609 A1-6	GPTS1BA1703 A1-7	GPTS1BA1710 A1-7	GPTS1BA1804 A1-8	GPTS1BA1811 A1-8	GPTS1BA1904 A1-9	GPTS1BA1911 A1-9	GPTS1BA11004 A1-10	GPTS1BA11011 A1-10
LOCATION												
SAMPLE DATE			19961213	19961213	19961213	19961213	19961213	19961213	19961214	19961214	19961214	19961214
TOP DEPTH (feet)			2	9	3	10	4	11	4	11.5	4	11
BOTTOM DEPTH (feet)			4	11	5	12	6	13	6	13.5	6	13
Pesticides/PCBs (ug/kg)												
2,4-D	782000	2040000	72 U	78 U	71 U	76 U	76 U	90 U	71 U	75 U	71 U	76 U
4,4'-DDD	2660	23800	2.9 U	3.1 U	2.9 U	3 U	2.8 U	3.6 U	2.9 U	3 U	2.9 U	3 U
DALAPON	2350000	6130000	1630 U	1750 U	1610 U	1710 U	1710 U	2030 U	1610 U	1690 U	1610 U	1710 U
DICAMBA	2350000	61300000	27 U	29 U	26 U	28 U	28 U	33 U	26 U	28 U	26 U	28 U
DICHLOROPROP	NC	NC	62 U	66 U	61 U	65 U	65 U	77 U	61 U	64 U	61 U	65 U
DINOSEB	78200	204000	43 U	46 U	43 U	45 U	45 U	54 U	43 U	45 U	43 U	45 U
MCPP	78200	2040000	5810 U	6250 U	5750 U	6100 U	6100 U	7250 U	5750 U	6020 U	5750 U	6100 U
Dioxins/Furans (ng/kg)												
1,2,3,4,6,7,8,9-OCDD	4260	38200	191 B	3 B	97.6 B	22.9 B	150 B	7.41 B	279 B	10.5 B	107 B	3.96 X
1,2,3,4,6,7,8,9-OCDF	4260	38200	13.7	0.57 U	0.664 U	2.04 U	0.234 U	0.519	0.22 U	0.37 U	0.328 U	0.392 U
1,2,3,4,6,7,8-HPCDD	426	3820	23	0.774 U	10.7	2.88 X	1.56	0.62 X	6.77	0.292 U	2.68	0.364 U
1,2,3,4,6,7,8-HPCDF	426	3820	10.5 B	0.44 U	1.96 B	1.17 U	0.205 XB	0.515 XB	0.177 U	0.103 U	0.204 U	0.334 U
1,2,3,4,7,8,9-HPCDF	426	3820	0.819 U	0.526 U	0.355 U	1.4 U	0.214 U	0.168 U	0.212 U	0.124 U	0.244 U	0.399 U
1,2,3,4,7,8-HXCDD	42.6	382	0.74 U	0.726 U	0.671 U	1.44 U	0.262 U	0.271 U	0.25 U	0.285 U	0.479 U	0.851 U
1,2,3,4,7,8-HXCDF	42.6	382	0.574 U	0.298 U	0.377 U	0.614 U	0.15 U	0.152 U	0.131 U	0.188 U	0.267 U	0.425 U
1,2,3,6,7,8-HXCDD	103	923	0.477 U	0.468 U	0.432 U	0.924 U	0.168 U	0.175 U	0.161 U	0.184 U	0.308 U	0.548 U
1,2,3,6,7,8-HXCDF	42.6	382	0.45 U	0.234 U	0.295 U	0.481 U	0.118 U	0.119 U	0.103 U	0.147 U	0.209 U	0.333 U
1,2,3,7,8,9-HXCDD	103	923	0.519 U	0.509 U	1.47	1.01 U	0.183 U	0.19 U	1.54	0.2 U	0.336 U	0.597 U
1,2,3,7,8-PECDF	85.2	763	0.26 U	0.282 U	0.335 U	0.614 U	0.233 U	0.254 U	0.27 U	0.21 U	0.198 U	0.33 U
2,3,4,6,7,8-HXCDF	42.6	382	0.588 U	0.306 U	0.386 U	0.629 U	0.154 U	0.156 U	0.135 U	0.193 U	0.273 U	0.435 U
TEQ	4.26	38.2	1.04	0.69	1.24	1.82	0.46	0.48	0.88	0.46	0.68	0.90
Inorganics (mg/kg)												
ARSENIC	0.426	3.82	0.39 U	1.2 B	0.38 U	0.4 U	0.55 B	1.7	0.38 U	2.3	0.51 B	3.2
BARIIUM	5480	14300	4.2	1.4	30.3	0.64 B	14.4	0.77 B	7.6	0.53 B	7.7	0.48 B
CADMIUM	39.1	1020	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.06 U	0.05 U	0.05 U	0.05 U	0.05 U
CHROMIUM	210	450	2.6	1.5	4.6	1.9	4.3	1.7	3.1	0.51 B	3.2	0.75 B
LEAD	400	1700	2.4	1.2	4.3	0.43	2.9	0.93	1.5	0.65	2.1	0.63
MERCURY	10	61.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04	0.05 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.35 U	0.37 U	0.34 U	0.36 U	0.34 U	0.43 U	0.34 U	0.36 U	0.35 U	0.36 U
SILVER	391	1020	0.22 U	0.24 U	0.22 U	0.23 U	0.22 U	0.27 U	0.22 U	0.23 U	0.22 U	0.23 U

Notes:
 * = Surrogate outside of quality control limits
 Bold values = Positive Detections
 Shaded values = Reported value greater than screening criteria
 ug/kg = micrograms per kilogram
 ng/kg = nanograms per kilogram
 mg/kg = milligrams per kilogram
 MS TRGs = Mississippi Target Risk Goals
 B = Chemical detected in quality control blanks
 U = Concentration less than value shown
 X = Co-eluting/nterfering target analytes
 J = Estimated concentration less than quantitation limit
 TEQ = Toxic equivalency quotient

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA2103 A2-1 19961216	GPTS1BA2110 A2-1 19961216	GPTS1BA2203 A2-2 19961216	GPTS1BA2210 A2-2 19961216	GPTS1BA2303 A2-3 19961216	GPTS1BA2310 A2-3 19961216	GPTS1BA2403 A2-4 19961216	GPTS1BA2409 A2-4 19961216	GPTS1BA2502 A2-5 19961216
LOCATION											
SAMPLE DATE											
TOP DEPTH (feet)			3	10	3	10	3	10	3	9.5	2.5
BOTTOM DEPTH (feet)			5	12	5	12	5	12	5	11.5	4.5
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
2-BUTANONE	84500	84500	12 U	13 U	12 U	12 U	12 U	12 U	62 U	5 J	12 U
ACETONE	7820000	104000000	77 B	50 B	40 B	6 JB	94 B	18 B	390 B	66 B	20 B
BENZENE	887	1360	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
ETHYLBENZENE	395000	395000	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
TETRACHLOROETHENE	11900	18200	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
TOLUENE	38000	38000	6 U	6 U	6 U	6 U	6 U	1 J	31 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
TOTAL XYLENES	318000	318000	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
TRICHLOROETHENE	5170	7920	6 U	6 U	6 U	6 U	6 U	6 U	31 U	6 U	6 U
Semivolatile Organics (ug/kg)											
2-METHYLNAPHTHALENE	1560000	40900000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
BENZO(A)ANTHRACENE	875	7840	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
BENZO(A)PYRENE	87.5	784	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
BENZO(G,H,I)PERYLENE	2350000	61300000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
BENZOIC ACID	313000000	817000000	1900 U	2100 U	2000 U	2000 U	2000 U	2000 U	2000 U	54 J	46 J
BENZYL ALCOHOL	235000000	204000000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	40 J	440 U	46 J	83 J	64 J	410 U	410 U	59 J	400 U
FLUORENE	3130000	81700000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
INDENO(1,2,3-CD)PYRENE	875	7840	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
N-NITROSODIPHENYLAMINE	130000	1170000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
NAPHTHALENE	194000	247000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
PHENANTHRENE	2350000	61300000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U
PHENOL	46900000	123000000	790	430 J	130 J	2400	220 J	410 U	420	710	440
PYRENE	2350000	61300000	400 U	440 U	410 U	400 U	410 U	410 U	410 U	410 U	400 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 6 OF 14

SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA2103 A2-1	GPTS1BA2110 A2-1	GPTS1BA2203 A2-2	GPTS1BA2210 A2-2	GPTS1BA2303 A2-3	GPTS1BA2310 A2-3	GPTS1BA2403 A2-4	GPTS1BA2409 A2-4	GPTS1BA2502 A2-5
LOCATION											
SAMPLE DATE			19961216	19961216	19961216	19961216	19961216	19961216	19961216	19961216	19961216
TOP DEPTH (feet)			3	10	3	10	3	10	3	9.5	2.5
BOTTOM DEPTH (feet)			5	12	5	12	5	12	5	11.5	4.5
Pesticides/PCBs (ug/kg)											
2,4-D	782000	2040000	75 U	82 U	78 U	76 U	78 U	77 U	77 U	78 U	76 U
4,4'-DDD	2660	23800	3 U	3.3 U	3.1 U	3 U	3.1 U	3.1 U	3.1 U	3.1 U	3 U
DALAPON	2350000	6130000	1690 U	1840 U	1750 U	1710 U	1750 U	1730 U	1730 U	1750 U	1710 U
DICAMBA	2350000	61300000	28 U	30 U	29 U	28 U	29 U	28 U	28 U	29 U	28 U
DICHLOROPROP	NC	NC	64 U	70 U	66 U	65 U	66 U	65 U	65 U	66 U	65 U
DINOSEB	78200	204000	45 U	49 U	46 U	45 U	46 U	46 U	46 U	46 U	45 U
MCPP	78200	2040000	5750 U	6580 U	6250 U	6100 U	6250 U	6170 U	6200 U	6250 U	6100 U
Dioxins/Furans (ng/kg)											
1,2,3,4,6,7,8,9-OCDD	4260	38200	110	38.3	14.6	16.5	64.4	33.9	26.6	122	156
1,2,3,4,6,7,8,9-OCDF	4260	38200	0.419 U	0.283 U	0.442 U	0.261 U	0.276 U	0.202 U	0.286 U	0.252 U	0.341 U
1,2,3,4,6,7,8-HPCDD	426	3820	9.89	1.04 X	0.431 U	0.764 X	2.32	2.42	1.82	8.18	12.3
1,2,3,4,6,7,8-HPCDF	426	3820	0.244 U	0.236 U	0.226 U	0.195 U	0.18 U	0.177 U	0.254 U	0.147 U	0.39 U
1,2,3,4,7,8,9-HPCDF	426	3820	0.292 U	0.282 U	0.27 U	0.233 U	0.215 U	0.212 U	0.303 U	0.175 U	0.467 U
1,2,3,4,7,8-HXCDD	42.6	382	0.325 U	0.338 U	0.446 U	0.218 U	0.288 U	0.503 U	0.248 U	0.237 U	0.71 U
1,2,3,4,7,8-HXCDF	42.6	382	0.131 U	0.191 U	0.165 U	0.114 U	0.219 U	0.246 U	0.14 U	0.178 U	0.337 U
1,2,3,6,7,8-HXCDD	103	923	0.209 U	0.217 U	0.287 U	0.14 U	0.185 U	0.324 U	0.16 U	0.152 U	0.457 U
1,2,3,6,7,8-HXCDF	42.6	382	0.103 U	0.149 U	0.13 U	0.089 U	0.172 U	0.193 U	0.11 U	0.139 U	0.288 U
1,2,3,7,8,9-HXCDD	103	923	2.63	0.237 U	0.312 U	0.153 U	0.202 U	0.353 U	0.174 U	0.166 U	1.16
1,2,3,7,8-PECDF	85.2	763	0.161 U	0.148 U	0.22 U	0.18 U	0.247 U	0.341 U	0.262 U	0.285 U	0.346 U
2,3,4,6,7,8-HXCDF	42.6	382	0.134 U	0.195 U	0.17 U	0.116 U	0.224 U	0.252 U	0.143 U	0.182 U	0.376 U
TEQ	4.26	38.2	0.80	0.44	0.52	0.40	0.45	0.86	0.63	0.75	1.21
Inorganics (mg/kg)											
ARSENIC	0.426	3.82	0.4 U	0.44 U	0.41 U	0.4 U	0.41 U	0.99 B	0.48 B	0.41 U	0.4 U
BARIIUM	5480	14300	13.1	2.6	5.1	0.96	0.7 B	0.67 B	2.8	0.75 B	1.7
CADMIUM	39.1	1020	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
CHROMIUM	210	450	4.5	1.2 B	2.6	1.4	1.1 B	0.61 B	3.1	0.79 B	3.9
LEAD	400	1700	2.1	0.91	1.9	0.97	0.86	1.1	1	0.45	1.1
MERCURY	10	61.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.36 U	0.4 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.38 U	0.36 U
SILVER	391	1020	0.23 U	0.25 U	0.24 U	0.23 U	0.24 U	0.23 U	0.24 U	0.24 U	0.23 U

Notes:

- * = Surrogate outside of quality control limits
- Bold values = Positive Detections
- Shaded values = Reported value greater than screening criteria
- µg/kg = micrograms per kilogram
- ng/kg = nanograms per kilogram
- mg/kg = milligrams per kilogram
- MS TRGs = Mississippi Target Risk Goals
- B = Chemical detected in quality control blanks
- U = Concentration less than value shown
- X = Co-eluting/nterfering target analytes
- J = Estimated concentration less than quantitation limit
- TEQ = Toxic equivalency quotient

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA2509 A2-5	GPTS1BA3103 A3-1	GPTS1BA3110 A3-1	GPTS1BA3203 A3-2	GPTS1BA3211 A3-2	GPTS1BA3303 A3-3	GPTS1BA3310 A3-3	GPTS1BA3403 A3-4	GPTS1BA3410 A3-4	GPTS1BA3503 A3-5
LOCATION												
SAMPLE DATE			19961216	19961216	19961216	19961216	19961216	19961215	19961215	19961216	19961216	19961216
TOP DEPTH (feet)			9.5	3	10	3	11	3	10	3	10	3
BOTTOM DEPTH (feet)			11.5	5	12	5	13	5	12	5	12	5
Volatile Organics (ug/kg)												
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
2-BUTANONE	84500	84500	2 J	11 U	12 U	12 U	12 U	12 U	12 U	11 U	13 U	12 U
ACETONE	7820000	104000000	23 B	110 B	28 B	70 B	43 B	72 B	78 B	45 B	44 B	19 B
BENZENE	887	1360	6 U	5 U	6 U	6 U	6 U	6 U	2 J	6 U	6 U	6 U
ETHYLBENZENE	395000	395000	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TETRACHLOROETHENE	11900	18200	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOLUENE	38000	38000	6 U	5 U	6 U	6 U	6 U	6 U	5 J	6 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOTAL XYLENES	318000	318000	6 U	5 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TRICHLOROETHENE	5170	7920	6 U	5 U	6 U	6 U	1 J	6 U	6 U	6 U	6 U	6 U
Semivolatile Organics (ug/kg)												
2-METHYLNAPHTHALENE	1560000	40900000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
BENZO(A)ANTHRACENE	875	7840	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
BENZO(A)PYRENE	87.5	784	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
BENZO(G,H,I)PERYLENE	2350000	61300000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
BENZOIC ACID	313000000	817000000	2000 U	1800 U	100 J	2000 U	1900 U	160 J	45 J	1800 U	67 J	90 J
BENZYL ALCOHOL	235000000	2040000000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	390 J	2100 U	140 J	410 U	460 U	390 U	60 J	49 J	320 J	100 J
FLUORENE	3130000	81700000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
INDENO(1,2,3-CD)PYRENE	875	7840	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
N-NITROSODIPHENYLAMINE	130000	1170000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
NAPHTHALENE	194000	247000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
PHENANTHRENE	2350000	61300000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U
PHENOL	46900000	123000000	570	1200	2800	140 J	1200	230 J	78 J	2100	3200	3500
PYRENE	2350000	61300000	400 U	360 U	400 U	410 U	400 U	390 U	410 U	370 U	430 U	390 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA2509 A2-5	GPTS1BA3103 A3-1	GPTS1BA3110 A3-1	GPTS1BA3203 A3-2	GPTS1BA3211 A3-2	GPTS1BA3303 A3-3	GPTS1BA3310 A3-3	GPTS1BA3403 A3-4	GPTS1BA3410 A3-4	GPTS1BA3503 A3-5
LOCATION												
SAMPLE DATE			19961216	19961216	19961216	19961216	19961216	19961215	19961215	19961216	19961216	19961216
TOP DEPTH (feet)			9.5	3	10	3	11	3	10	3	10	3
BOTTOM DEPTH (feet)			11.5	5	12	5	13	5	12	5	12	5
Pesticides/PCBs (ug/kg)												
2,4-D	782000	2040000	77 U	68 U	155 U	77 U	75 U	70 U	77 U	70 U	82 U	74 U
4,4'-DDD	2660	23800	3 U	2.7 U	3 U	3.1 U	3 U	3 U	3.1 U	2.8 U	3.3 U	3 U
DALAPON	2350000	6130000	1730 U	1540 U	1710 U	1730 U	1690 U	1570 U	1730 U	1570 U	1840 U	1670 U
DICAMBA	2350000	61300000	28 U	25 U	105 U	28 U	28 U	26 U	28 U	26 U	30 U	27 U
DICHLOROPROP	NC	NC	65 U	58 U	162 U	65 U	64 U	60 U	65 U	60 U	70 U	63 U
DINOSEB	78200	204000	46 U	41 U	232 U	46 U	45 U	42 U	46 U	42 U	49 U	44 U
MCPP	78200	2040000	6170 U	5500 U	11500	6170 U	6020 U	5620 U	6180 U	5620 U	6580 U	5950 U
Dioxins/Furans (ng/kg)												
1,2,3,4,6,7,8,9-OCDD	4260	38200	127	27.8	109	58.4	0.937	48	1.05	1.02	1.41	23.2
1,2,3,4,6,7,8,9-OCDF	4260	38200	0.347 U	0.359 U	1.99	0.416 U	0.444 U	0.362 U	0.305 U	0.408 U	0.853 U	0.611 U
1,2,3,4,6,7,8-HPCDD	426	3820	1.49	2.24	0.904 X	1.92	0.321 U	1.52	0.318 U	0.211 U	0.863 U	0.481 U
1,2,3,4,6,7,8-HPCDF	426	3820	0.199 U	0.321 U	1.13 X	0.328 U	0.278 U	0.2 U	0.192 U	0.212 U	0.368 U	0.244 U
1,2,3,4,7,8,9-HPCDF	426	3820	0.238 U	0.384 U	0.37 U	0.392 U	0.333 U	0.239 U	0.229 U	0.253 U	0.44 U	0.291 U
1,2,3,4,7,8-HXCDD	42.6	382	0.293 U	0.509 U	0.404 U	0.573 U	0.281 U	0.337 U	0.393 U	0.356 U	0.602 U	0.528 U
1,2,3,4,7,8-HXCDF	42.6	382	0.198 U	0.336 U	0.261 U	0.267 U	0.179 U	0.248 U	0.209 U	0.177 U	0.29 U	0.209 U
1,2,3,6,7,8-HXCDD	103	923	0.189 U	0.328 U	0.604 X	0.369 U	0.181 U	0.217 U	0.253 U	0.229 U	0.388 U	0.34 U
1,2,3,6,7,8-HXCDF	42.6	382	0.155 U	0.264 U	0.657	0.209 U	0.141 U	0.195 U	0.164 U	0.138 U	0.227 U	0.164 U
1,2,3,7,8,9-HXCDD	103	923	0.205 U	0.357 U	0.283 U	0.402 U	0.197 U	0.236 U	0.276 U	0.25 U	0.422 U	0.37 U
1,2,3,7,8-PECDF	85.2	763	0.17 U	0.201 U	0.286 U	0.332 U	0.202 U	0.212 U	0.196 U	0.235 U	0.252 U	0.352 U
2,3,4,6,7,8-HXCDF	42.6	382	0.203 U	0.345 U	0.267 U	0.273 U	0.184 U	0.254 U	0.214 U	0.181 U	0.297 U	0.214 U
TEQ	4.26	38.2	0.59	0.54	0.66	0.67	0.48	0.41	0.42	0.51	0.71	0.68
Inorganics (mg/kg)												
ARSENIC	0.426	3.82	0.41 U	0.36 U	1.5	0.41 U	0.98 B	0.39 U	1.3	0.39 B	3.7	1.2
BARIIUM	5480	14300	0.41 B	6.6	0.52 B	0.82 B	0.53 B	0.77 B	0.5 B	19.3	0.92	12.3
CADMIUM	39.1	1020	0.05 U	0.04 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
CHROMIUM	210	450	1.4	2.8	1.2 B	2.4	0.54 B	2.7	0.9 B	1.9	0.8 B	3.5
LEAD	400	1700	0.82	1.9	1.3	1.1	0.64	1.6	0.6	1.6	0.99	2.8
MERCURY	10	61.3	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.37 U	0.33 U	0.37 U	0.37 U	0.36 U	0.4 B	0.37 U	0.34 U	0.39 U	0.36 U
SILVER	391	1020	0.23 U	0.21 U	0.23 U	0.21 U	0.25 U	0.23 U				

Notes:
 * = Surrogate outside of quality control limits
 Bold values = Positive Detections
 Shaded values = Reported value greater than screening criteria
 ug/kg = micrograms per kilogram
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 MS TRGs = Mississippi Target Risk Goals
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TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA3510 A3-5 19961216	GPTS1BA3603 A3-6 19961214	GPTS1BA3610 A3-6 19961214	GPTS1BA3702 A3-7 19961214	GPTS1BA3710 A3-7 19961214	GPTS1BA3802 A3-8 19961214	GPTS1BA3809 A3-8 19961214	GPTS1BA3902 A3-9 19961214	GPTS1BA3909 A3-9 19961214
LOCATION											
SAMPLE DATE											
TOP DEPTH (feet)			10	3	10	2.5	10	2	9	2	9
BOTTOM DEPTH (feet)			12	5	12	4.5	12	4	11	4	11
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
2-BUTANONE	84500	84500	12 U	11 U	12 U	12 U	13 U	12 U	12 U	19 U	12 U
ACETONE	7820000	104000000	94 B	62 B	20 B	76 B	54 B	91 B	11 JB	110 B	56 B
BENZENE	887	1360	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
ETHYLBENZENE	395000	395000	6 U	2 J	6 U	6 U	6 U	6 U	6 U	9 U	6 U
METHYLENE CHLORIDE	14300	21900	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
TETRACHLOROETHENE	11900	18200	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
TOLUENE	38000	38000	1 J	19	6 U	6 U	6 U	6 U	6 U	9 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
TOTAL XYLENES	318000	318000	1 J	13	6 U	6 U	6 U	6 U	6 U	9 U	6 U
TRICHLOROETHENE	5170	7920	6 U	6 U	6 U	6 U	6 U	6 U	6 U	9 U	6 U
Semivolatile Organics (ug/kg)											
2-METHYLNAPHTHALENE	1560000	40900000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
BENZO(A)ANTHRACENE	875	7840	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
BENZO(A)PYRENE	87.5	784	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
BENZO(G,H,I)PERYLENE	2350000	61300000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
BENZOIC ACID	313000000	817000000	72 J	330 J	150 J	140 J	2000 U	110 J	66 J	520 J	130 J
BENZYL ALCOHOL	23500000	204000000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	110 J	63 J	100 J	92 J	120 J	65 J	240 J	160 J	210 J
FLUORENE	3130000	81700000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
INDENO(1,2,3-CD)PYRENE	875	7840	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
N-NITROSODIPHENYLAMINE	130000	1170000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U
NAPHTHALENE	194000	247000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	81 J	410 U
PHENANTHRENE	2350000	61300000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	130 J	410 U
PHENOL	46900000	123000000	4200	2500	5000	520	490	1200	1800	7800	2500
PYRENE	2350000	61300000	390 U	370 U	400 U	400 U	420 U	400 U	400 U	620 U	410 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA3510 A3-5	GPTS1BA3603 A3-6	GPTS1BA3610 A3-6	GPTS1BA3702 A3-7	GPTS1BA3710 A3-7	GPTS1BA3802 A3-8	GPTS1BA3809 A3-8	GPTS1BA3902 A3-9	GPTS1BA3909 A3-9
LOCATION											
SAMPLE DATE			19961216	19961214	19961214	19961214	19961214	19961214	19961214	19961214	19961214
TOP DEPTH (feet)			10	3	10	2.5	10	2	9	2	9
BOTTOM DEPTH (feet)			12	5	12	4.5	12	4	11	4	11
Pesticides/PCBs (ug/kg)											
2,4-D	782000	2040000	75 U	70 U	176	76 U	78 U	76 U	75 U	117 U	78 U
4,4'-DDD	2660	23800	3 U	2.8 U	3 U	3 U	3.2 U	3 U	3 U	5 P	3.1 U
DALAPON	2350000	6130000	1690 U	1570 U	111 J	1710 U	1770 U	1710 U	1690 U	2640 U	1750 U
DICAMBA	2350000	61300000	28 U	26 U	105	28 U	29 U	28 U	28 U	43 U	29 U
DICHLOROPROP	NC	NC	64 U	60 U	192	65 U	67 U	65 U	64 U	100 U	66 U
DINOSEB	78200	204000	45 U	42 U	284	45 U	47 U	45 U	45 U	70 U	46 U
MCPP	78200	2040000	6020 U	5620 U	6100 U	6100 U	6330 U	6100 U	6020 U	9430 U	6250 U
Dioxins/Furans (ng/kg)											
1,2,3,4,6,7,8,9-OCDD	4260	38200	1.27	53.5	1.18	17.6 B	12.3	430 B	0.911	31.7	1.53
1,2,3,4,6,7,8,9-OCDF	4260	38200	0.327 U	0.944 U	0.246 U	0.328 U	1.13 X	0.325 U	0.428 U	0.898 X	0.287 U
1,2,3,4,6,7,8-HPCDD	426	3820	0.446 U	3.98 X	0.268 U	1.11 X	1.88	24.6	0.534 U	4.92 X	0.372 U
1,2,3,4,6,7,8-HPCDF	426	3820	0.306 U	0.481 U	0.178 U	0.218 U	0.939 X	0.25 U	0.362 U	1.1 X	0.308 X
1,2,3,4,7,8,9-HPCDF	426	3820	0.366 U	0.574 U	0.212 U	0.26 U	0.341 U	0.299 U	0.432 U	0.589 U	0.228 U
1,2,3,4,7,8-HXCDD	42.6	382	0.393 U	0.52 U	0.342 U	0.492 U	0.489 U	0.332 U	0.559 U	0.816 U	0.666 U
1,2,3,4,7,8-HXCDF	42.6	382	0.23 U	0.235 U	0.17 U	0.233 U	0.278 U	0.209 U	0.298 U	0.704 U	0.269 U
1,2,3,6,7,8-HXCDD	103	923	0.253 U	0.335 U	0.22 U	0.317 U	0.315 U	0.214 U	0.36 U	0.525 U	0.429 U
1,2,3,6,7,8-HXCDF	42.6	382	0.18 U	0.184 U	0.134 U	0.182 U	0.218 U	0.164 U	0.234 U	0.552 U	0.211 U
1,2,3,7,8,9-HXCDD	103	923	0.275 U	0.365 U	0.24 U	0.345 U	0.343 U	1.18 X	0.392 U	0.572 U	0.467 U
1,2,3,7,8-PECDF	85.2	763	0.207 U	0.331 U	0.177 U	0.313 U	0.311 U	0.212 U	0.424 U	0.55 U	0.25 U
2,3,4,6,7,8-HXCDF	42.6	382	0.235 U	0.241 U	0.175 U	0.238 U	0.285 U	0.214 U	0.305 U	0.721 U	0.276 U
TEQ	4.26	38.2	0.50	0.62	0.51	0.52	0.68	0.99	0.86	1.25	0.68
Inorganics (mg/kg)											
ARSENIC	0.426	3.82	1.4	0.37 U	1.7	0.4 U	3.9	0.72	3	455	1.2 B
BARIUM	5480	14300	0.72 B	9.6	0.44 B	2.1	0.91	17.4	2.4	177	0.5 B
CADMIUM	39.1	1020	0.05 U	0.04 U	0.05 U	3	0.05 U				
CHROMIUM	210	450	0.74 B	2.7	0.97 B	3.2	2.9	4.7	2.7	89.2	0.89 B
LEAD	400	1700	0.74	2.8	0.83	2.2	1	1.5	1.2	63.8	0.57
MERCURY	10	61.3	0.04 U	0.05	0.04 U	0.06 U	0.04 U				
SELENIUM	391	1020	0.36 U	0.34 U	0.37 U	0.37 U	0.38 U	0.36 U	0.36 U	14.2	0.37 U
SILVER	391	1020	0.23 U	0.21 U	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.64 B	0.24 U

Notes:

- * = Surrogate outside of quality control limits
- Bold values = Positive Detections
- Shaded values = Reported value greater than screening criteria
- µg/kg = micrograms per kilogram
- ng/kg = nanograms per kilogram
- mg/kg = milligrams per kilogram
- MS TRGs = Mississippi Target Risk Goals
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- U = Concentration less than value shown
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TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA4103 A4-1 19961207	GPTS1BA4109 A4-1 19961207	GPTS1BA4203 A4-2 19961207	GPTS1BA4210 A4-2 19961208	GPTS1BA4303 A4-3 19961208	GPTS1BA4313 A4-3 19961208	GPTS1BA4403 A4-4 19961208	GPTS1BA4413 A4-4 19961208	GPTS1BA5109 A5-1 19961207
LOCATION											
SAMPLE DATE											
TOP DEPTH (feet)			3	9	3	10.5	3	13	3	13	9.5
BOTTOM DEPTH (feet)			5	11	5	12.5	5	15	5	15	11.5
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	7 U	6 U	6 U	6 U	6 U	1 J	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
2-BUTANONE	84500	84500	13 U	14 U	12 U	12 U	11 U	12 U	11 U	12 U	12 U
ACETONE	7820000	104000000	43 B	100 B	160 B	12 B	27 B	18 B	19 B	13 B	79
BENZENE	887	1360	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
ETHYLBENZENE	395000	395000	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	4 J	6 J	4 J	6 U	6 U	6 U	6 U	4 J	2 J
TETRACHLOROETHENE	11900	18200	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOLUENE	38000	38000	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	14	7 U	6 U	6 U	6	6 U	6 U	6 U	6 U
TOTAL XYLENES	318000	318000	6 U	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TRICHLOROETHENE	5170	7920	13 B	7 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Semivolatile Organics (ug/kg)											
2-METHYLNAPHTHALENE	1560000	40900000		460 U	390 U	400 U	370 U	400 U	1100	390 U	400 U
BENZO(A)ANTHRACENE	875	7840		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
BENZO(A)PYRENE	87.5	784		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
BENZO(G,H,I)PERYLENE	2350000	61300000		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
BENZOIC ACID	313000000	817000000		55 J	1900 U	71 J	48 J	59 J	1800 U	1900 U	48 J
BENZYL ALCOHOL	23500000	204000000		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000		74 J	51 J	160 J	370 U	400 U	48 J	110 J	120 J
FLUORENE	3130000	81700000		460 U	390 U	400 U	370 U	400 U	150 J	390 U	400 U
INDENO(1,2,3-CD)PYRENE	875	7840		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
N-NITROSODIPHENYLAMINE	130000	1170000		460 U	390 U	400 U	370 U	400 U	310 J	390 U	400 U
NAPHTHALENE	194000	247000		460 U	390 U	400 U	370 U	400 U	81 J	390 U	400 U
PHENANTHRENE	2350000	61300000		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U
PHENOL	46900000	123000000		1900	890	910	620	580	230 J	810	1300
PYRENE	2350000	61300000		460 U	390 U	400 U	370 U	400 U	380 U	390 U	400 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 12 OF 14

SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA4103 A4-1	GPTS1BA4109 A4-1	GPTS1BA4203 A4-2	GPTS1BA4210 A4-2	GPTS1BA4303 A4-3	GPTS1BA4313 A4-3	GPTS1BA4403 A4-4	GPTS1BA4413 A4-4	GPTS1BA5109 A5-1
LOCATION											
SAMPLE DATE			19961207	19961207	19961207	19961208	19961208	19961208	19961208	19961208	19961207
TOP DEPTH (feet)			3	9	3	10.5	3	13	3	13	9.5
BOTTOM DEPTH (feet)			5	11	5	12.5	5	15	5	15	11.5
Pesticides/PCBs (ug/kg)											
2,4-D	782000	2040000	78 U	86 U	73 U	74 U	69 U	76 U	70 U	74 U	75 U
4,4'-DDD	2660	23800	3.2 U	3.5 U	2.9 U	3 U	2.8 U	3 U	2.8 U	3 U	3 U
DALAPON	2350000	6130000	1770 U	1940 U	1650 U	1670 U	1560 U	1710 U	1600 U	1670 U	1690 U
DICAMBA	2350000	61300000	29 U	32 U	27 U	27 U	26 U	28 U	26 U	27 U	28 U
DICHLOROPROP	NC	NC	67 U	74 U	62 U	63 U	59 U	65 U	60 U	63 U	64 U
DINOSEB	78200	204000	47 U	51 U	44 U	44 U	41 U	45 U	42 U	44 U	45 U
MCPP	78200	2040000	6330 U	6940 U	5880 U	5950 U	5560 U	6100 U	5700 U	5950 U	6020 U
Dioxins/Furans (ng/kg)											
1,2,3,4,6,7,8,9-OCDD	4260	38200	13000 B	2.05 B	24.1 B	2.21 B	4.93 B	2.11 B	20.9 B	18.7 B	2.89 B
1,2,3,4,6,7,8,9-OCDF	4260	38200	1450	0.541 X	0.256 U	0.272 U	0.332 U	0.734	0.266 U	2.41	0.149 U
1,2,3,4,6,7,8-HPCDD	426	3820	1050	0.709	0.836	0.215 U	0.728	0.325 X	1.72	1.44 X	0.529
1,2,3,4,6,7,8-HPCDF	426	3820	284	0.825	0.268	0.193 X	0.272 U	0.543	0.183 U	0.864	0.207
1,2,3,4,7,8,9-HPCDF	426	3820	9.01	0.131 U	0.109 U	0.162 U	0.325 U	0.171 U	0.219 U	0.186 U	0.07 U
1,2,3,4,7,8-HXCDD	42.6	382	4.74	0.166 U	0.233 U	0.314 U	0.351 U	0.26 U	0.27 U	0.185 U	0.212 U
1,2,3,4,7,8-HXCDF	42.6	382	52.1 I	0.121 U	0.122 U	0.159 U	0.134 U	0.165 U	0.172 U	0.074 U	0.106 U
1,2,3,6,7,8-HXCDD	103	923	32.4	0.107 U	0.15 U	0.202 U	0.226 U	0.167 U	0.174 U	0.119 U	0.137 U
1,2,3,6,7,8-HXCDF	42.6	382	0.493 U	0.095 U	0.096 U	0.124 U	0.105 U	0.129 U	0.135 U	0.058 U	0.083 U
1,2,3,7,8,9-HXCDD	103	923	3.46	0.116 U	0.163 U	0.22 U	0.246 U	0.182 U	0.402	0.13 U	0.149 U
1,2,3,7,8-PECDF	85.2	763	2.07 I	0.148 U	0.127 U	0.223 U	0.238 U	0.175 U	0.181 U	0.101 U	0.108 U
2,3,4,6,7,8-HXCDF	42.6	382	0.645 U	0.124 U	0.125 U	0.163 U	0.137 U	0.169 U	0.176 U	0.076 U	0.109 U
TEQ	4.26	38.2	27.6	0.30	0.37	0.47	0.50	0.42	0.42	0.21	0.25
Inorganics (mg/kg)											
ARSENIC	0.426	3.82	1.2 B	4.9	0.64 B	0.83 B	0.37 U	0.77 B	0.38 U	1.5	3.5
BARIIUM	5480	14300	21.4	2.7 *	7 *	0.82 B	25.4	0.55 B	6.8	0.47 B*	2.1 *
CADMIUM	39.1	1020	0.08 B	0.06 U	0.04 U	0.05 U	0.04 U	0.05 U	0.05 U	0.05 U	0.05 U
CHROMIUM	210	450	5.3	4.7 *	4.2 *	0.95 B	4.5	0.63 B	1.1 B	0.54 B*	4.2 *
LEAD	400	1700	5.2	2.6 *	2.2 *	0.77	3.6	0.67	1.5	1 *	1 *
MERCURY	10	61.3	0.04 U	0.05 U	0.03 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.38 U	0.41 U	0.3 U	0.36 U	0.33 U	0.37 U	0.34 U	0.36 U	0.36 U
SILVER	391	1020	0.24 U	0.26 U	0.19 U	0.23 U	0.21 U	0.23 U	0.22 U	0.23 U	0.23 U

Notes:

- * = Surrogate outside of quality control limits
- Bold values = Positive Detections
- Shaded values = Reported value greater than screening criteria
- µg/kg = micrograms per kilogram
- ng/kg = nanograms per kilogram
- mg/kg = milligrams per kilogram
- MS TRGs = Mississippi Target Risk Goals
- B = Chemical detected in quality control blanks
- U = Concentration less than value shown
- X = Co-eluting/nterfering target analytes
- J = Estimated concentration less than quantitation limit
- TEQ = Toxic equivalency quotient

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 13 OF 14

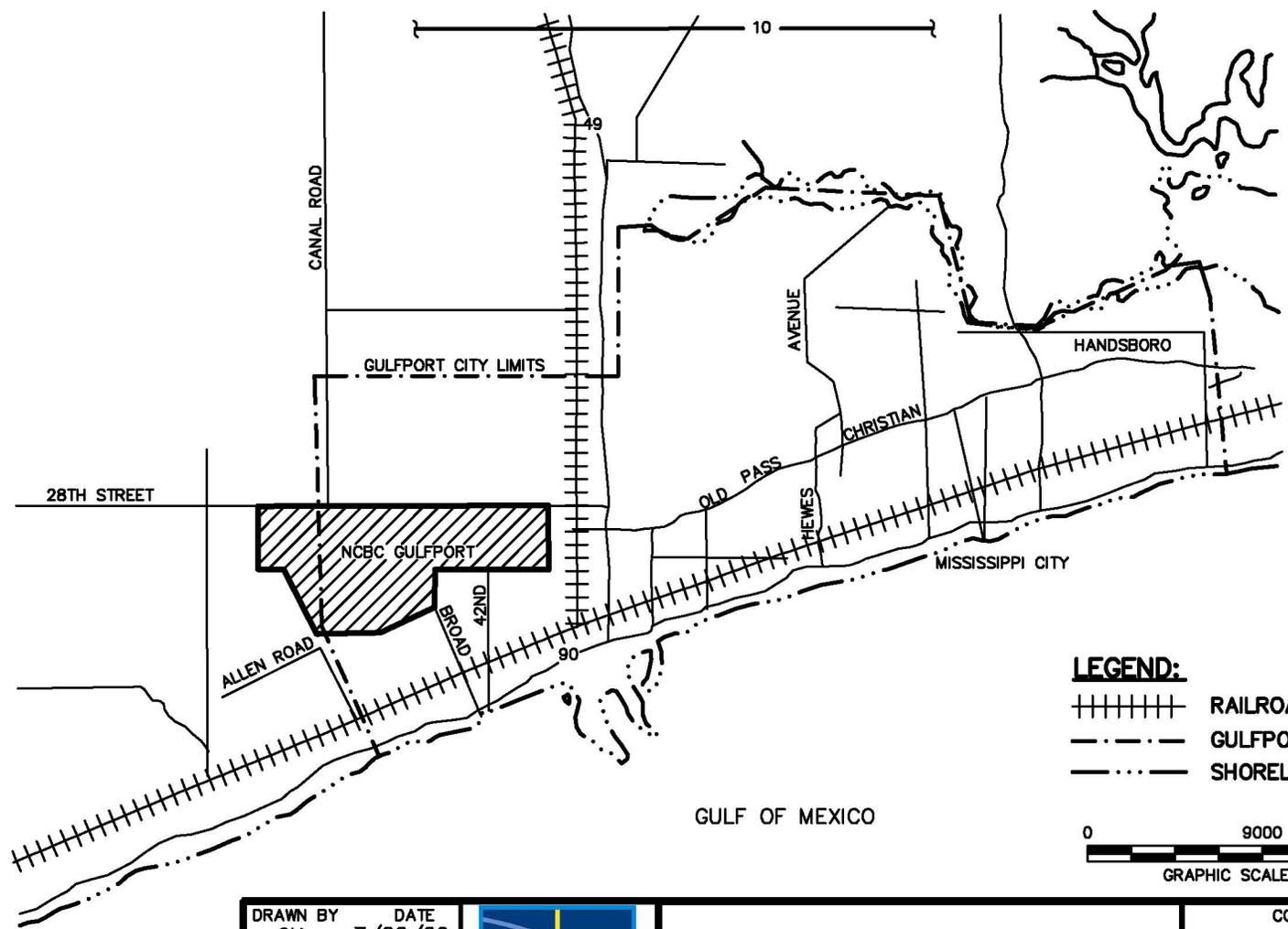
SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA5109-AV	GPTS1BA5109-D	GPTS1BA5102	GPTS1BA5205	GPTS1BB1103	GPTS1BB1110	GPTS1BB1205	GPTS1BB1303	GPTS1BB1310
LOCATION			A5-1	A5-1	A5-1	A5-2	B1-1	B1-1	B1-2	B1-3	B1-3
SAMPLE DATE			19961207	19961207	19961208	19961212	19961208	19961208	19961208	19961208	19961208
TOP DEPTH (feet)			9.5	9.5	2.5	5	3	10	5.5	3	10
BOTTOM DEPTH (feet)			11.5	11.5	4	7	5	12	7.5	5	12
Volatile Organics (ug/kg)											
1,1,1-TRICHLOROETHANE	1190000	1190000	6 U	6 U	6 U	6 U	3 J	6 U	2 J	6 U	6 U
1,1-DICHLOROETHENE	77.2	118	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
2-BUTANONE	84500	84500	12 U	12 U	12 U	13 U	12 U	12 U	12 U	13 U	12 U
ACETONE	7820000	104000000	89.5	100	160 B	78	20 B	38 B	18 B	140 B	10 JB
BENZENE	887	1360	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
ETHYLBENZENE	395000	395000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
METHYLENE CHLORIDE	14300	21900	2 J	2 J	6 U	3 J	6 U	5 J	1 J	5 J	4 J
TETRACHLOROETHENE	11900	18200	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOLUENE	38000	38000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TOTAL 1,2-DICHLOROETHENE	NC	NC	6 U	6 U	6 U	6 U	4 J	6 U	6 U	6 U	6 U
TOTAL XYLENES	318000	318000	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
TRICHLOROETHENE	5170	7920	6 U	6 U	6 U	6 U	15 B	6 U	6 U	6 U	6 U
Semivolatile Organics (ug/kg)											
2-METHYLNAPHTHALENE	1560000	40900000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
BENZO(A)ANTHRACENE	875	7840	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
BENZO(A)PYRENE	87.5	784	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
BENZO(G,H,I)PERYLENE	2350000	61300000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
BENZOIC ACID	313000000	817000000	48 J	1900 U	1900 U	62 J	51 J	1900 U	47 J	2100 U	1900 U
BENZYL ALCOHOL	23500000	204000000	400 U	400 U	390 U	66 J	400 U	390 U	410 U	430 U	400 U
BIS(2-ETHYLHEXYL)PHTHALATE	45600	409000	120 J	120 J	58 J	120 J	43 J	140 J	68 J	48 J	400 U
FLUORENE	3130000	81700000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
INDENO(1,2,3-CD)PYRENE	875	7840	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
N-NITROSODIPHENYLAMINE	130000	1170000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
NAPHTHALENE	194000	247000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
PHENANTHRENE	2350000	61300000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U
PHENOL	46900000	123000000	870	440	320 J	2600	1100	930	770	1300	1200
PYRENE	2350000	61300000	400 U	400 U	390 U	420 U	400 U	390 U	410 U	430 U	400 U

TABLE 1-1
POSITIVE DETECTIONS IN VERIFICATION STUDY SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 14 OF 14

SAMPLE ID	MS TRGs UNRESTRICTED	MS TRGs RESTRICTED	GPTS1BA5109-AV	GPTS1BA5109-D	GPTS1BA5102	GPTS1BA5205	GPTS1BB1103	GPTS1BB1110	GPTS1BB1205	GPTS1BB1303	GPTS1BB1310
LOCATION			A5-1	A5-1	A5-1	A5-2	B1-1	B1-1	B1-2	B1-3	B1-3
SAMPLE DATE			19961207	19961207	19961208	19961212	19961208	19961208	19961208	19961208	19961208
TOP DEPTH (feet)			9.5	9.5	2.5	5	3	10	5.5	3	10
BOTTOM DEPTH (feet)			11.5	11.5	4	7	5	12	7.5	5	12
Pesticides/PCBs (ug/kg)											
2,4-D	782000	2040000	74 U	73 U	74 U	78 U	75 U	74 U	77 U	82 U	75 U
4,4'-DDD	2660	23800	3 U	3 U	3 U	3.2 U	3 U	3 U	3.1 U	3.3 U	3 U
DALAPON	2350000	6130000	1670 U	1650 U	1670 U	1770 U	1690 U	1670 U	1730 U	1840 U	1690 U
DICAMBA	2350000	61300000	27.5 U	27 U	27 U	29 U	28 U	27 U	28 U	30 U	28 J
DICHLOROPROP	NC	NC	63 U	62 U	63 U	67 U	64 U	63 U	65 U	70 U	64 U
DINOSEB	78200	204000	44.5 U	44 U	44 U	47 U	45 U	44 U	46 U	49 U	45 U
MCPP	78200	2040000	5950 U	5880 U	5950 U	6330 U	6020 U	5950 U	6170 U	6580 U	6020 U
Dioxins/Furans (ng/kg)											
1,2,3,4,6,7,8,9-OCDD	4260	38200	2.707 B	2.524 B	35 B	313 B	131 B	0.898 XB	4.67 B	12.9 B	1.06 B
1,2,3,4,6,7,8,9-OCDF	4260	38200	0.1955 U	0.242 U	43.8	0.159 U	0.341 U	0.159 U	0.315 U	0.197 U	0.125 U
1,2,3,4,6,7,8-HPCDD	426	3820	0.542	0.555	4.13	4.55	7.85	0.302	0.357 X	0.911 X	0.285 X
1,2,3,4,6,7,8-HPCDF	426	3820	0.14	0.146 U	36.6	0.22 XB	0.249 U	0.116 U	0.127 U	0.164 U	0.19
1,2,3,4,7,8,9-HPCDF	426	3820	0.1225 U	0.175 U	0.512 U	0.173 U	0.298 U	0.138 U	0.151 U	0.195 U	0.119 U
1,2,3,4,7,8-HXCDD	42.6	382	0.2685 U	0.325 U	0.209 U	0.451 U	0.428 U	0.245 U	0.424 U	0.197 U	0.164 U
1,2,3,4,7,8-HXCDF	42.6	382	0.1535 U	0.201 U	0.72	0.224 U	0.29 U	0.122 U	0.203 U	0.13 U	0.075 U
1,2,3,6,7,8-HXCDD	103	923	0.173 U	0.209 U	0.37 X	0.29 U	0.275 U	0.158 U	0.273 U	0.127 U	0.106 U
1,2,3,6,7,8-HXCDF	42.6	382	0.12 U	0.157 U	0.553 X	0.176 U	0.228 U	0.095 U	0.159 U	0.102 U	0.059 U
1,2,3,7,8,9-HXCDD	103	923	0.1885 U	0.228 U	0.562	0.316 U	0.3 U	0.172 U	0.297 U	0.138 U	0.115 U
1,2,3,7,8-PECDF	85.2	763	0.147 U	0.186 U	0.169 U	0.194 U	0.164 U	0.149 U	0.229 U	0.103 U	0.168 U
2,3,4,6,7,8-HXCDF	42.6	382	0.1575 U	0.206 U	0.635	0.23 U	0.298 U	0.125 U	0.208 U	0.133 U	0.077 U
TEQ	4.26	38.2	0.34	0.43	1.00	0.66	0.52	0.30	0.56	0.31	0.31
Inorganics (mg/kg)											
ARSENIC	0.426	3.82	3.5		0.46 B	0.89 B*	0.73 B	0.39 U	7.3	3.2	1.5
BARIIUM	5480	14300	2.1 *		26.7	0.9	1.2	0.7 B*	14.1	5.6 *	0.51 B*
CADMIUM	39.1	1020	0.05 U		0.05 U	0.05 U	0.05 U	0.05 U	0.05 B	0.06 B	0.05 U
CHROMIUM	210	450	4.2 *		7	3.6 *	2.6	0.77 B*	10.1	9.9 *	0.42 B*
LEAD	400	1700	1 *		4.6	2 *	1.5	0.84 *	7	11.5 *	1 *
MERCURY	10	61.3	0.04 U		0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U
SELENIUM	391	1020	0.36 U		0.36 U	0.38 U	0.5 B	0.36 U	0.58 B	0.48 B	0.36 U
SILVER	391	1020	0.23 U		0.23 U	0.24 U	0.23 U	0.23 U	0.24 U	0.25 U	0.23 U

Notes:

- * = Surrogate outside of quality control limits
- Bold values = Positive Detections
- Shaded values = Reported value greater than screening criteria
- µg/kg = micrograms per kilogram
- ng/kg = nanograms per kilogram
- mg/kg = milligrams per kilogram
- MS TRGs = Mississippi Target Risk Goals
- B = Chemical detected in quality control blanks
- U = Concentration less than value shown
- X = Co-eluting/interfering target analytes
- J = Estimated concentration less than quantitation limit
- TEQ = Toxic equivalency quotient



LEGEND:

- +++++ RAILROAD TRACKS
- .-.- GULFPORT CITY LIMITS
- SHORELINE/STREAM

0 9000 18000
GRAPHIC SCALE IN FEET

DRAWN BY CK	DATE 7/20/09
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	



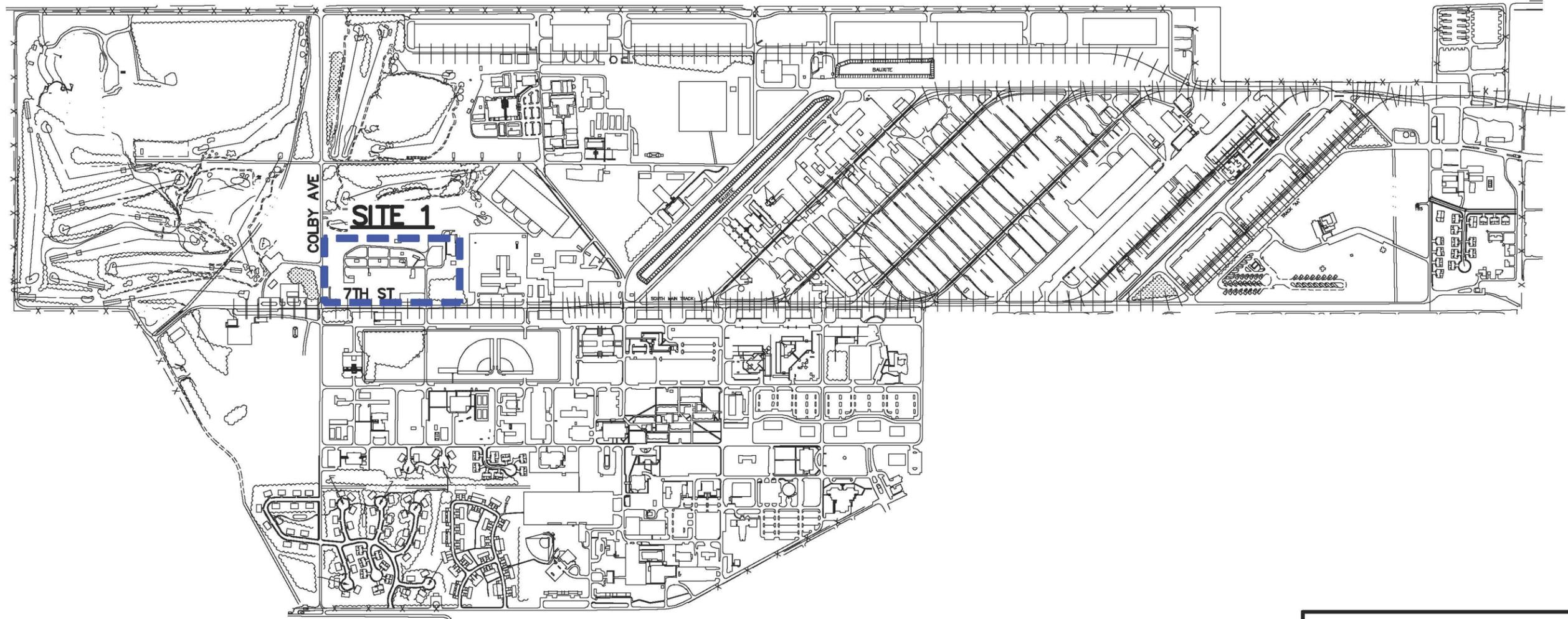
SITE VICINITY MAP
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. 0700	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 1-1	REV. 0

CTO 0065

Rev. 0
01/07/10

ACAD: 0700CMD4.dwg 07/20/09 CK PIT



LEGEND:

— — — — — SITE LOCATION

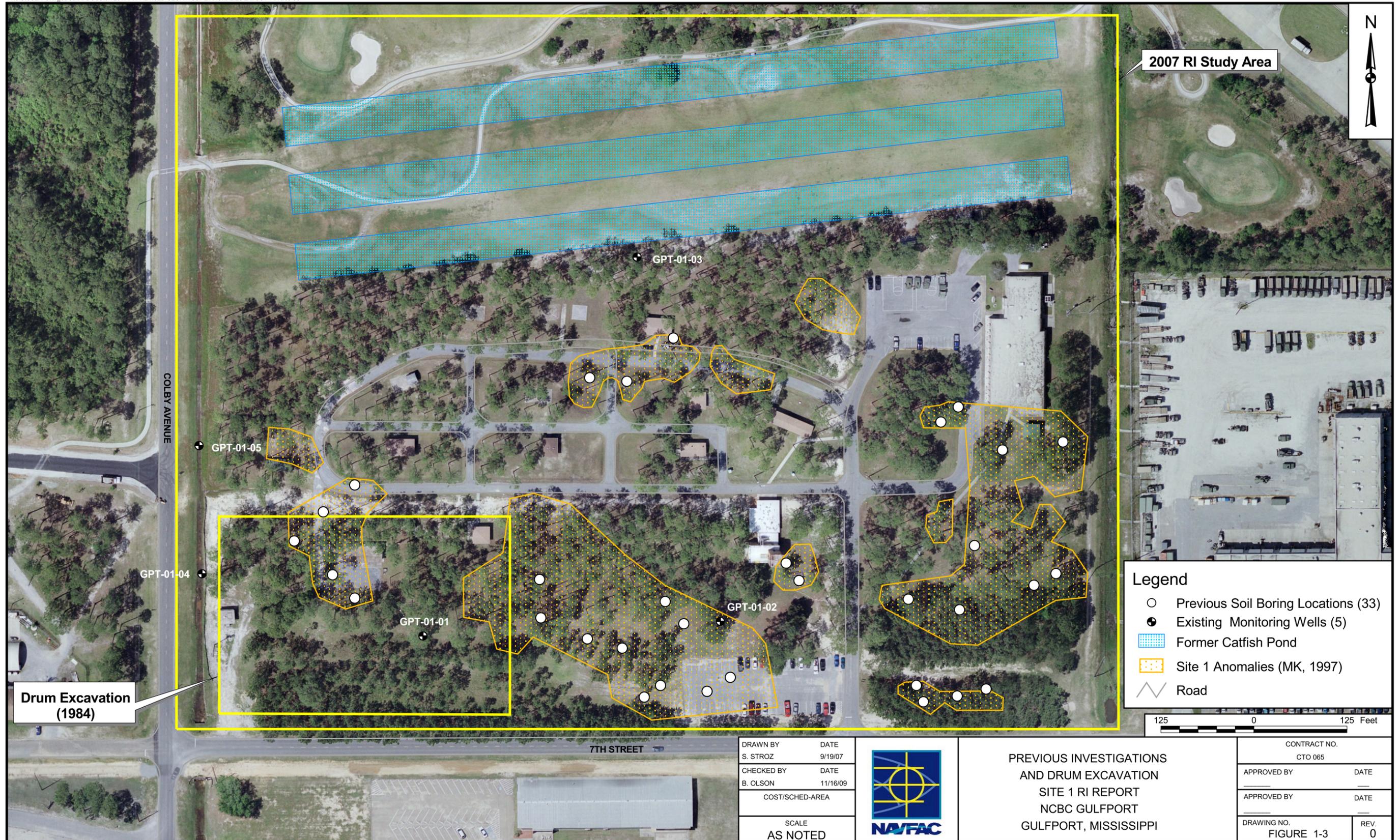
GRAPHIC SCALE IN FEET

DRAWN BY CK	DATE 7/20/09
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	



SITE LOCATION MAP
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

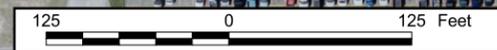
CONTRACT NO. 0700	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 1-2	REV. 0



2007 RI Study Area

Legend

- Previous Soil Boring Locations (33)
- Existing Monitoring Wells (5)
- ▨ Former Catfish Pond
- ▨ Site 1 Anomalies (MK, 1997)
- Road



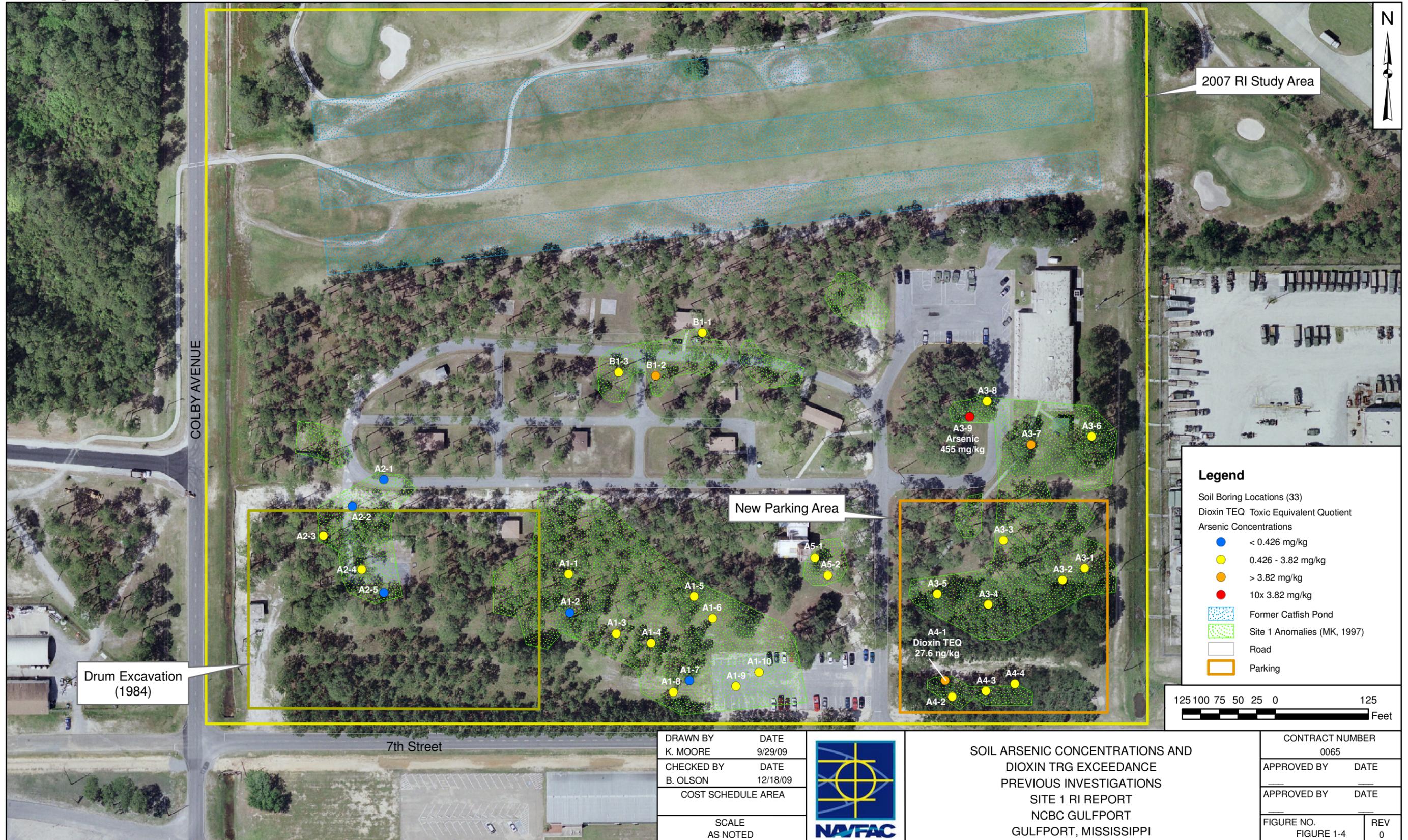
Drum Excavation (1984)

DRAWN BY S. STROZ	DATE 9/19/07
CHECKED BY B. OLSON	DATE 11/16/09
COST/SCHED-AREA	
SCALE AS NOTED	



PREVIOUS INVESTIGATIONS
AND DRUM EXCAVATION
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 1-3	REV. 0



DRAWN BY K. MOORE	DATE 9/29/09
CHECKED BY B. OLSON	DATE 12/18/09
COST SCHEDULE AREA	
SCALE AS NOTED	



SOIL ARSENIC CONCENTRATIONS AND
DIOXIN TRG EXCEEDANCE
PREVIOUS INVESTIGATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 1-4	REV 0

2.0 STUDY AREA INVESTIGATION

This section provides the details of RI activities conducted at Site 1. Data were collected during this RI to:

- Determine the extent of the waste disposal area.
- Identify the types of materials disposed of in the landfill and the chemicals of potential concern (COPCs).
- Determine the extent and sources of mobile contaminants in soil and groundwater.
- Assess the potential impact to media including surface water and sediment and the surficial aquifer.

Site 1 RI field activities included the following:

- Geophysical investigation
- Passive soil-gas survey
- Surface soil sampling
- Subsurface soil sampling
- DPT groundwater screening
- Monitoring well installation and sampling
- Surface water and sediment sampling
- Aquifer characterization

2.1 GEOPHYSICAL INVESTIGATION

An important element of the containment presumptive remedy for landfills is to adequately determine the extent of the disposal area. A geophysical survey was conducted at Site 1 to locate individual disposal cells and to delineate the extent of the landfill. Data from the geophysical survey were used to guide later phases of the investigation.

Magnetic and terrain conductivity (EM-31) geophysical surveys were conducted at the suspected disposal areas at Site 1 (Figure 2-1). These surveys were based on a 10-foot line spacing grid.

On the golf course area north of Site 1 (former location of catfish ponds) a meandering path EM-31 survey was conducted (Figure 2-1). This survey was used to rapidly screen the Catfish Pond area for unreported disposal cells. The report for the geophysical investigation is included in Appendix A.

2.2 SOIL AND VADOSE ZONE INVESTIGATIONS

The soil and vadose zone investigations, which included a passive soil-gas survey and surface and subsurface soil sampling for chemical analysis, were implemented to refine the delineation of the waste disposal area and confirm that landfill contents meet the municipal-type waste definition.

In addition, investigations were conducted to screen for landfill gas generation and to determine the grain size of the fill material used in the existing soil cover.

2.2.1 Passive Soil-Gas Survey

The passive soil gas survey was a qualitative study of volatile contaminants in shallow subsurface soil and groundwater. Passive soil-gas samplers were used to collect media-composite samples from the vadose zone and shallow surficial aquifer. The 32 samplers were installed to investigate anomalies identified in the geophysical survey where waste disposal was suspected to have occurred. One, two, or three soil gas samplers were installed at the individual anomalies, based on the extent of the anomaly (Figure 2-2). Eight samplers were lost or destroyed before recovery. The report from the soil gas survey is included in Appendix B.

This assessment was not a complete characterization of vadose zone chemistry at Site 1; rather the results provided an efficient means of determining hot spots in the study area and supported the subsequent investigative phases of the RI.

2.2.2 Surface Soil Investigation

The surface soil investigation was conducted to determine if the existing surface soil at the site can be integrated into a final cover. Twenty-one (21) sample locations were selected from the landfill disposal area for chemical analysis (Figure 2-3). Field sampling records are included in Appendix C. One surface soil sample was collected from 0 to 1 foot at 19 locations and 0 to 2 feet at 2 locations.

The surface soil samples were analyzed for target compound list (TCL) VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and target analyte list (TAL) inorganics (see Table 2-1). The results of the surface soil investigation are presented in Section 4.2.2. Validated data are included in Appendix D.

2.2.3 Subsurface Soil Investigation

Because extensive subsurface soil sampling was conducted for the 1997 Field Verification Action (discussed in Section 1.4.3), subsurface soil sampling for the RI focused on sampling for VOCs, which

may have migrated from the waste disposal areas since the previous sampling event, and on subsurface soils adjacent to the canal on the east side of Site 1, which potentially could be disturbed during planned construction activities.

2.2.3.1 DPT Subsurface Soil Samples

Because extensive subsurface soil sampling was conducted at Site 1 for the Field Verification Study, subsurface soil sampling for the RI concentrated on evaluating the current concentrations of VOCs, the most mobile contaminants suspected to have been disposed of during landfill operations. One subsurface soil sample was collected from each of 10 drilling locations (see Figure 2-3). The drilling locations were selected to coincide with the margins of the waste area and provide a cross-sectional characterization of the shallow subsurface across the site. These samples were submitted for quick-turnaround analysis for TCL VOCs. Soil boring logs are included in Appendix C. Validated data are included in Appendix D.

2.2.3.2 Canal Bank Samples

Seven additional soil samples were collected adjacent to the canal on the east side of Site 1. These sample locations were outside of the area previously investigated. Three of the samples were analyzed for a full suite of analyses, TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and TAL inorganics (see Table 2-1). The other four samples were analyzed only for PCBs. Validated data are included in Appendix D.

2.2.4 Landfill Gas Screening

The landfill gas screening was conducted to detect generation of landfill gases at Site 1. The evaluation included the collection and field analysis of vadose zone gas samples from four locations at Site 1 (shown on Figure 2-4). Locations were evenly spaced over the disposal area. At one location, 01LG05, groundwater was pulled into the sample train and readings were not taken.

The vadose zone sampling was conducted with an expendable probe system because of potential for the water table to be very close to the ground surface. The sampling probe tip was attached to a length of teflon tubing and was driven with a slide hammer to a depth of 1 foot below land surface (bls) and the surface annular space was sealed with clay. A GEM 2000 landfill gas monitor was attached to the tubing and was used to purge the system. The GEM 2000 was used to monitor concentrations of methane (% CH₄), oxygen (% O₂), and carbon dioxide (% CO₂). Readings were recorded at two time intervals (at 5 and 10 minutes elapsed time). At each sampling location, the readings showed that the vadose zone gas concentrations had stabilized (consistent reading maintained for 5 minutes). Then a Multi-Rae multi-gas

meter was attached to the tubing and readings were recorded for oxygen (%O₂), methane lower explosive limit (% LEL), VOCs [photoionization detector (PID) in parts per million (ppm)], carbon monoxide (ppm CO), and hydrogen sulfide (ppm H₂S).

2.2.5 Grain Size Sampling and Analysis

Surface soil samples were collected at five locations in the waste disposal area (Figure 2-4) to provide preliminary quantitative data on the material forming the existing soil cover. The five samples were analyzed for grain size distribution (ASTM D 422).

2.3 GROUNDWATER INVESTIGATIONS

Groundwater sampling during the RI included DPT groundwater screening and permanent monitoring well sampling. DPT groundwater sampling was conducted to support the soil-gas study, and monitoring well sampling was conducted to characterize site groundwater conditions. Figure 2-5 includes DPT sample locations, and Figure 2-6 includes monitoring well locations.

2.3.1 DPT Groundwater Screening

A DPT rig was mobilized to complete a groundwater investigation following an assessment of the soil-gas modules. A total of 29 groundwater samples from 29 locations were collected via temporary wells and analyzed for VOCs using Method 8260.

At each location, a 2-inch-diameter well screen was driven to a selected depth, based on site lithology, and then exposed to a discrete 4-foot interval of the water-bearing zone. Samples were collected at depths ranging from 6 feet to 45 feet. The results of the DPT groundwater screening are presented in Section 4.3.1.

2.3.2 Monitoring Well Installation and Sampling

A total of 22 permanent monitoring wells (GPT-01-06 through GPT-01-27) were installed at Site 1 during the RI at locations chosen based on the results of the DPT groundwater investigation (see Table 2-2). Wells were installed upgradient and downgradient of the landfill to evaluate potential migration of contamination, and well pairs and clusters were installed to evaluate vertical groundwater gradients. Wells were screened in the shallow and deep zones of the shallow surficial aquifer. Well locations are presented on Figure 2-6.

Monitoring well groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and TAL inorganics. Groundwater quality parameters

including pH, conductivity, temperature, dissolved oxygen, and turbidity were measured with field instruments at each monitoring well during sampling activities. The monitoring well groundwater results are presented in Section 4.3.2. Groundwater sample log sheets are included in Appendix C.

Monitoring wells were installed using DPT methods and were constructed of 1-inch-diameter, Schedule 40 polyvinyl chloride (PVC) flush-threaded casing with 5-foot (deep wells) or 10-foot (shallow and intermediate wells), 0.01-inch slotted, PVC, pre-packed screens. The shallow monitoring wells were installed to total depths averaging 14 feet. Four intermediate wells (GPT-01-07/GPT-01-10/GPT-01-12/GPT-01-14) were installed to total depths between 23 and 29 feet. Deep monitoring wells (GPT-01-6/GPT-01-9/GPT-01-11) were installed to total depths between 40 and 49 feet. A 2-foot-thick bentonite pellet seal was installed above the 20/40 sand filter pack. The remainder of the annulus of the borehole was grouted with cement/bentonite slurry. The monitoring wells were completed at ground surface with flush-mount vaults, as specified in the Southern Division Specifications for Monitoring Well Completion and Abandonment (NFESC, 1999). The horizontal location and top of casing elevation for each new monitoring well was surveyed by a Mississippi-licensed professional land surveyor. Monitoring well construction details are summarized in Table 2-2.

2.4 SURFACE WATER AND SEDIMENT INVESTIGATION

Surface water and sediment samples were collected during the RI from drainage ditches bordering the east and west sides of Site 1. The data collected were used to characterize the general aquatic environmental quality in these ditches. Five co-located surface water and sediment samples were collected (Figure 2-7). Three of the samples (01SW/SD0101, 01SW/SD0201, and 01SW/SD0301) were collected from or adjacent to the shallow, concrete-lined drainage ditch on the west side of Site 1, parallel to Colby Ave. At the time of sample collection, maintenance workers had cleaned the sediment from the ditch. Therefore, at locations 01SD0201 and 01SD0301, sediment was collected from the locations where shallow drainage swales from Site 1 intersected the concrete-lined ditch. The surface water samples were collected from within the ditch. The surface water and sediment samples collected at 01SW/SD0101 were collected from the mouth of a culvert, where the ditch had not been cleaned. Two surface water and sediment sample locations (01SW/SD0401 and 01SW/SD0501) were located in the larger drainage ditch on the east side of Site 1.

The surface water and sediment samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and TAL inorganics. Surface water and sediment results are presented in Section 4.4. Surface water and sediment sample log sheets are included in Appendix C.

2.5 AQUIFER CHARACTERIZATION

Static water level (SWL) measurement data were recorded from Site 1 monitoring wells in September of 2008. The monitoring well locations are shown on Figure 2-6. The SWL measurement data and top of casing elevations were used to determine groundwater elevations at site monitoring wells. The groundwater elevations were used to estimate flow direction and horizontal and vertical gradients at each site.

Hydraulic conductivity values were calculated from slug tests that were conducted in wells at Site 3, which is located approximately 750 feet to the northwest of Site 1 (Site 3 RI) and Site 4, which is located approximately 500 feet to the west of Site 1 (Site 4 RI). Because the hydrogeology of these sites is similar, additional slug tests were not conducted at Site 1.

**TABLE 2-1
REMEDIAL INVESTIGATION SAMPLING AND ANALYSIS SUMMARY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

SAMPLE MATRIX	LABORATORY SAMPLE ANALYSES					
	TCL VOCs	TCL SVOCs	TCL Pest/PCBs	Appx IX Herbicide	TAL Metals + CN	PCBs Only
Soil						
Surface Soil	21	21	21	21	21	
Subsurface Soil	13	3	3	3	3	4
Sediment	5	5	5	5	5	
Surface Water	5	5	5	5	5	
Groundwater						
Monitoring Wells	22	22	22	22	22	
DPT	29					

Notes:

- TCL Target Compound List
- TCL VOCs TCL volatile organic compounds - Method 8260B
- TCL SVOCs TCL semivolatile organic compounds - Method 8270C
- TCL Pest/PCBs TCL pesticides and polychlorinated biphenyls - Methods 8081A/8082
- Appx IX Herbicide Appendix IX chlorinated herbicides - Method 8151B
- TAL Metals + CN Target Analyte List metals and cyanide - Method 6061B
- PCBs Only Method 8082

TABLE 2-2

Rev. 0
01/07/10

**MONITORING WELL INSTALLATION DETAILS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

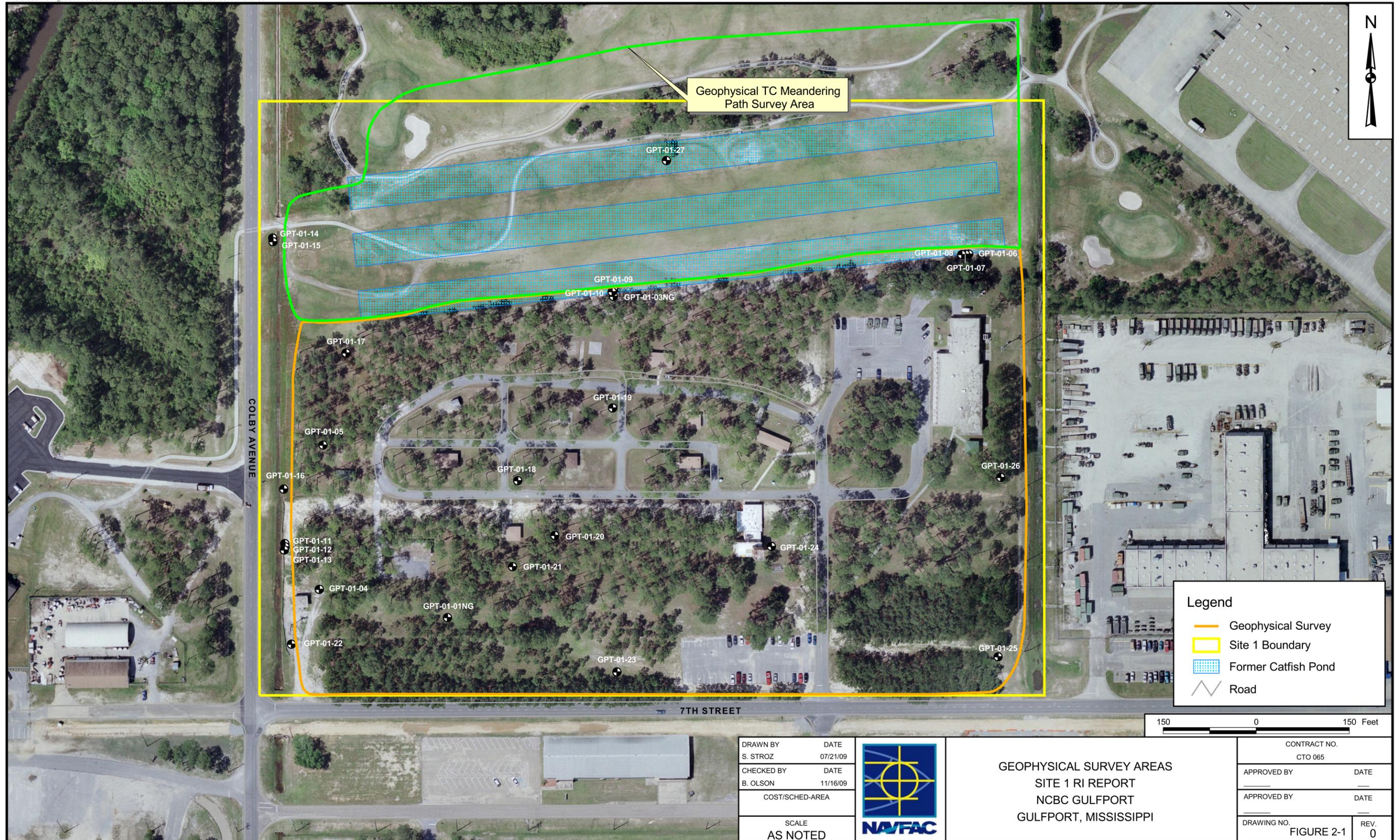
MONITORING WELL ID	INSTALLATION DATE	WELL TOTAL DEPTH (feet BTOC)	SCREENED INTERVAL (feet bls)	TOP-OF-CASING ELEVATION (feet msl)
GPT-01-01		32.51		27.86
GPT-01-02		29.68		29.09
GPT-01-03		27.84		26.99
GPT-01-04		Shallow		Unknown
GPT-01-05		24.58		23.58
Monitoring wells GPT-01-01 to GPT-01-05 installed as part of previous investigations				
GPT-01-06	12-Aug-2009	40.05	35-40	25.38
GPT-01-07	12-Aug-2009	24.41	14-24	25.55
GPT-01-08	12-Aug-2009	12.54	2-12	25.43
Monitoring wells GPT-01-06/07/08 are clustered				
GPT-01-03		27.84		26.99
GPT-01-09	13-Aug-2009	48.89	44-49	25.26
GPT-01-10	13-Aug-2009	22.64	12.5-22.5	25.24
Monitoring wells GPT-01-03/09/10 are clustered				
GPT-01-11	14-Aug-2009	39.27	34-39	23.13
GPT-01-12	14-Aug-2009	24.09	14-24	23.03
GPT-01-13	14-Aug-2009	13.24	3-13	23.27
Monitoring wells GPT-01-11/12/13 are clustered				
GPT-01-14	15-Aug-2009	28.91	19-29	22.69
GPT-01-15	15-Aug-2009	14.60	4.5-14.5	22.39
Monitoring wells GPT-01-14/15 are clustered				
GPT-01-16	15-Aug-2009	14.24	4-14	22.69
GPT-01-17	15-Aug-2009	13.98	4-14	22.87
GPT-01-18	15-Aug-2009	14.04	4-14	24.15
GPT-01-19	16-Aug-2009	14.08	4-14	24.39
GPT-01-20	16-Aug-2009	14.05	4-14	24.18
GPT-01-21	16-Aug-2009	13.96	4-14	24.19
GPT-01-22	19-Aug-2009	14.20	4-14	27.11
GPT-01-23	19-Aug-2009	14.28	4-14	27.83
GPT-01-24	19-Aug-2009	14.17	4-14	25.25
GPT-01-25	19-Aug-2009	14.14	4-14	26.94
GPT-01-26	19-Aug-2009	14.19	4-14	26.21
GPT-01-27	16-Aug-2009	14.18	4-14	24.98

Notes:

feet bls - feet below land surface

feet msl - feet above mean sea level

feet BTOC - feet below top of casing

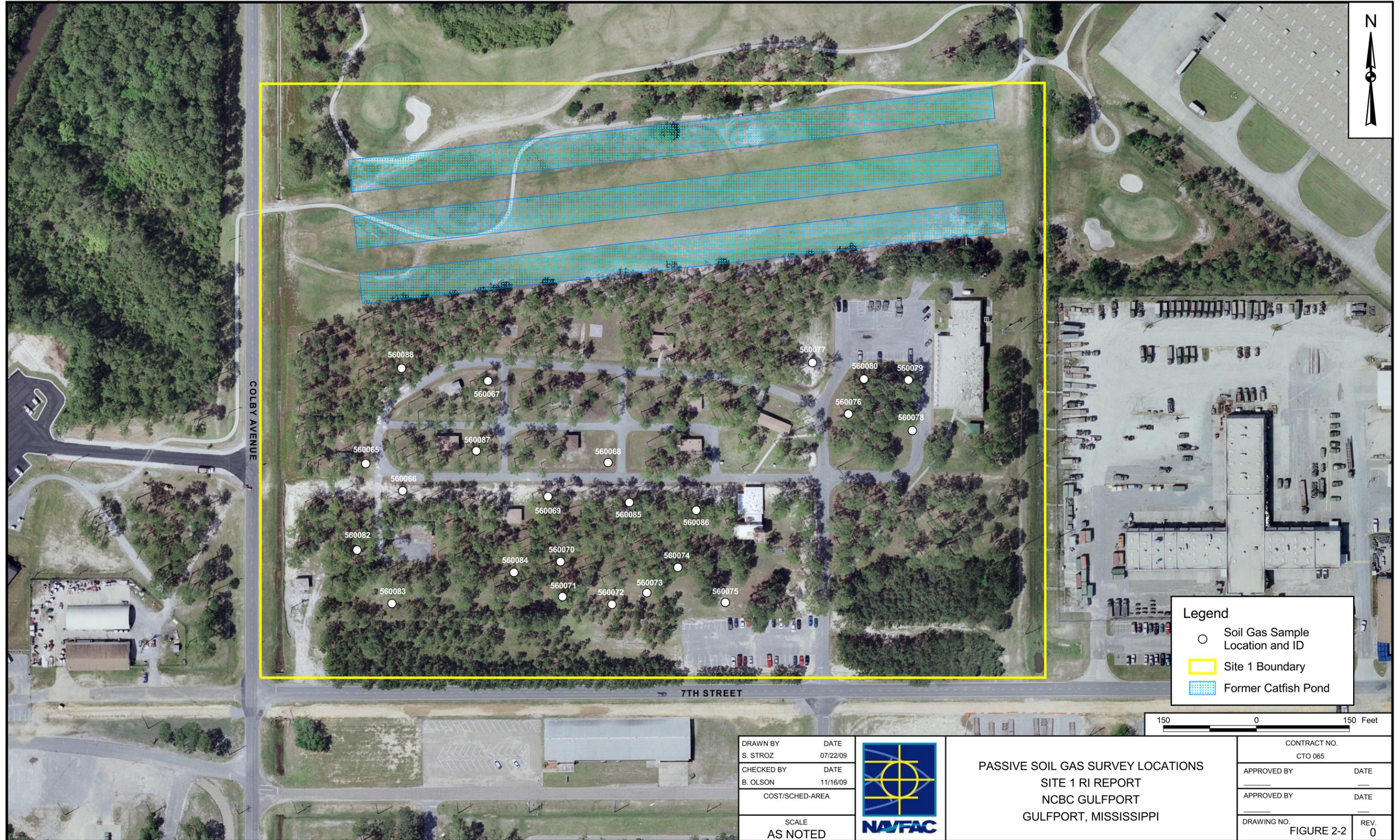


DRAWN BY S. STROZ	DATE 07/21/09
CHECKED BY B. OLSON	DATE 11/16/09
COST/SCHED-AREA	
SCALE AS NOTED	



GEOPHYSICAL SURVEY AREAS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2-1	REV. 0



Legend

- Soil Gas Sample Location and ID
- Site 1 Boundary
- ▒ Former Catfish Pond

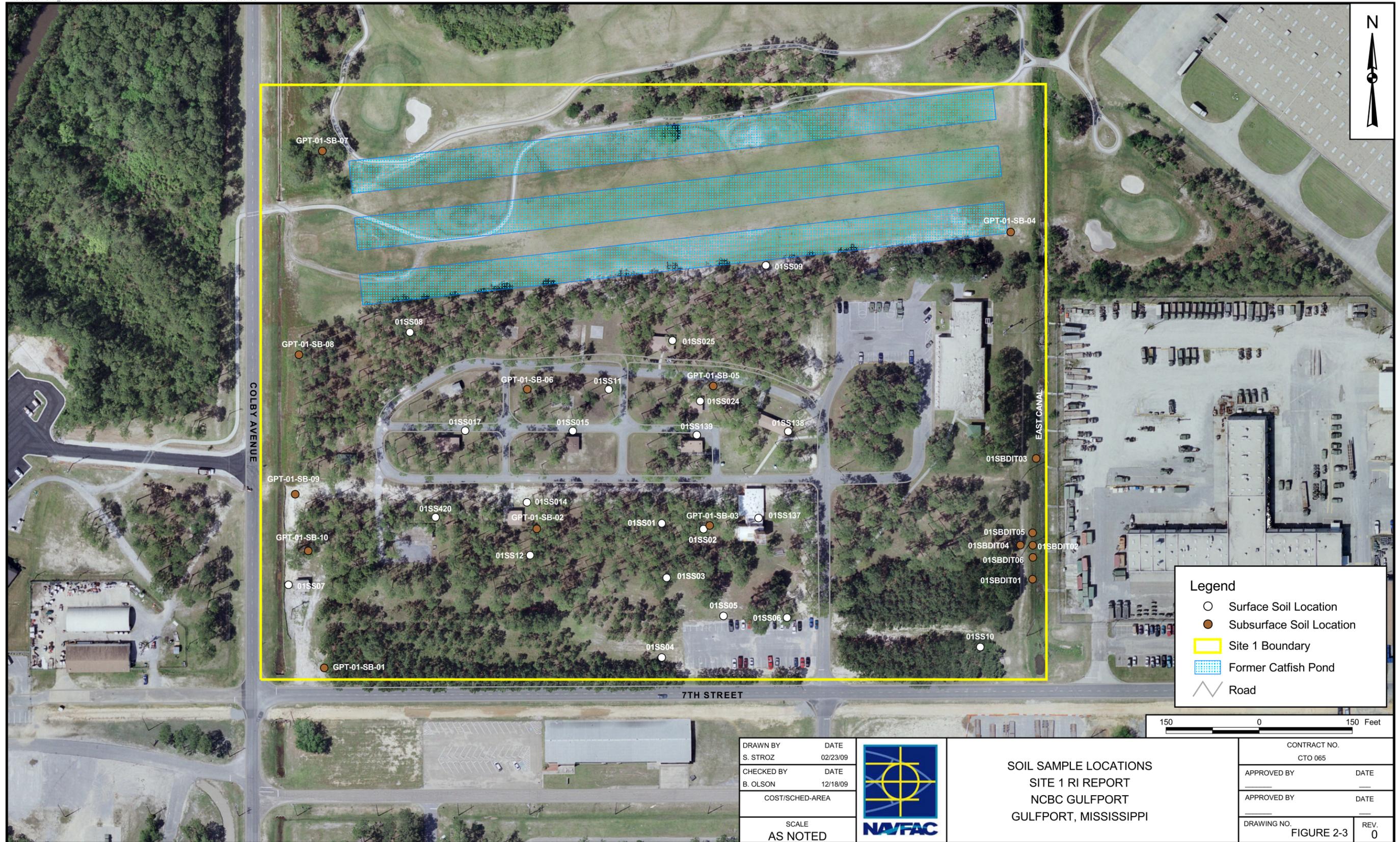


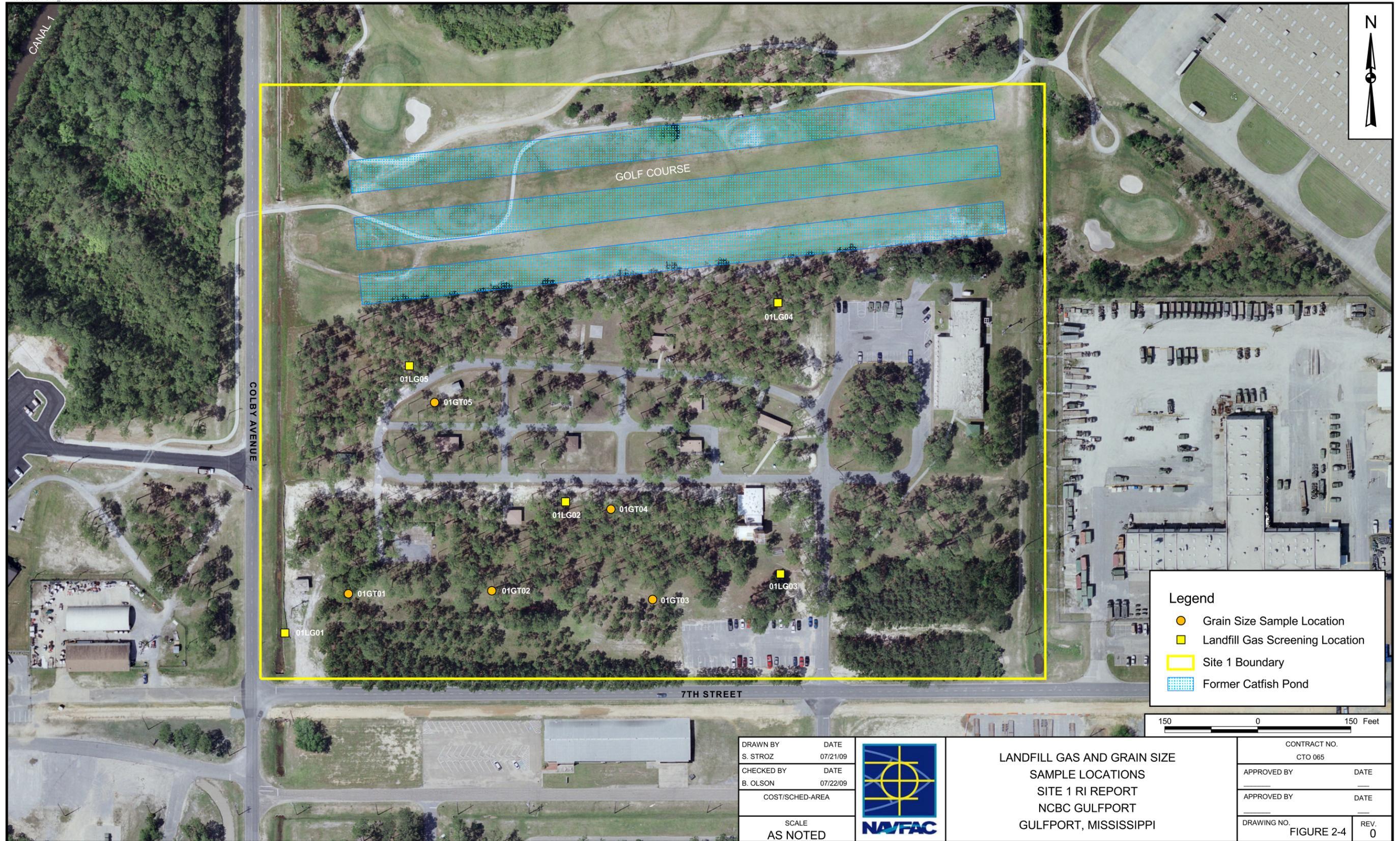
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CHECKED BY B. OLSON	DATE 11/16/09
COST/SCHED-AREA	
SCALE AS NOTED	



PASSIVE SOIL GAS SURVEY LOCATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2-2	REV. 0





Legend

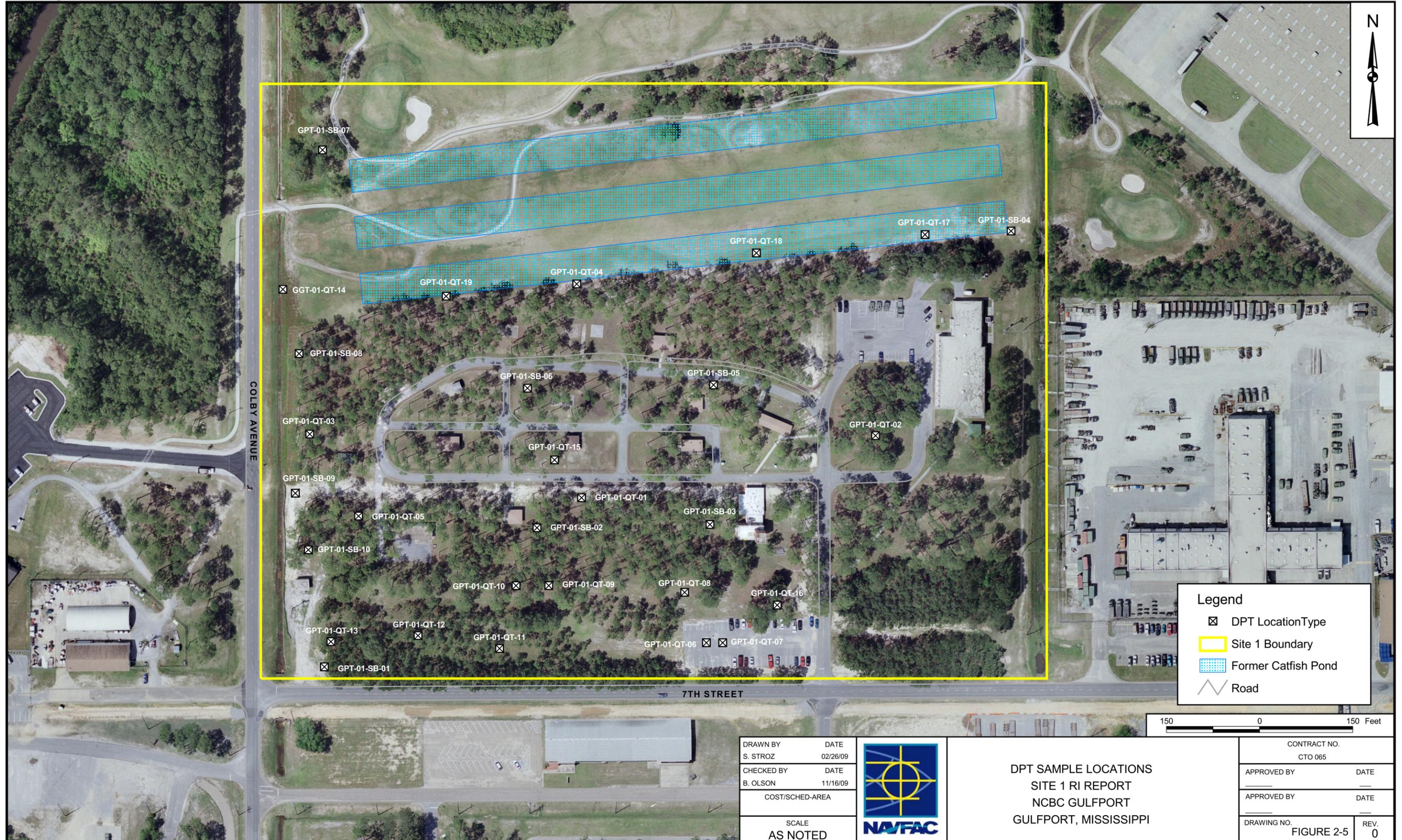
- Grain Size Sample Location
- Landfill Gas Screening Location
- Site 1 Boundary
- Former Catfish Pond

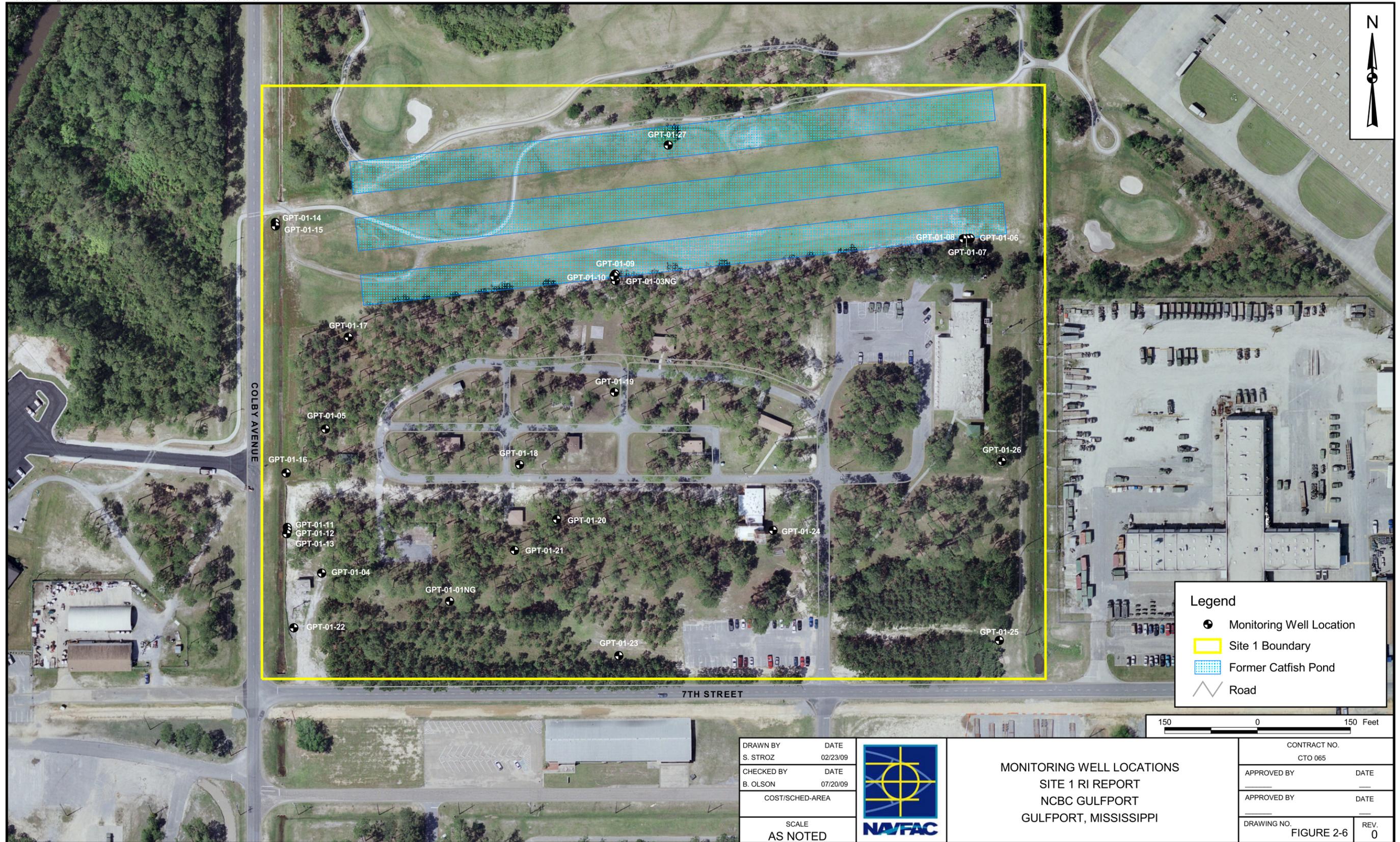
DRAWN BY S. STROZ	DATE 07/21/09
CHECKED BY B. OLSON	DATE 07/22/09
COST/SCHED-AREA	
SCALE AS NOTED	



LANDFILL GAS AND GRAIN SIZE
SAMPLE LOCATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2-4	REV. 0





Legend

- Monitoring Well Location
- Site 1 Boundary
- Former Catfish Pond
- Road

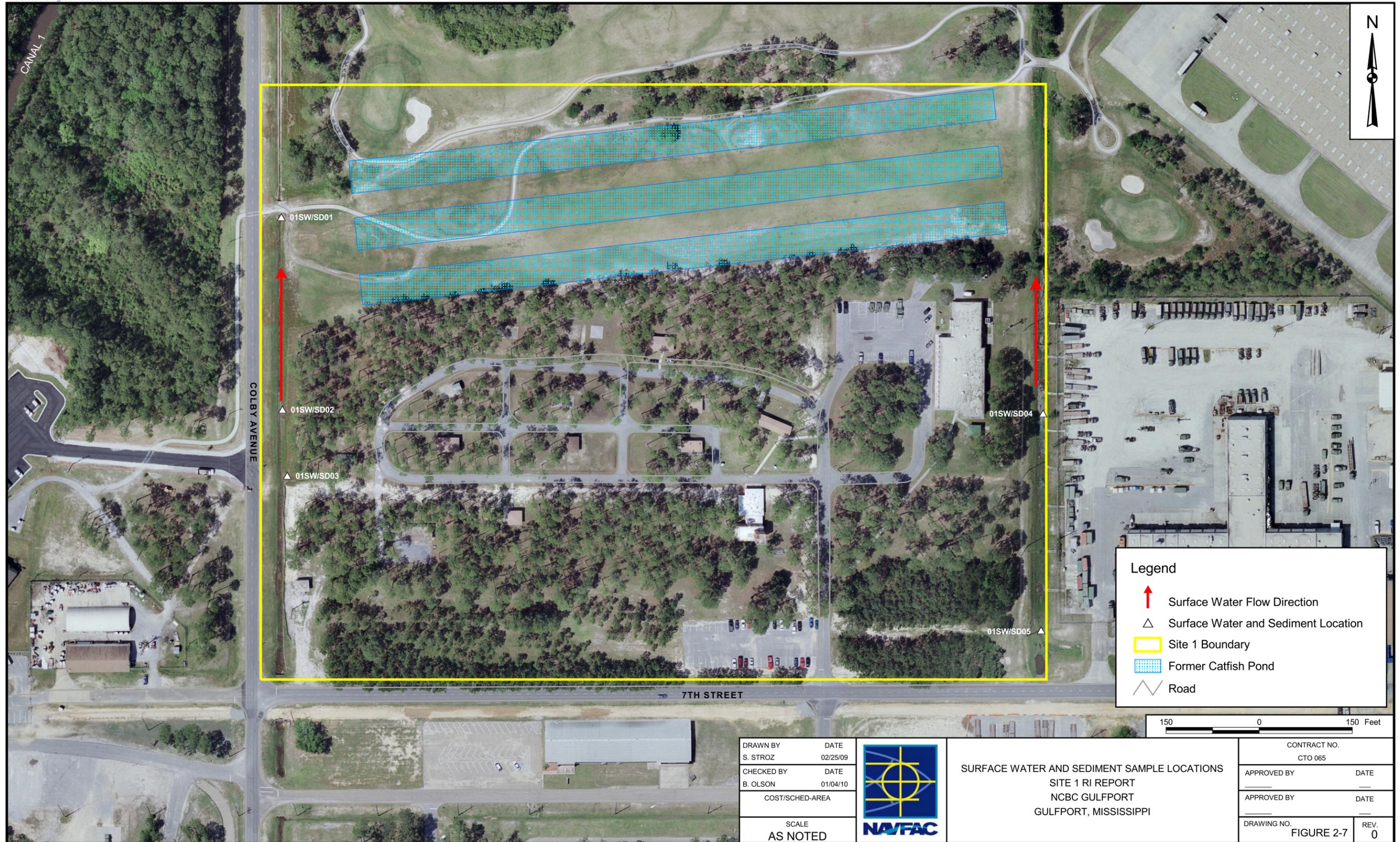


DRAWN BY S. STROZ	DATE 02/23/09
CHECKED BY B. OLSON	DATE 07/20/09
COST/SCHED-AREA	
SCALE AS NOTED	



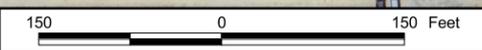
**MONITORING WELL LOCATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2-6	REV. 0



Legend

- Surface Water Flow Direction
- Surface Water and Sediment Location
- Site 1 Boundary
- Former Catfish Pond
- Road



DRAWN BY S. STROZ	DATE 02/25/09
CHECKED BY B. OLSON	DATE 01/04/10
COST/SCHED-AREA	
SCALE AS NOTED	



SURFACE WATER AND SEDIMENT SAMPLE LOCATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2-7	REV. 0

3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

NCBC Gulfport is located in the western part of the City of Gulfport, Mississippi, in southeastern Harrison County, approximately 2 miles north of the Gulf of Mexico. NCBC Gulfport occupies approximately 1,100 acres and has an average elevation of approximately 30 feet above sea level.

3.1 SURFACE FEATURES

Site 1 is a former landfill facility encompassing approximately 9 acres, although the areal extent of the waste disposal is smaller (Figure 3-1). The site is bordered on the north by facilities of the Pine Bayou Golf Course. Planted pine trees are present across the site. The site topography is relatively flat, with elevations of approximately 20 to 24 feet above mean sea level.

3.2 METEOROLOGY

The Gulfport area has a mild climate with warm and humid summers [average temperature of 82 degrees Fahrenheit (°F)] and mild winters (average temperature of 52 °F). The mean annual precipitation is 63.5 inches, and individual storms are often intense and may produce large 24-hour precipitation totals. The Mississippi coast is subject to hurricanes between June 1 and November 30.

3.3 SURFACE WATER HYDROLOGY

NCBC Gulfport is located in the Gulf Coast Flatwoods Region, which extends along the southern coast of Harrison County. This area is typically drained by small streams flowing southeastward toward the coast. Topography in this area is a series of wet, poorly drained depressions between better drained areas of slightly higher elevation.

Surface water in the vicinity of NCBC Gulfport is abundant. Storm water runoff is collected in a series of ditches and canals and directed off base. Large precipitation events tend to produce small stream and ditch flooding due to relatively high stream flow velocities.

The drainage ditch on the western side of the site receives surface water runoff from most of the disposal area identified at Site 1 and discharges to Canal No. 1 on the northern side of 8th Street (Figure 3-1).

The canal on the eastern side of Site 1 receives limited runoff from the eastern part of Site 1 and flows to the north and discharges south of 28th Street at Outfall 3.

3.4 GEOLOGY

Data collected from soil borings advanced at Site 1 were used to evaluate the lithologic and stratigraphic conditions that may influence contaminant fate and transport at the site.

3.4.1 Site Stratigraphy

Surface and shallow subsurface soils in the Site 1 area are primarily gray and brown sand to sandy silt with varying amounts of gravel and minor clay horizons. Figure 3-2 shows the locations of soil borings used to develop the geologic cross section, Figure 3-3. The uppermost 2 feet in most areas is fill material. Below the fill material, typical lithologies are light brown and gray fine sands and silty fine sands. These strata are typical of Pleistocene and Recent age terrace and stream valley deposits. Some horizons contain stringers of fine, subrounded, quartz gravel or shell fragments to depths of up to 20 feet. The top of a gray silt unit with sand and clay is encountered at depths of approximately 20 to 30 feet bls, depending on site topography. This clay-rich layer is persistent across the site, with thicknesses ranging from 5 to 10 feet.

Below the gray clayey sand layer, gray silty sand, and sand lithologies are present at depths ranging from 35 to 50 feet. This sand unit is 5 to 10 feet thick over most of the site. At depths of approximately 40 to 48 feet, a much more plastic green-gray clayey silt layer was encountered. This layer is persistent across the site and, based on other sites investigated at NCBC Gulfport, ranges from 10 to 50 feet thick (HLA, 1999). This layer may represent an aquitard that separates the shallow surficial aquifer from deeper water-bearing units.

3.4.2 Regional Geology

NCBC Gulfport is located in the coastal plain of southern Mississippi, which is underlain by a series of estuarine or deltaic sediments that dip southwestward toward the delta of the Mississippi River (Shows, 1970). These sediments range in age from Miocene to Recent and are not readily separated into stratigraphic units. The uppermost beds are Pleistocene and Recent terrace and stream valley deposits. The uppermost stratigraphic unit in the coastal plain area is the Pamlico Sand. The Pamlico Sand formation is approximately 60 to 70 feet thick and is composed of fine silt, sands, and shale, or clay. The Pamlico Sand is underlain by the following formations:

- Citronelle Formation (youngest), approximately 100 feet thick.
- Graham Ferry Formation, alternating layers of sand, shale, and clay ranging from 125 to 250 feet thick.
- Upper and Lower Pascagoula Formations (oldest), alternating layers of sand, shale, and clay with shell and boulders approximately 1,100 feet thick.

3.5 SOILS

Surface and shallow subsurface soils identified from soil borings at Site 1 are primarily sand and silty sand with minor clay horizons. Native soils typically begin at depths of 1 to 2 feet, depending on topography.

The Soil Survey of Harrison County [United States Department of Agriculture (USDA), 1975] identifies the soil type in the developed areas of Site 1 where landfill operations occurred as Harleston fine sandy loam with 0 to 2 percent slopes, a moderately well-drained soil developed in loamy material and commonly found on uplands. This soil type is typically sandy loam and fine sandy loam and is strongly acid to very strongly acid. Permeability is moderate, available water capacity is medium, and runoff is slow.

3.6 HYDROGEOLOGY

Hydrogeologic data were collected to evaluate movement of groundwater in the shallow surficial aquifer at the site. The lithologies at Site 1 are consistent with the typical surficial aquifer of the Mississippi Coastal Plain, composed of undifferentiated alluvium and Pamlico Sand terrace deposits (Recent to Pleistocene in age). The Pamlico Sand formation is approximately 60 to 70 feet thick and is composed of fine sands and clay.

The monitoring wells installed for the RI are grouped into two zones, shallow and deep. The shallow wells include water table wells installed to depths of 13 to 14 feet and the wells installed to depths of approximately 25 to 30 feet bls, at the top of the gray silt unit. Deep wells were installed to depths of approximately 40 to 50 feet bls, at the top of the green silt unit and are screened in the sandy unit between the silt units.

Depth to groundwater and groundwater elevation data were used to determine the site-specific groundwater flow direction and water table gradient. Groundwater flow velocity at the site was estimated using hydraulic conductivity values determined for selected site monitoring wells and hydraulic gradient data.

3.6.1 Static Water Level and Groundwater Elevations

The depth to groundwater at NCBC Gulfport ranges from approximately 2 to 10 feet and is controlled primarily by surface topography. Water level measurement data were recorded from Site 1 monitoring wells in September 2008 (see Table 3-1).

Depth to water measurements in the shallow wells ranged from 0.57 to 6.86 feet bls. Depths to water are greater in the areas of higher elevation in the southern and eastern parts of the site and decrease with elevation approaching the ditch on the western boundary of the site.

Depth to water measurements in the deep wells ranged from 1.89 to 5.20 feet. Depth to water was greatest at GPT-01-09, located in the north central part of Site 1 and decreased to the west and east.

3.6.2 Groundwater Flow Direction

Groundwater elevations measured in September 2008 were plotted and contoured on maps for the shallow zone (Figure 3-4). Based on these contours, groundwater flow in the shallow zone shows a north-south oriented divide near the middle of the site, with groundwater flow to the northwest to the west of the divide, and to the northeast to the east of the divide.

Groundwater elevation data from the three deep zone wells was plotted and the groundwater flow direction is estimated to be to the northwest (Figure 3-5).

3.6.3 Horizontal Hydraulic Gradient

The average horizontal groundwater gradient across the site was calculated using the following equation and groundwater elevations measured in site monitoring wells and the estimated groundwater flow direction:

$$I \equiv \frac{h_1 - h_2}{d}$$

where:

I = hydraulic gradient

h_1 = groundwater elevation at point 1, the highest value

h_2 = groundwater elevation at point 2, the lowest value

d = horizontal distance between points 1 and 2 parallel to direction of groundwater flow

The highest and lowest groundwater elevations measured in monitoring wells from each aquifer zone (shallow and deep) were used to determine the difference in groundwater elevation for that zone across the site (Table 3-2). Because there is a groundwater divide in the shallow zone, gradients were calculated for the western and eastern sides of the site. The horizontal distance between the high and low groundwater elevation points in each zone was measured parallel to the estimated groundwater flow direction.

The average gradient in the shallow wells west of the groundwater divide was 0.003 feet per foot (ft/ft). The average gradient in the shallow wells east of the groundwater divide was 0.002 ft/ft. The gradient in the deep wells was 0.008 ft/ft.

3.6.4 Vertical Hydraulic Gradient

The vertical groundwater gradient was estimated from groundwater elevations measured in shallow and deep monitoring well pairs installed at the site. The vertical gradient is determined from the difference in groundwater elevations in adjacent shallow and deep monitoring wells and the vertical separation of the screened intervals of the monitoring wells. The vertical separation of each well cluster is the difference in depth below grade of the middle of the shallow well screened interval and the middle of the deep well screened interval. If the groundwater elevation in the shallow well in a cluster is higher than the groundwater elevation in the deep well, the vertical gradient is negative or downward. If the groundwater elevation in the shallow well is lower than the groundwater elevation in the deep well, the vertical gradient is positive or upward.

Little or no vertical gradient, 0.01 to -0.01 ft/ft, was observed in the monitoring well pairs screened in the upper and lower parts of the shallow zone (Table 3-3).

More pronounced vertical gradients, -0.03 to -0.12 ft/ft, were observed in the well clusters where wells were screened in the shallow and deep zones (Table 3-3). The vertical gradients were downward across the site, indicating that the downward migration of contaminants from the shallow part of the aquifer may be limited by a semi-confining layer and suggesting the potential for groundwater discharge to surface water bodies.

3.6.5 Hydraulic Conductivity

Hydraulic conductivity values for Site 1 were estimated using the data from slug tests conducted in selected monitoring wells at Site 3 (TtNUS, 2008) and Site 4 (TtNUS, 2007). A slug test data summary is included in Table 3-4. The geometric mean of the hydraulic conductivity values reported for shallow monitoring wells at Site 3 and Site 4 is approximately 23.5 feet per day (ft/day). The geometric mean of

the hydraulic conductivity values reported for deep monitoring wells at Site 4 is approximately 3.2 ft/day. The slug test data indicate two orders of magnitude variation in hydraulic conductivity in the surficial aquifer.

3.6.6 Horizontal Groundwater Flow Velocity

Potential horizontal movement of groundwater at the site may be estimated in terms of transportation by natural flow in the saturated zone, assuming groundwater flow follows Darcy's Law. Darcy's Law is expressed as:

$$V \equiv \frac{(K * I)}{\eta}$$

where:

- V = average velocity
- K = hydraulic conductivity
- η = effective porosity
- I = average hydraulic gradient

Data from soil borings advanced during the DPT investigation indicate that fine-grained sand and silty or clayey sand are typical lithologies at the site. Review of standard literature suggests that a representative effective porosity for this lithology is approximately 30 percent (Heath, 1983).

The horizontal gradient in the shallow surficial aquifer in the western half of Site 1 was 0.003 ft/ft. With a hydraulic conductivity of 23.5 ft/day, the groundwater flow velocity in this part of Site 1 was 0.24 ft/day.

The horizontal gradient in the shallow surficial aquifer in the eastern half of Site 1 was 0.002 ft/ft. With a hydraulic conductivity of 23.5 ft/day, the groundwater flow velocity in this part of Site 1 was 0.16 ft/day.

The horizontal gradient in the deep surficial aquifer at Site 1 was 0.008 ft/ft. With a hydraulic conductivity of 3.2 ft/day, the groundwater flow velocity in this aquifer zone at Site 1 was 0.09 ft/day.

3.6.7 Regional Hydrogeology

In the Gulfport area, geologic units containing fresh water are of Miocene to Recent age. Aquifers are composed predominantly of sand beds that are irregular in thickness and horizontal extent. There are no thick, consistently traceable confining units between aquifers at these shallow depths (Shows, 1970).

The uppermost aquifer is the surficial aquifer, which is composed of undifferentiated alluvium and Pamlico Sand terrace deposits (Recent to Pleistocene in age). The Pamlico Sand formation is approximately 60 to 70 feet thick and is composed of fine sands and clay. Depth to groundwater in the surficial aquifer is variable depending on local topography and precipitation, but generally ranges from 4 to 7 feet bls. In the northern part of the Base, shallow groundwater flow in the surficial aquifer is north toward Turkey Creek, which empties into Bernard Bayou and eventually into the Gulf of Mexico via the Mississippi Sound. Generally, this aquifer is not used for potable water supply.

Beneath the surficial aquifer are hydrogeologic units which include aquifers in the Citronelle Formation and Graham Ferry Formation (Pliocene) and Pascagoula, Hattiesburg, and Catahoula Formations (Miocene). Boundaries between the aquifers are vaguely defined, if at all. These aquifers are composed of sands and discontinuous clays and are a major source of potable water in the Gulfport area.

Wells in the Citronelle Formation are used in Harrison County for both domestic and industrial water supply. Supply wells in the Upper and Lower Pascagoula Formations provide the majority of fresh water used in the Coastal Plain. The Hattiesburg Formation becomes increasingly brackish with depth, and salt water is encountered near the base of this unit (approximately 2,000 feet below sea level).

3.7 DEMOGRAPHY AND LAND USE

NCBC Gulfport is located in the western part of the City of Gulfport, Mississippi, in southeastern Harrison County. Biloxi, the largest city in Harrison County, is located 7 miles east of Gulfport, and Pass Christian is located 7 miles to the west.

NCBC Gulfport is an active military facility with a primary mission of supporting battalions of the NCF and the storage and maintenance of pre-positioned War Reserve Material Stock. NCF support consists of both homeport services and deployed support. Additional missions include tenant support and services to other activities in the region.

Land uses on base include training activities, equipment and materials storage, maintenance areas, recreational facilities, and residential housing for military personnel. Land use in off-base areas adjacent to NCBC Gulfport is primarily residential.

Site 1 is located adjacent to the base golf course; therefore, recreational users and trespassers, as well as site and maintenance workers, are expected to use the site.

3.8 ECOLOGY

Site 1 is located in the northwestern corner of the base. Areas to the east and south of the site are developed and used as training facilities. The area to the north and west include parts of the Pine Bayou Golf Course.

3.8.1 Aquatic Habitats

The drainage ditches at Site 1 are part of the network of interconnected ditches and canals that convey storm water on the base. The on-base ditches at NCBC Gulfport are generally straight and uniform in width, lacking the morphological properties of natural streams. Aquatic plants may grow in stable sand and gravel banks near and below water levels. Wading birds, fish, and benthic organisms have been observed in the ditches and canals on the base.

3.8.2 Terrestrial Habitats

Ground cover at the site is predominantly maintained grass, with planted pines, and several small buildings. Large trees are present throughout the site. On-site wildlife may forage at Site 1, but due to lack of suitable cover on the golf course, wildlife use is assumed to be temporary. Snakes, turtles, frogs, and Canada geese have been observed at the site.

3.8.3 Species of Concern

A request for a listing of species of concern was sent to the Heritage Program of the Mississippi Museum of Natural Science. The response from the Heritage Program, dated February 24, 2003, cited no occurrences of state or federal listed or proposed endangered or threatened plants or animals on NCBC Gulfport.

TABLE 3-1

Rev. 0
01/07/10

**WATER LEVEL MEASUREMENT SUMMARY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

MONITORING WELL ID	WELL TOTAL DEPTH (feet BTOC)	TOP-OF-CASING ELEVATION (feet msl)	9/10/2008	
			DEPTH TO WATER BTOC)	GROUNDWATER ELEVATION (feet msl)
GPT-01-01	32.51	27.86	4.57	23.29
GPT-01-02	29.68	29.09	5.39	23.70
GPT-01-04	Shallow			
GPT-01-05	24.58	23.58	1.17	22.41
GPT-01-06	40.05	25.38	3.86	21.52
GPT-01-07	24.41	25.55	3.51	22.04
GPT-01-08	12.54	25.43	3.33	22.10
GPT-01-03	27.84	26.99	4.17	22.82
GPT-01-09	48.89	25.26	5.20	20.06
GPT-01-10	22.64	25.24	2.45	22.79
GPT-01-11	39.27	23.13	1.89	21.24
GPT-01-12	24.09	23.03	0.58	22.45
GPT-01-13	13.24	23.27	0.81	22.46
GPT-01-14	28.91	22.69	1.31	21.38
GPT-01-15	14.60	22.39	0.99	21.40
GPT-01-16	14.24	22.69	0.57	22.12
GPT-01-17	13.98	22.87	0.81	22.06
GPT-01-18	14.04	24.15	1.25	22.90
GPT-01-19	14.08	24.39	1.43	22.96
GPT-01-20	14.05	24.18	1.06	23.12
GPT-01-21	13.96	24.19	0.99	23.20
GPT-01-22	14.20	27.11	4.18	22.93
GPT-01-23	14.28	27.83	4.00	23.83
GPT-01-24	14.17	25.25	1.86	23.39
GPT-01-25	14.14	26.94	6.86	20.08
GPT-01-26	14.19	26.21	3.86	22.35
GPT-01-27	14.18	24.98	2.25	22.73

Notes:

feet msl - feet above mean sea level

feet BTOC - feet below top of casing

TABLE 3-2
HORIZONTAL HYDRAULIC GRADIENT
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

		SELECTED WELLS	TOTAL DEPTH (feet BTOC)	SCREEN LENGTH (feet)	TOP OF CASING ELEVATION (feet msl)	DEPTH TO WATER (feet BTOC)	GROUNDWATER ELEVATION (feet msl)
SHALLOW WELLS							
WEST	Highest	GPT-01-23	14.28	10	27.83	4.00	23.83
	Lowest	GPT-01-15	14.60	10	22.39	0.99	21.40
		HORIZONTAL DISTANCE (feet)		875	HORIZONTAL GRADIENT (feet/foot)		0.003
EAST	Highest	GPT-01-23	14.28	10	27.83	4.00	23.83
	Lowest	GPT-01-08	12.54	10	25.43	3.33	22.10
		HORIZONTAL DISTANCE (feet)		875	HORIZONTAL GRADIENT (feet/foot)		0.002
DEEP WELLS							
	Highest	GPT-01-06	40.05	5	25.38	3.86	21.52
	Lowest	GPT-01-09	48.89	5	25.26	5.20	20.06
		HORIZONTAL DISTANCE (feet)		187.5	HORIZONTAL GRADIENT (feet/foot)		0.008

Notes:
feet bls - feet below land surface
feet msl - feet above mean sea level
feet BTOC - feet below top of casing
Horizontal distance measure parallel to direction of groundwater flow

TABLE 3-3
VERTICAL HYDRAULIC GRADIENT
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

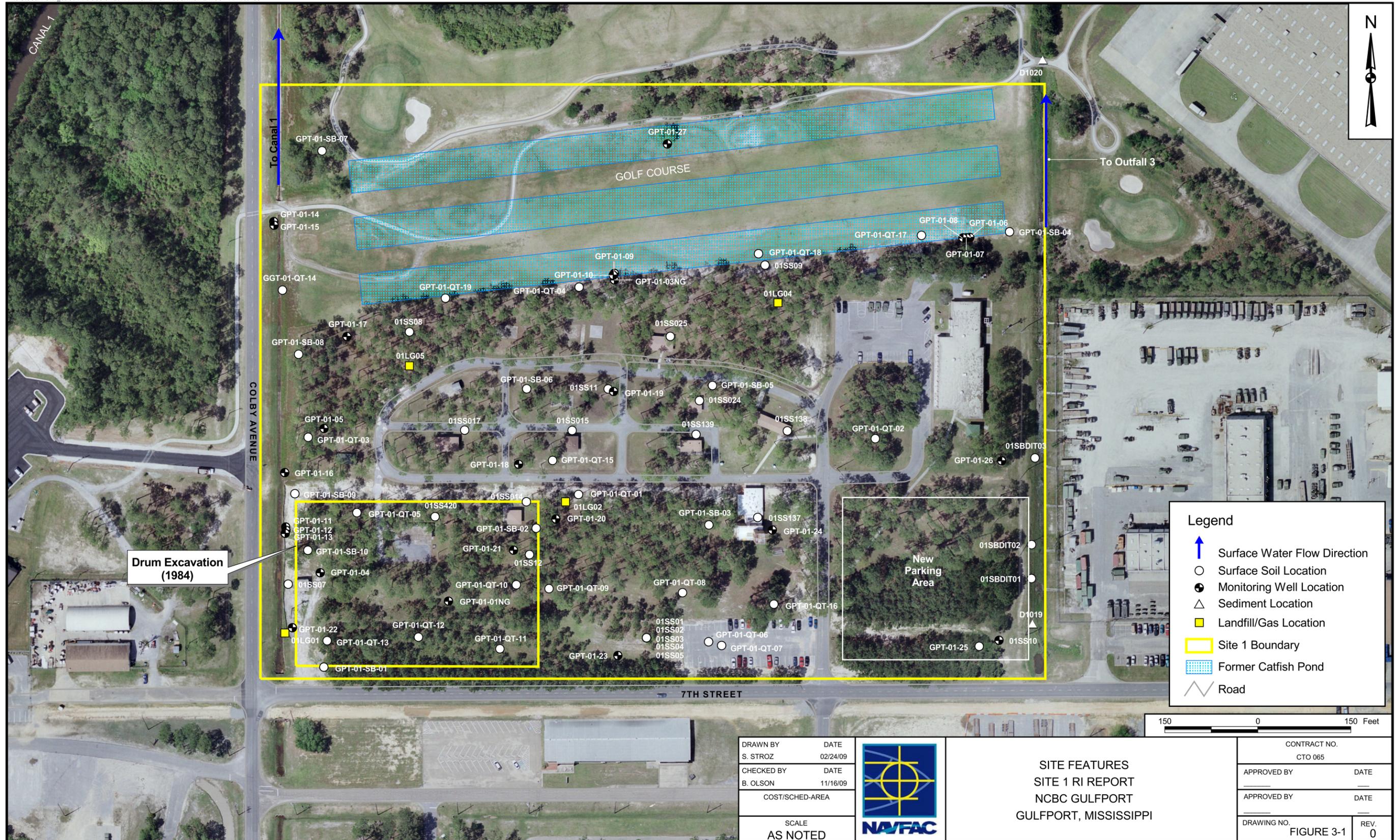
				9/10/2008	
WELL PAIRS	TOTAL WELL DEPTH (feet BTOC)	SCREENED INTERVAL (feet bls)	TOP OF CASING ELEVATION (feet msl)	DEPTH TO WATER (feet BTOC)	GROUNDWATER ELEVATION (feet msl)
GPT-01-10	23	13-23	25.24	2.45	22.79
GPT-01-03	28	18-28	26.99	4.17	22.82
SCREEN SEPARATION (feet)		5	VERTICAL GRADIENT		0.01
GPT-01-03	28	18-28	26.99	4.17	22.82
GPT-01-09	49	44-49	25.26	5.20	20.06
SCREEN SEPARATION (feet)		23.5	VERTICAL GRADIENT		-0.12
GPT-01-08	13	3-13	25.43	3.33	22.10
GPT-01-07	24	14-24	25.55	3.51	22.04
SCREEN SEPARATION (feet)		11	VERTICAL GRADIENT		-0.01
GPT-01-07	24	14-24	25.55	3.51	22.04
GPT-01-06	40	35-40	25.38	3.86	21.52
SCREEN SEPARATION (feet)		18.5	VERTICAL GRADIENT		-0.03
GPT-01-13	13	3-13	23.27	0.81	22.46
GPT-01-12	24	14-24	23.03	0.58	22.45
SCREEN SEPARATION (feet)		11	VERTICAL GRADIENT		0.00
GPT-01-12	24	14-24	23.03	0.58	22.45
GPT-01-11	40	35-40	23.13	1.89	21.24
SCREEN SEPARATION (feet)		18.5	VERTICAL GRADIENT		-0.07
GPT-01-15	15	5-15	22.39	0.99	21.40
GPT-01-14	29	19-29	22.69	1.31	21.38
SCREEN SEPARATION (feet)		14	VERTICAL GRADIENT		0.00

Notes:
 feet bls - feet below land surface
 feet msl - feet above mean sea level
 feet BTOC - feet below top of casing
 Negative gradients are downward, positive gradients are upward

**TABLE 3-4
HYDRAULIC CONDUCTIVITY VALUES
SITES 3 AND 4
SITE 1 REMEDIAL INVESTIGATION REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

SHALLOW WELLS		K (ft/day)
SITE 4	GPT-04-09	36.0
	TD = 26 feet BTOC	44.6
		47.5
		38.9
	GPT-04-16	38.9
	TD = 14 feet BTOC	38.9
		40.3
		44.6
	GPT-04-18	44.6
TD = 21 feet BTOC	38.9	
	44.6	
	9.3	
SITE 3	GPT-03-04	9.3
	TD = 23 feet BTOC	8.7
		8.0
		31.3
	GPT-03-16	31.3
	TD = 27 feet BTOC	46.3
		46.2
		17.4
	GPT-03-07	17.4
	TD = 14 feet BTOC	14.6
		19.8
		1.9
	GPT-03-09	1.9
	TD = 25 feet BTOC	2.4
		38.1
		35.7
	GPT-03-13	38.1
	TD = 30 feet BTOC	35.7
40.7		
106.2		
GPT-03-16	106.2	
TD = 20 feet BTOC	112.9	
	118.1	
	5.9	
GPT-03-17	5.9	
TD = 29 feet BTOC	6.0	
	5.8	
	23.5	
Geometric Mean		23.5
DEEP WELLS		K (ft/day)
SITE 4	GPT-04-11R	1.0
	GPT-04-17	5.8
		5.8
Geometric Mean		3.2

K Hydraulic Conductivity
ft/day feet per day
TD Total depth of well
feet BTOC Feet below top of casing

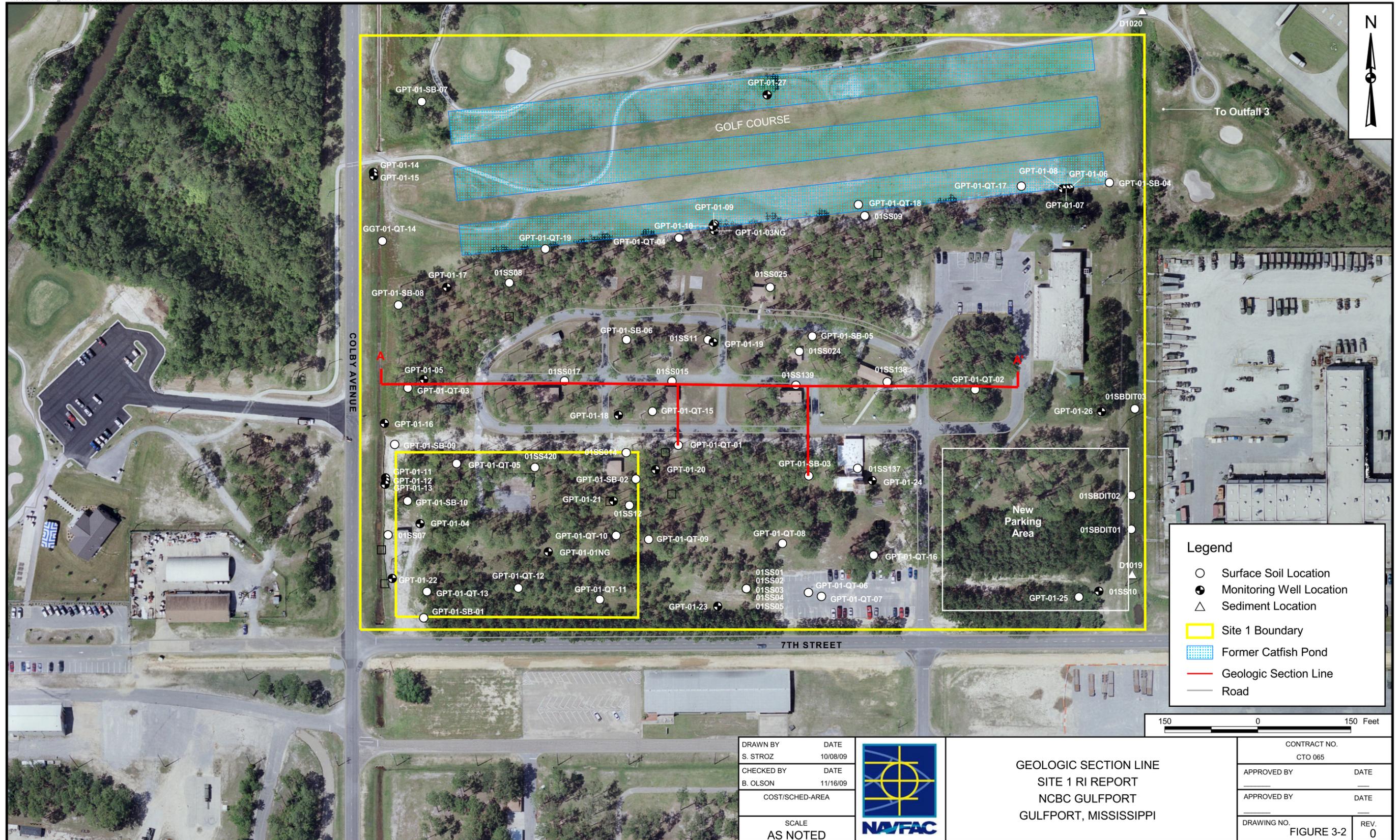


DRAWN BY S. STROZ	DATE 02/24/09
CHECKED BY B. OLSON	DATE 11/16/09
COST/SCHED-AREA	
SCALE AS NOTED	

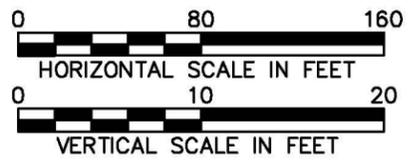
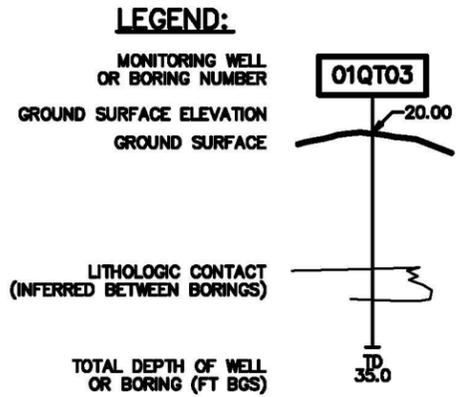
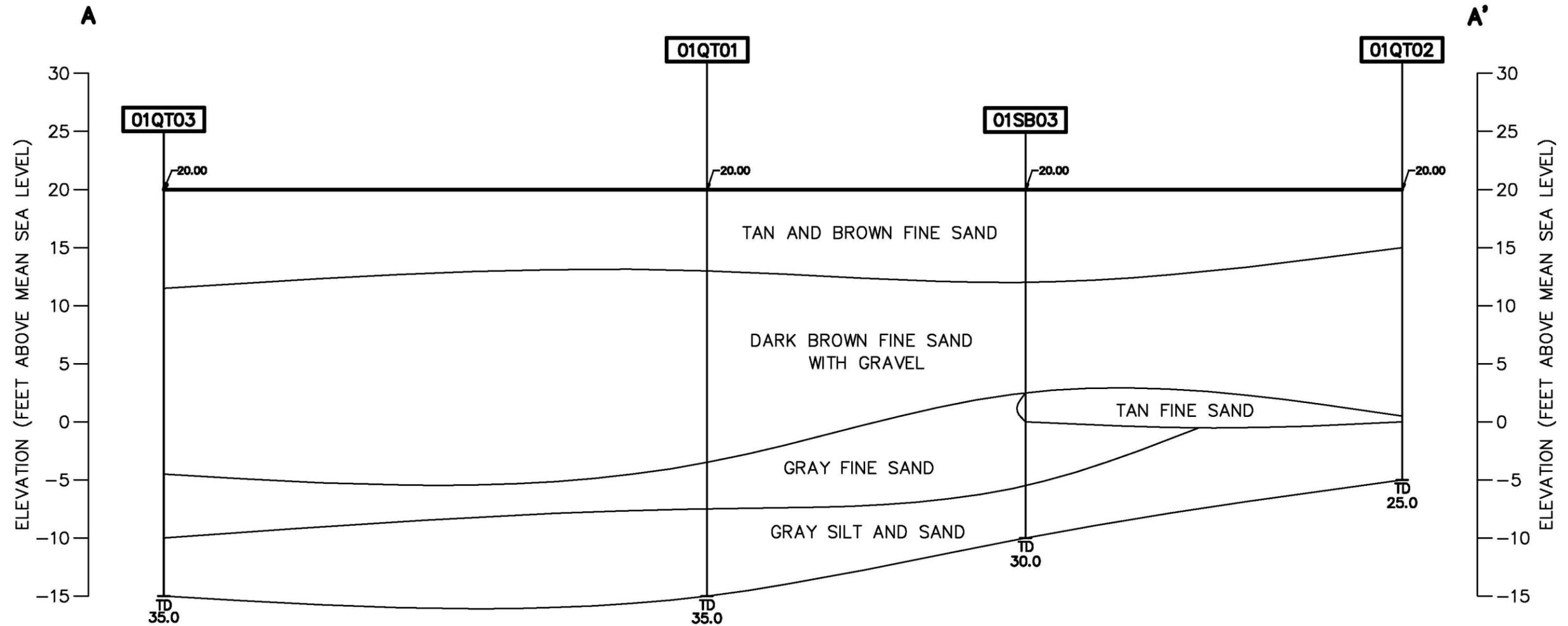


SITE FEATURES
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3-1	REV. 0



ACAD: 0700CK01.dwg 11/03/09 CK PIT

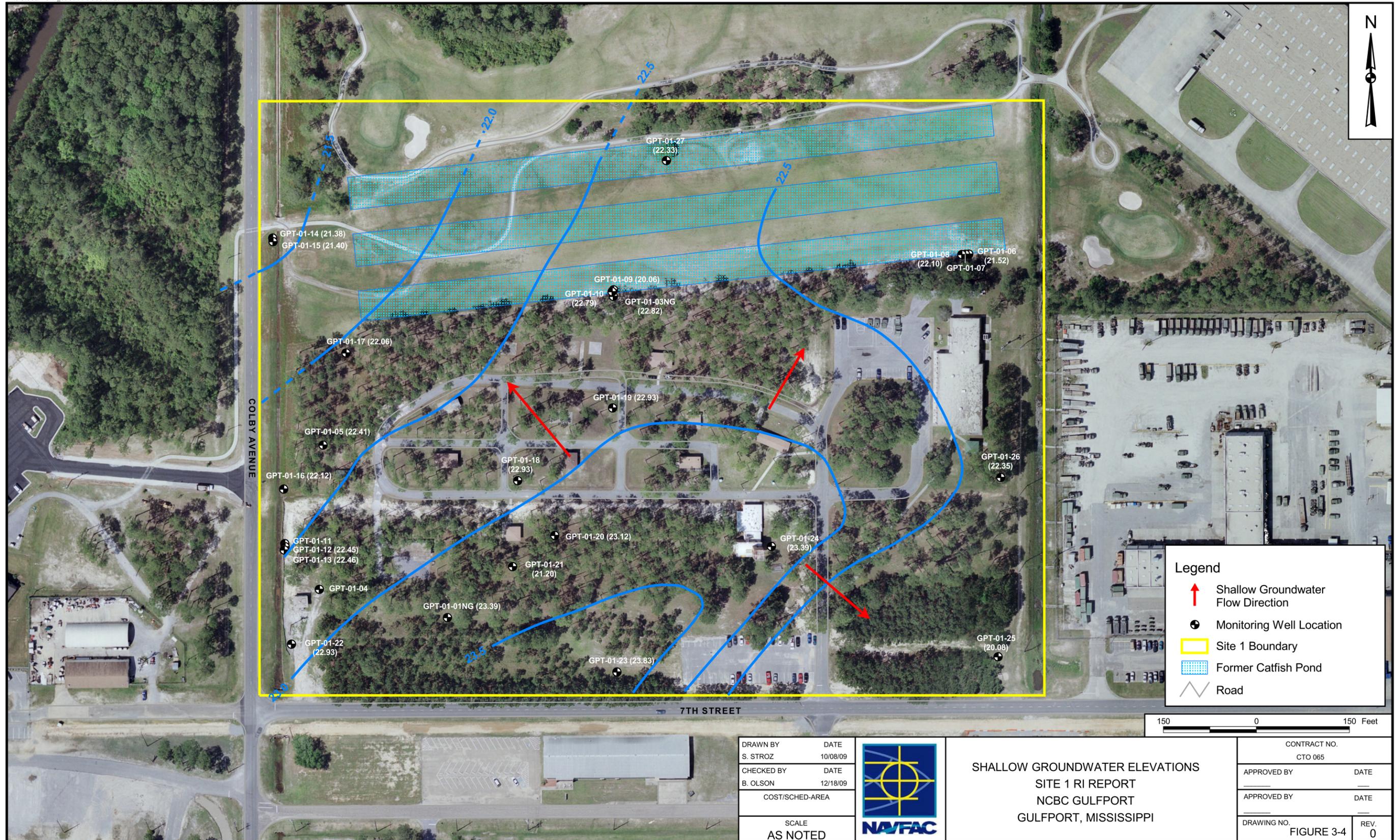


DRAWN BY	DATE
CK	11/03/09
CHECKED BY	DATE
REVISED BY	DATE
SCALE AS NOTED	



GEOLOGIC CROSS SECTION
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. 0700	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 3-3	REV. 0



Legend

- Shallow Groundwater Flow Direction
- Monitoring Well Location
- Site 1 Boundary
- Former Catfish Pond
- Road

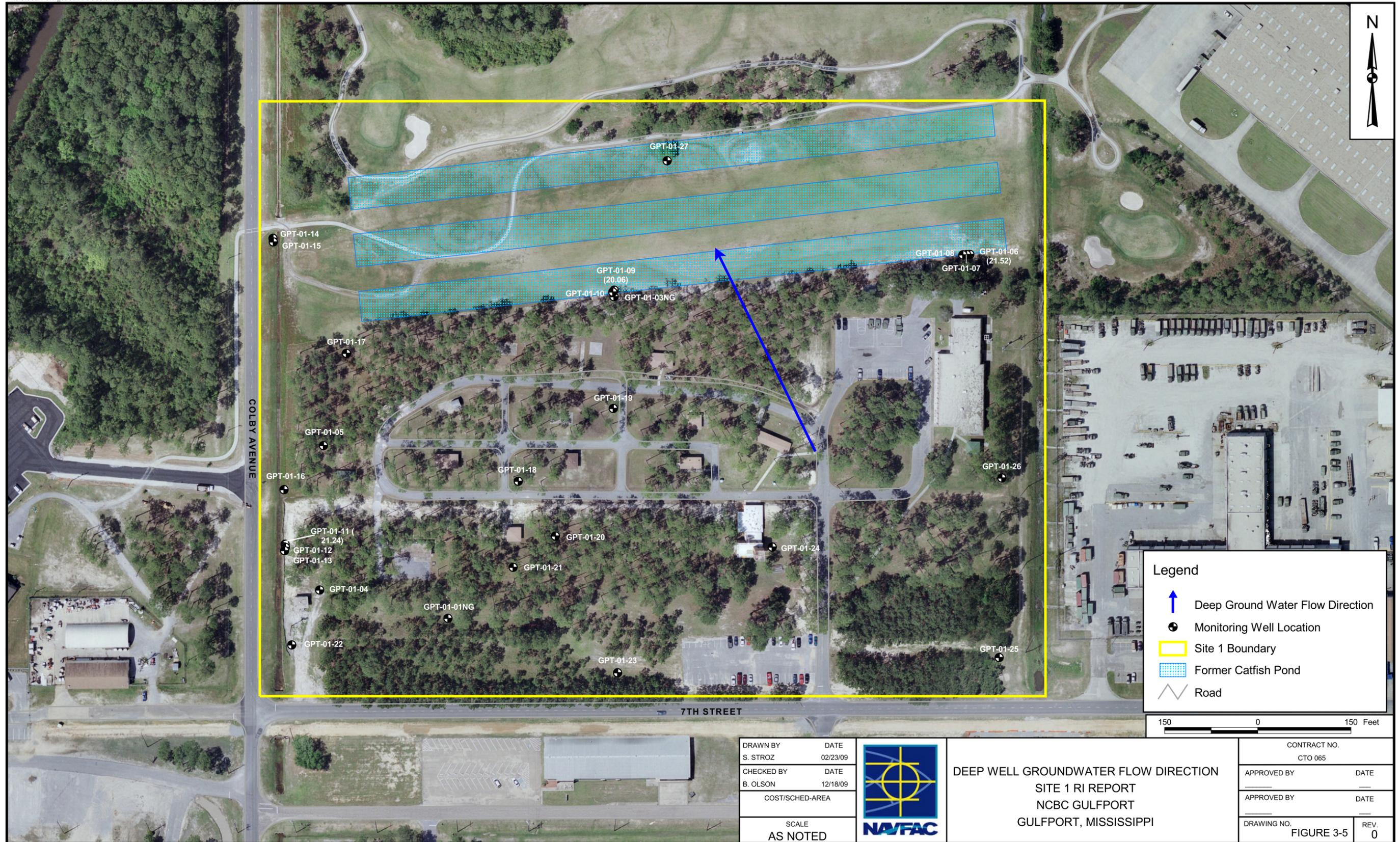


DRAWN BY S. STROZ	DATE 10/08/09
CHECKED BY B. OLSON	DATE 12/18/09
COST/SCHED-AREA	
SCALE AS NOTED	



SHALLOW GROUNDWATER ELEVATIONS
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3-4	REV. 0



Legend

- Deep Ground Water Flow Direction
- Monitoring Well Location
- Site 1 Boundary
- Former Catfish Pond
- Road



DRAWN BY S. STROZ	DATE 02/23/09
CHECKED BY B. OLSON	DATE 12/18/09
COST/SCHED-AREA	
SCALE AS NOTED	



DEEP WELL GROUNDWATER FLOW DIRECTION
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 3-5	REV. 0

4.0 NATURE AND EXTENT OF CONTAMINATION

As stated in Section 1.0, the field and laboratory analytical data collected for the RI provide the information necessary to: (1) adequately characterize the nature and extent of contamination at the site, (2) define site dynamics, and (3) determine site risks to human and ecological receptors. Section 4.0 presents the characterization of the nature and extent of contamination at the site by:

- Identifying the types of materials disposed of during landfill operations.
- Evaluating the extent of potential sources of contaminants that could impact receptors outside the boundary of the containment area (cap).
- Identifying contaminants based on screening against state and federal criteria for exposure to human receptors, ecological receptors, and potential receiving media.

The screening criteria used to evaluate the nature and extent of contamination in environmental media at Site 1 included the following:

- MDEQ Tier 1 TRGs
- Oak Ridge National Laboratory (ORNL) Regional Screening Levels (RSLs)
- Soil Screening Levels (SSLs) for migration to air and groundwater
- USEPA Groundwater Volatilization Criteria (GVCs)
- USEPA Region 4 Ecological Screening Values (ESVs)

The screening criteria used to evaluate environmental media sampled at Site 1 are summarized in Table 4-1. The decision points used to identify the COPCs included:

- Chemicals detected at concentrations greater than the screening criteria (Table 4-1).
- Non-carcinogens detected at a concentration greater than 1/10 of their direct exposure screening criteria [representing a hazard quotient (HQ) of 0.1 as a conservative approach to include cumulative effects].
- Chemicals without established ESVs [retained for evaluation in the screening level ecological risk assessment (SLERA)].

The Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills (USEPA, 1996c) identifies the waste characteristics of military landfills that allow the application of the presumptive remedy guidance. The guidance states that appropriate characteristics include the following:

- Risks are low-level except for “hot spots.”
- Treatment of wastes is usually impractical due to the volume and heterogeneity of the waste.
- Waste types include household, commercial, non-hazardous sludge, and industrial waste solids.
- Lesser quantities of hazardous wastes are present compared to municipal wastes.
- Land application units, surface impoundments, injection wells, and waste piles are **not** included.

The guidance further states that it is anticipated that military landfills will have industrial solid waste, paints (and paint thinners), pesticides, transformer oils, and other solvents in relatively low proportion to the volume of municipal wastes – including construction debris, commercial/household type garbage, and yard wastes. The types of waste that would exclude a military site from presumptive remedy consideration include chemical warfare agents, munitions, and other explosives. Based on the site history, operational history of the base, and results from previous investigations, Site 1 qualifies for presumptive remedy consideration.

To specifically examine the contaminant sources at Site 1 and to begin the definition of site dynamics, the following sections describe the types, distribution, and trends of contaminants present in the various media.

4.1 WASTE DISPOSAL BOUNDARY AND CONTAMINANT SOURCES

The first requirements of the presumptive remedy RI for landfills were to adequately characterize the extent of the disposal area and to determine if the types of wastes at the site are appropriate for a presumptive remedy.

4.1.1 Waste Disposal Boundary

At Site 1, the waste disposal boundary was established by evaluating the results of the magnetometer (shown on Figure 4-1) and EM-31 (shown on Figure 4-2) surveys.

Visual observations of soil samples at DPT sampling locations and monitoring well locations further aided in delineation of the waste disposal area. In addition, these observations confirmed that the geophysical survey was effective in accurately determining the waste disposal boundaries of the landfill.

4.1.2 Contaminant Sources

A review of disposal practices and interviews with site workers during the IAS (Envirodyne Engineering, 1985) indicated that liquid chemical wastes generated by the base were disposed of at Site 1 from 1942 to 1948. These liquid wastes included fuels, oils, and solvents.

4.2 SOILS AND VADOSE ZONE

The passive soil gas survey and quick-turn soil screening were used to look for potential hot-spots associated with the waste disposal areas identified by the geophysical survey. Additional full suite soil sampling was conducted to characterize surface and subsurface soil conditions. The landfill gas screening and geotechnical sampling were used for a preliminary evaluation of existing conditions in the landfill.

4.2.1 Passive Soil-Gas Survey

The passive soil-gas survey was conducted to provide a qualitative evaluation of the presence or absence of volatile contaminants in soil and shallow groundwater. The passive soil-gas methodology does not distinguish between contaminants present in soil, groundwater, or both media. The concentrations of contaminants reported by this method do not directly correlate to quantified concentrations in soil or groundwater samples used for risk-based screening.

The passive soil gas survey detected low levels of total petroleum hydrocarbons (TPH) at each of the sample locations. The highest concentration was reported in sample 560070, located near the center of the disposal area. Because the area is planted with pine trees, it is likely that naturally occurring terpenes produced the widespread detections of TPH in the soil gas samples.

Detections of other compounds were limited to two sample locations. Low levels of the alkanes undecane and tridecane were detected at the 560070 location. Toluene was detected at the 560069 sample location.

Soil and groundwater samples collected for quantitative analysis in the vicinity of these two soil gas samples did not have detectable levels of the compounds reported in the soil gas samples.

4.2.2 Surface Soil

The current surface soil cover at Site 1 was brought in following landfill closure. The source of the fill material is unknown. Surface soil samples were collected from a depth of 0 to 1 foot at 19 locations and

from a depth of 0 to 2 feet at 2 locations at Site 1 and were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and TAL inorganics. Analytes detected in the surface soil samples are summarized in Table 4-2, and results exceeding the TRG are presented on Figure 4-3.

4.2.2.1 Volatile Organics

Three VOCs were reported in one or more surface soil samples collected at Site 1.

Tetrachloroethene was detected in two surface soil samples, 01SS13701 and 01SS42001, at estimated concentrations of 0.28 J and 0.22J micrograms per kilogram (ug/kg), which are less than the TRGs (unrestricted – 11,900 ug/kg and restricted – 18,200 ug/kg) and the RSL (570 ug/kg). The tetrachloroethene concentrations in both these samples were greater than the SSL for soil leaching to groundwater of 0.052 ug/kg. The detected concentrations of tetrachloroethene were less than the ESV (10 ug/kg).

2-Butanone was detected at concentrations ranging from 1.8 to 4 ug/kg, which are less than the direct exposure and migration pathways screening criteria for human health. An ESV has not been established for 2-butanone.

4-methyl-2 pentanone was detected at concentrations ranging from 0.71 to 1.2 ug/kg, which are less than the direct exposure and migration pathways screening criteria for human health. An ESV has not been established for 4-methyl-2 pentanone.

4.2.2.2 Semivolatile Organics

Benzo(b)fluoranthene was detected in one surface soil sample, 01SS04QT at a concentration of 78 J ug/kg which is greater than the SSL for soil leaching to groundwater of 47 ug/kg and less than the TRG, RSL, and ESV.

Caprolactam was detected in surface soil samples at concentrations ranging from 140 to 300 J ug/kg, which are orders of magnitude less than the TRG, the RSL, and SSL. An ESV has not been established for caprolactam.

4.2.2.3 Pesticides/PCBs

Dieldrin was the only pesticide detected in Site 1 surface soil samples at a concentration exceeding human health direct exposure criteria (TRG and RSL). Dieldrin was detected in 98 of the 21 soil samples.

Dieldrin was detected in one surface soil sample (01SS02501) at a concentration of 460 J ug/kg, which is greater than the restricted TRG (358 ug/kg) and the residential RSL (30 ug/kg), as well as the ESV (0.5 ug/kg) and the SSL for leaching to groundwater (0.09 ug/kg).

Dieldrin concentrations at six of the sample locations, 01SS0801 (01SS0901, 01SS1001, 01SS1101, 01SS1401, and 01SS01501) ranged from 0.55 J ug/kg to 15 J ug/kg, which are greater than the ESV and SSL for leaching to groundwater, but less than the direct exposure criteria (TRGs and RSL). The dieldrin concentration in surface soil sample 01SS13701, 0.36 J ug/kg, exceeded the ESV only.

Aldrin was detected in 3 of the 21 surface soil samples. Aldrin was detected in one surface soil sample (01SS01701) at a concentration of 6.3 J ug/kg, which is greater than the ESV (2.5 ug/kg) and the SSL for leaching to groundwater (0.84 ug/kg). Aldrin concentrations detected in the other two samples, [01SS02501 (0.29 J ug/kg) and 01SS4201 (0.16 J ug/kg)] were less than the screening criteria.

Heptachlor epoxide concentrations at five of the sample locations (01SS1001, 01SS1101, 01SS01401, 01SS02401, and 01SS02501) ranged from 0.25 J ug/kg to 1.7 J ug/kg, which are greater than the SSL for leaching to groundwater (0.079 ug/kg), but less than the direct exposure criteria (TRGs and RSL). An ESV has not been established for heptachlor epoxide.

Isomers of the pesticide benzene hexachloride (BHC) were detected in one or more samples at concentrations greater than the SSL for leaching to groundwater. Alpha BHC was detected in one surface soil sample (01SS05QT) at a concentration of 0.26 J ug/kg, which is greater than the SSL of 0.074 ug/kg. Beta BHC was detected in five of the surface soil samples, but only the concentration reported for 01SS0801 (0.36 J ug/kg) was greater than the SSL of 0.26 ug/kg. Delta BHC was detected in one surface soil sample (01SS01401) at a concentration of 0.26 J ug/kg which is greater than the SSL of 0.074 ug/kg. Gamma BHC (lindane) was detected in one surface soil sample, the field duplicate 01SS013901-D, at a concentration of 0.23 J ug/kg, which is greater than the ESV of 0.05 ug/kg, but less than the SSL of 0.43 ug/kg.

Aroclor 1260 was detected in one surface soil sample, 01SS1001 at a concentration of 17 J ug/kg which is greater than the SSL of 14 ug/kg, but less than the residential TRG (1,000 ug/kg), RSL (220 ug/kg), and ESV (20 ug/kg).

Endrin aldehyde was detected in two surface soil samples, 01S06QT at 0.31 J ug/kg and 01SS1001 at 2 J ug/kg. These concentrations are less than the direct exposure and migration pathways screening criteria. An ESV has not been established for endrin aldehyde.

Several pesticides were detected at concentrations less than direct exposure or migration pathway screening criteria, but do not have established ESVs; endosulfan II (6 samples), endosulfan sulfate (1 sample), heptachlor (1 sample), and methoxychlor (4 samples).

4.2.2.4 Herbicides

2,4,5-trichlorophenoxyacetic acid (2,4,5-T) was detected in surface soil samples at concentrations ranging from 1.2 to 6 ug/kg, which are orders of magnitude less than the TRG, the RSL, and SSL. An ESV has not been established for 2,4,5-T.

Dinoseb was detected in one surface soil sample at a concentration of 8.8 ug/kg, which is orders of magnitude less than the TRG, the RSL, and SSL. An ESV has not been established for dinoseb.

4.2.2.5 Inorganics

Metals were frequently detected in the soil samples collected at Site 1 (see Table 4-2).

Arsenic was the only metal detected in Site 1 surface soil samples at concentrations exceeding human health direct exposure criteria (TRGs and RSL). Arsenic was detected in 19 of the 21 soil samples.

Arsenic was detected in two surface soil samples at concentrations greater than the restricted TRG of 3.82 mg/kg:

01SS04QT 4.8 mg/kg
01SS0701 3.9 mg/kg

Arsenic concentrations in 14 of the 21 surface soil samples were greater than the unrestricted TRG (0.426 mg/kg), the residential RSL (0.39 mg/kg) and the SSL for soil leaching to groundwater (0.0013 mg/kg – risk based and 0.29 mg/kg – MCL based):

01SS01QT	0.83 mg/kg	01SS01501	1 mg/kg
01SS02QT	1.5 mg/kg	01SS01701	2.7 mg/kg
01SS03QT	1.1 mg/kg	01SS02401	0.78 mg/kg
01SS05QT	1.6 mg/kg	01SS02501	1.1 mg/kg
01SS06QT	1.3 mg/kg	01SS13701	1.9 mg/kg
01SS1001	3.5 mg/kg	01SS13801	1.2 mg/kg
01SS1101	1.7 mg/kg	01SS13901-D	1.5 mg/kg
01SS1201	1.3 mg/kg	01SS42001	1.5 mg/kg
01SS01401	1.8 mg/kg		

Pettry and Switzer (2001) evaluated the arsenic concentrations in different soil resource areas. Samples of soils collected from Coastal Flatwoods areas had arsenic concentrations ranging from 0.37 to 14.78 mg/kg, with a mean arsenic concentration of 4.42 mg/kg. The detected concentrations of arsenic in the Site 1 soil samples, 0.78 to 4.8 mg/kg, are within this range of concentrations and all but one (01SS04QT – 4.8 mg/kg) was less than the mean concentration reported by Pettry and Switzer.

Aluminum was detected in each of the surface soil samples at concentrations ranging from 1,770 to 12,300 mg/kg. Each of the aluminum detections were at greater concentration than the ESV of 50 mg/kg, but less than the TRG, RSL, and SSLs.

Antimony was reported in two of the surface soil samples, 01SS0801 – 1.1 J mg/kg and 01SS42001 – 3.6 J mg/kg. These concentrations are greater than the SSL for leaching to groundwater, 0.66 mg/kg, and the ESV, 0.27 mg/kg, but less than the TRG and RSL.

Cobalt was detected in one soil sample (01SS1701) at a concentration of 6.8 mg/kg, which is greater than the SSL for leaching to groundwater, 0.49 mg/kg. This concentration is less than the TRG, RSL, and ESV.

Iron was detected in each of the surface soil samples at concentrations ranging from 546 to 9,050 mg/kg. Each of the iron detections were at greater concentration than the ESV of 200 mg/kg. All but one of the reported iron concentration were greater than the SSL for leaching to groundwater of 640 mg/kg. Iron concentrations were less than the TRG and RSL.

Manganese was detected in each of the surface soil samples at concentrations ranging from 1 to 358 mg/kg. The reported manganese concentration in 01SS1701 (358 mg/kg) is greater than the ESV (220 mg/kg) and the SSL for leaching to groundwater (57 mg/kg). The manganese concentrations in two other samples (01SS1401 – 67.4 mg/kg and 01SS13701 – 89 mg/kg) only exceeded the SSL for leaching to groundwater. Manganese concentrations were less than the TRG and RSL.

Chromium was detected in each of the surface soil samples at concentrations ranging from 2.2 to 11 mg/kg. Each of the chromium detections was at greater concentration than the SSL for leaching to groundwater of 2.1 mg/kg. Chromium concentrations were less than the TRG, RSL, and ESV.

Copper was detected in 19 of the 21 surface soil samples at concentrations ranging from 1.4 to 210 mg/kg. Most of the reported copper concentrations were less than 10 mg/kg. The reported copper concentration in 01SS1501 (210 mg/kg) is greater than the ESV (28 mg/kg) and the SSL for leaching to groundwater, 51 mg/kg. Copper concentrations were less than the TRG and RSL.

Lead was detected in each of the surface soil samples at concentrations ranging from 3.2 to 70.6 mg/kg. The lead concentrations in eight samples were greater than the ESV, 11 mg/kg and the SSL for leaching to groundwater, 14 mg/kg. Lead concentrations were less than the TRGs and RSL.

Selenium was reported in four of the surface soil samples. The selenium concentrations detected in two of the surface soil samples (01SS05QT – 1 mg/kg and 01SS06QT – 1.3 mg/kg) are greater than the SSL for leaching to groundwater (0.95 mg/kg) and the ESV (0.52 mg/kg). The selenium concentrations detected in two other surface soil samples (01SSQT01 – 0.69 mg/kg and 01SS04QT – 0.71 mg/kg) were greater than the ESV. Selenium concentrations were less than the TRG and RSL.

Vanadium was detected in each of the surface soil samples at concentrations ranging from 2.7 to 16 mg/kg. The vanadium concentrations in 14 samples were greater than the ESV, 7.8 mg/kg. Vanadium concentrations were less than the TRG, RSL, and SSLs.

Zinc was detected in each of the surface soil samples at concentrations ranging from 1.7 to 89 mg/kg. The zinc concentrations in two samples (01SS1001 – 54.8 mg/kg and 01SS13701 – 89 mg/kg) were greater than the ESV, 46 mg/kg. Zinc concentrations were less than the TRG, RSL, and SSLs.

4.2.2.6 Summary of Surface Soil Analytical Results

Chemicals detected in surface soil at Site 1 appear to have resulted from typical maintenance activities and the addition of fill from an unknown source. Relatively few VOCs were detected in Site 1 surface soil samples and concentrations were low. A range of pesticides were detected, but many were only found in one sample. Metals were detected frequently in the surface soil samples. Table 4-3 details the screening of COPCs for Site 1 surface soil. The chemicals retained as COPCs for evaluation in the remedial actions (RAs) are summarized below:

- Direct Exposure (carcinogen) – dieldrin and arsenic
- Direct Exposure (non-carcinogen) – aluminum, antimony, cobalt, iron, and manganese
- Leaching to groundwater – tetrachloroethene, benzo(b)fluoranthene, Aroclor-1260, aldrin, alpha chlordane, BHC isomers, dieldrin, heptachlor epoxide, antimony, arsenic, chromium, cobalt, iron, lead, manganese, and selenium.
- Ecological Receptors – aldrin, gamma BHC, dieldrin, endrin aldehyde, aluminum, antimony, copper, iron, lead, manganese, selenium, vanadium, and zinc

- Ecological Receptors (No ESV) – 2-butanone, 4-methyl-2-pentanone, caprolactam, chlordane, endosulfan II, endosulfan sulfate, heptachlor, heptachlor epoxide, methoxychlor, 2,4,5-T, and dinoseb

4.2.3 Subsurface Soil

One subsurface soil sample was collected from each of 10 drilling locations and analyzed for VOCs (Table 4-4). The drilling locations were selected to coincide with the margins of the waste area and provide a cross-sectional characterization of the shallow subsurface across the site. Six additional soil samples were collected adjacent to the ditch on the east side of Site 1. Three of the samples were analyzed for a full suite of analytes (Table 4-4). The other three locations were analyzed only for PCBs (Table 4-4).

4.2.3.1 Volatile Organics

The VOCs detected in the subsurface soil samples, chloromethane (1 sample), 2-butanone (2 samples), 4-methyl-2-pentanone (1 sample), and carbon disulfide (1 sample), were all at concentrations less than the screening criteria.

4.2.3.2 Semivolatile Organics

SVOC concentrations in the three ditch bank samples analyzed for SVOCs were less than the laboratory detection limits.

4.2.3.3 Pesticides/PCBs

The PCB Aroclor-1242 was detected in one of the ditch bank samples (01SBDIT02) at a concentration of 2,400 J ug/kg. This reported concentration was greater than the unrestricted TRG (1,000 ug/kg), the RSL (220 ug/kg), and the SSL for leaching to groundwater (3 ug/kg). PCB concentrations in the other ditch bank samples were less than the laboratory detection limit.

Beta BHC was reported in two of the ditch bank samples (01SBDIT01 – 0.32 J ug/kg and 01SBDIT02 – 63 J ug/kg) at concentrations greater than the SSL for leaching to groundwater (0.026 ug/kg) but less than the unrestricted TRG (355 ug/kg), the RSL (270 ug/kg), and the SSL for soil to air (16,000 ug/kg).

Other BHC isomers detected in 01SBDIT02 were alpha BHC - 4.2 J ug/kg and delta BHC – 34 J ug/kg, at concentrations greater than the SSL for leaching to groundwater, 0.074 ug/kg, but less than the unrestricted TRG (101 ug/kg), the RSL (77 ug/kg), and the SSL for soil to air (750 ug/kg). Note that the screening criteria for alpha BHC were used to evaluate the delta BHC results.

Dieldrin was reported in two of the ditch bank samples, 01SBDIT01 – 0.43 J ug/kg and 01SBDIT02 – 0.85 R ug/kg. Note that the result for 01SBDIT03 was R-flagged during data validation for laboratory quality issues. Because most of the screening criteria for dieldrin are two to three orders of magnitude greater than the R-flagged result, it has been treated as a detection of 0.85 ug/kg for this evaluation. The detected dieldrin concentrations in these two samples were greater than the SSL for leaching to groundwater (0.09 ug/kg), but less than the unrestricted TRG (39.9 ug/kg), the RSL (30 ug/kg), and the SSL for soil to air (1,100 ug/kg).

Heptachlor epoxide was detected in two of the ditch bank soil samples (01SBDIT01 – 0.33 J ug/kg and 01SBDIT02 – 6.2 J ug/kg) at concentrations greater than the SSL for leaching to groundwater, 0.079 ug/kg.

4.2.3.4 Herbicides

Herbicide concentrations in the three ditch bank samples analyzed for herbicides were less than the laboratory detection limits.

4.2.3.5 Inorganics

Arsenic was the only metal detected in the canal bank soil samples collected at Site 1 with concentrations exceeding human health direct exposure criteria. Arsenic was reported in two of the ditch bank soil samples, 01SBDIT01 – 2 mg/kg and 01SBDIT03 – 1.3 mg/kg. These concentrations are greater than the unrestricted TRG (0.426 mg/kg), the RSL (0.39 mg/kg) and the SSL for leaching to groundwater (0.0013 mg/kg) but less than the restricted TRG (3.82 mg/kg). The detected concentrations of arsenic in the Site 1 soil samples are within the range of concentrations for Coastal Flatwoods areas (Pettry and Switzer, 2001) and are less than the mean concentration.

Chromium was detected in each of the ditch bank soil samples at concentrations ranging from 3 to 9.8 mg/kg. Each of the chromium detections was at greater concentration than the SSL for leaching to groundwater of 2.1 mg/kg. Chromium concentrations were less than the TRG and RSL.

Iron was detected in each of the ditch bank soil samples at concentrations ranging from 908 to 2,060 mg/kg. Each of the iron detections was at a greater concentration than the SSL for leaching to groundwater of 640 mg/kg. Iron concentrations were less than the TRG and RSL.

4.2.3.6 Summary of Subsurface Soil Analytical Results

Relatively few VOCs were detected in Site 1 subsurface soil samples and concentrations were low. A range of pesticides were detected, but many were found only in one sample. Metals were detected frequently in the subsurface soil samples. Table 4-5 details the screening of COPCs for Site 1 subsurface soil. The chemicals retained as COPCs for evaluation in the human health risk assessment (HHRA) are summarized below:

- Direct Exposure (carcinogen) – Aroclor-1242 and arsenic.
- Direct Exposure (non-carcinogen) – aluminum
- Leaching to groundwater – alpha chlordane, Aroclor-1242, beta BHC, delta BHC, dieldrin, heptachlor epoxide, arsenic, chromium, and iron

4.2.4 Landfill Gas Screening

The methane concentrations at the five vadose zone sampling locations at Site 1 were less than the instrument detection levels for both methane concentration (% CH₄) and LEL (Table 4-6).

4.2.5 Grain Size Analysis

Grain size samples of the current cover were evaluated to see if the current cover material was likely to have the geotechnical properties required for the low permeability layer. Each of the samples was predominantly sand, 73 percent to 83 percent, which suggests that current cover would require amendment to meet the low permeability criteria (Table 4-7).

4.3 GROUNDWATER

Groundwater samples were collected during two phases of investigation that included DPT groundwater sampling for VOC analysis and monitoring well sampling. DPT groundwater samples were analyzed to quantify concentrations of VOCs identified in the passive soil-gas survey. Monitoring wells were sampled for a full suite of analytes to further characterize groundwater conditions at the site.

The presumptive remedy strategy for Site 1 includes containment of the buried waste via a soil landfill cover for the waste disposal area. The goal of the groundwater sampling program was to provide the data necessary to answer the following questions:

- Is the waste observed in the landfill consistent with the use of the presumptive remedy?
- Do site dynamics support a containment strategy?
- Are there hot spots that require additional delineation?
- Will the hot spots require additional treatment?
- Should additional non-presumptive remedies be included in the containment alternatives?

The results of the groundwater investigations are discussed below.

4.3.1 DPT Groundwater Investigation

Groundwater samples were collected from 29 DPT locations (Figure 4-4) and analyzed for VOCs (Table 4-8). The samples were collected from locations across the entire waste disposal area, as well as upgradient, cross-gradient, and downgradient of the landfill. The initial sample collection focused on geophysical hot spots identified during the survey and subsequent locations were sampled to refine the delineation. Vertically, groundwater samples were collected from depths ranging from 6 to 45 feet bls.

The DPT VOC analytical results are discussed in Section 4.3.2.1, along with the monitoring well VOC results.

4.3.2 Monitoring Well Sampling

Groundwater samples were collected from 22 monitoring wells at Site 1 (Figure 4-4). The majority of the monitoring wells were screened in the shallow aquifer at depths of 30 feet or less. The monitoring well groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TCL pesticides and PCBs, Appendix IX chlorinated herbicides, and TAL inorganics. Analytes detected in monitoring well samples are summarized in Table 4-9.

4.3.2.1 Volatile Organics

Tetrachloroethene was reported in five of the groundwater samples out of a total of 51 samples (29 DPT locations and 22 monitoring wells). Four of the DPT groundwater samples had detections of tetrachloroethene:

01TW0101	0.35 J micrograms per liter (ug/L)
01TW0301	0.41 J ug/L
01QT0401	0.54 J ug/L
01QT1501	0.26 J ug/L

Tetrachloroethene was detected in one monitoring well sample:

01GW2301 2.5 ug/L

Each of these tetrachloroethene detections was greater than the RSL, 0.11 ug/L. Only the concentration reported in the monitoring well sample 01GW2301, 2.5 ug/L was greater than the GVC of 1.1 ug/L. All of the detections were less than the TRG of 5 ug/L, which is based on the MCL.

Trichloroethene was reported in four of the groundwater samples. Two of the DPT groundwater samples had detections of trichloroethene:

01TW0101 0.51 J ug/L

01TW0301 0.32 J ug/L

Trichloroethene was detected in two monitoring well samples:

01GW2001 0.3 J ug/L

01GW2301 1.3 ug/L

Each of these trichloroethene detections was greater than the GVC, 0.053 ug/L. All of the detections were less than the TRG of 5 ug/L, which is based on the MCL and the RSL, 1.7 ug/L.

Other VOCs detected in one or more groundwater samples, cis-1,2-dichloroethene, chloromethane, acetone, 2-butanone, and carbon disulfide, were at concentrations less than the screening criteria.

4.3.2.2 Semivolatile Organics

Naphthalene was reported in one monitoring well sample (01GW2601) at a concentration of 6.7 J ug/L, exceeding the TRG of 6.2 ug/L and the RSL of 0.14 ug/L. Naphthalene was not detected in the other monitoring well groundwater samples.

Bis(2-ethylhexyl)phthalate was detected in five of the monitoring well samples at concentrations ranging from 1.7 J ug/L to 2 J ug/L, which are less than the TRG (6 ug/L) and the RSL (4.8 ug/L).

4.3.2.3 Pesticides/PCBs

4-4'-DDT was detected in one groundwater sample (01GW2401) at a concentration of 0.0068 J ug/L, which is less than the TRG (0.197 ug/L) and the RSL (0.2 ug/L).

Endrin aldehyde was detected in one groundwater sample (01GW1301) at a concentration of 0.0088 J ug/L, which is less than the TRG (2 ug/L) and the RSL (11 ug/L).

4.3.2.4 Herbicides

Silvex (2,4,5-TP) was reported by the laboratory in seven of the monitoring well samples at concentrations less than the screening criteria. Note that the result for three of the groundwater samples were R-flagged during data validation for laboratory quality issues. Because most of the screening criteria for Silvex are two to three orders of magnitude greater than the R-flagged results, they have been treated as detections for this evaluation.

4.3.2.5 Inorganics

Arsenic was detected in 2 of the 21 monitoring well samples, 01GW1401 at 19.1 ug/L and 01GW1501 at 14.2 ug/L. These concentrations are less than the TRG (50 ug/L), but exceed the RSL (0.045 ug/L). Both of these monitoring wells are located at the northwest corner of the site, on the west side of the ditch that parallels Colby Avenue.

Iron was detected in each of the monitoring well samples at concentrations ranging from 147 ug/L to 44,000 ug/L. Iron concentrations were greater than the TRG (11,000 ug/L) and the RSL (26,000 ug/L) in three monitoring well samples:

- 01GW1401 38,000 ug/L
- 01GW1501 44,000 ug/L
- 01GW2701 28,800 ug/L

Iron concentrations were greater than the TRG, but less than the RSL in two groundwater samples:

- 01GW0901 11,500 ug/L
- 01GW2001 13,900 ug/L

Four of these five locations are in the northern part of the investigation area, in the vicinity of the former catfish ponds.

Thallium was detected in one monitoring well sample (01GW1601) at a concentration of 4.1 ug/L, greater than the TRG (2 ug/L) and the RSL (2.4 ug/L).

Aluminum was detected in each of the monitoring well samples collected at Site 1. Reported aluminum concentrations ranged from 73.5 to 6,320 ug/L, which are less than the TRG (36,500 ug/L) and the RSL (37,000 ug/L).

Manganese was detected in each of the monitoring well samples collected at Site 1. Reported manganese concentrations ranged from 4.4 to 548 ug/L, which are less than the TRG (730 ug/L) and the RSL (880 ug/L).

Other metals and cyanide were at concentrations less than screening criteria.

4.3.3 Summary of Groundwater Analytical Results

Relatively few organic compounds were detected in Site 1 groundwater samples and concentrations were low. Metals were detected frequently in the groundwater samples. Table 4-10 details the screening of COPCs for Site 1 groundwater. The chemicals retained as COPCs for evaluation in the HHRA are summarized below:

- Direct Exposure (carcinogen) – tetrachloroethene, trichloroethene, naphthalene, and arsenic.
- Direct Exposure (non-carcinogen) – iron, manganese, and thallium
- Volatilization from groundwater – tetrachloroethene and trichloroethene

4.4 SURFACE WATER AND SEDIMENT

The surface water and sediment samples were analyzed for a full suite of analytes including TCL VOCs, TCL SVOCs, pesticides and PCBs, chlorinated herbicides, TAL metals and cyanide. Surface water analytical results are compared to the ESVs and the TRGs and RSLs for tap water, and the sediment analytical results are compared to the ESVs and the TRGs and RSLs for soil direct exposure.

4.4.1 Surface Water

Surface water samples co-located with sediment samples were collected from drainage ditches adjacent to Site 1 at the locations shown on Figure 4-5. Three of the surface water samples (01SW0101, 01SW0201, and 01SW0301) were collected from the shallow, concrete-lined drainage ditch on the west side of Site 1, parallel to Colby Avenue. At the time of sample collection, maintenance workers had cleaned the sediment from the ditch. The surface water samples were collected from within the ditch. Surface water sample 01SW0101 was collected from the mouth of a culvert, where the ditch had not

been cleaned. Two surface water samples (01SW0401 and 01SW0501) were located in the larger drainage ditch on the east side of Site 1 (Table 4-11).

4.4.1.1 Volatile Organics

Four VOCs were reported in one or more surface water samples collected at Site 1.

Acetone was detected in each of the samples with concentrations ranging from 3.4 to 5.1 ug/L, which are less than the TRG (608 ug/L) and the RSL (22000 ug/L). An ESV has not been established for acetone.

Carbon disulfide was detected in two of the surface water samples [01SW0201 and 01SW0301 (and field duplicate)] with estimated concentrations ranging from 0.19 to 0.20 ug/L, which are less than the TRG (1040 ug/L) and the RSL (1000 ug/L). An ESV has not been established for carbon disulfide.

1,1,2 trichloro-trifluoroethane was detected in one surface water sample (01SW0401) at a concentration of 6.6 ug/L, which is less than the TRG (59400 ug/L) and the RSL (59000 ug/L). An ESV has not been established for 1,1,2 trichloro-trifluoroethane.

Toluene was detected in one surface water sample (01SW0401) at an estimated concentration of 0.22 ug/L, which is less than the TRG (1000 ug/L), the RSL (2300 ug/L), and the ESV (175 ug/L).

4.4.1.2 Semivolatile Organics

One SVOC, caprolactam, was detected in each of the surface water samples at estimated concentrations ranging from 0.91 J to 2.1 J ug/L, which are less than the TRG (18,300 ug/L) and the RSL (18000 ug/L). An ESV has not been established for caprolactam.

4.4.1.3 Pesticides/PCBs

One pesticide, alpha chlordane, was detected in one surface water sample (01SW00401) at an estimated concentration of 0.004 J ug/L, which is less than the TRG (2 ug/L), the RSL (0.19 ug/L), and the ESV (0.0043 ug/L). PCBs were not reported in the surface water samples.

4.4.1.4 Herbicides

One herbicide, 2,4,5-TP (Silvex), was detected in four of the surface water samples at estimated concentrations ranging from 0.044 J ug/L to 0.067 J ug/L, which are less than the TRG (50 ug/L) and the RSL (290 ug/L). An ESV has not been established for Silvex.

4.4.1.5 Inorganics

Eleven metals were reported in one or more surface water samples collected at Site 1. Cyanide was not detected in the surface water samples.

Arsenic was detected in one surface water sample (01SW00101) at a concentration of 3.4 ug/L, which is greater than the RSL (0.045 ug/L), and less than the TRG (50 ug/L) and the ESV (190 ug/L).

Iron was detected in each of the surface water samples at concentrations ranging from 1,720 to 2,410 ug/L, which are less than the TRG (11000 ug/L) and the RSL (26000 ug/L) and greater than the ESV (1000 ug/L).

Aluminum was detected in each of the surface water samples at concentrations ranging from 430 to 1,690 ug/L, which are less than the TRG (36500 ug/L) and the RSL (37000 ug/L) and greater than the ESV (87 ug/L).

Lead was detected in two of the surface water samples [01SW0301 (and field duplicate) and 01SW0401] with concentrations ranging from 1.6 to 2.0 ug/L, which are less than the TRG (50 ug/L) and greater than the ESV (1.32 ug/L). An RSL has not been established for lead.

Barium was detected in each of the samples with concentrations ranging from 27.4 to 30.1 ug/L, which are less than the TRG (2000 ug/L) and the RSL (7300 ug/L). An ESV has not been established for barium.

Manganese was detected in each of the samples with concentrations ranging from 26.3 to 53.1 ug/L, which are less than the TRG (730 ug/L) and the RSL (880 ug/L). An ESV has not been established for manganese.

Zinc was detected in each of the samples with concentrations ranging from 5.4 to 10.4 ug/L, which are less than the TRG (11000 ug/L), the RSL (11000 ug/L), and the ESV 58.91 ug/L).

Calcium, magnesium, and sodium were detected in each of the surface water samples. Potassium was reported only in surface water sample 01SW0401. Because these elements are considered essential nutrients for both human and ecological receptors, screening criteria have not been established.

4.4.1.6 Summary of Surface Water Analytical Results

The concentrations of organic compounds (VOCs, SVOCs, pesticides, PCBs, and herbicides) reported in the surface water samples collected at Site 1 were less than the human health screening criteria; therefore, none of the organic compounds were retained as COPCs for the HHRA. The organic compounds detected in surface water samples at Site 1 that do not have established ESVs (1,1,2-trichloroethane, acetone, carbon disulfide, caprolactam, and silvex) were retained as COPCs for the SLERA (Table 4-12).

Arsenic was detected in one surface water sample (01SW0101) at a concentration greater than the RSL tap water criteria and is retained as a COPC in the HHRA. Iron concentrations in all the surface water samples were less than the TRGs and RSL. However, iron concentrations were greater than 10 percent of the TRG; therefore, iron will be evaluated as a non-carcinogenic COPC in the HHRA.

Aluminum, iron and lead were reported in Site 1 surface water samples at concentrations greater than the ESVs and are retained as ecological COPCs. Barium and manganese were retained as COPCs for the SLERA because ESVs have not been established for these metals.

4.4.2 Sediment

Sediment samples were collected from drainage ditches and swales adjacent to Site 1 (Figure 4-5). Five co-located surface water and sediment samples were collected for the RI. Three of the sample locations (01SD0101, 01SD0201, and 01SD0301) were collected from or adjacent to the shallow, concrete-lined drainage ditch on the west side of Site 1, parallel to Colby Avenue. At the time of sample collection, maintenance workers had cleaned the sediment from the ditch. Therefore, at locations 01SD0201 and 01SD0301, sediment was collected from the locations where shallow drainage swales from Site 1 intersected the concrete-lined ditch. Sediment sample 01SD0101 was collected from the mouth of a culvert, where the ditch had not been cleaned. Two surface water and sediment samples (01SW/SD0401 and 01SW/SD0501) were collected in the larger drainage ditch on the east side of Site 1 (Table 4-13).

4.4.2.1 Volatile Organics

VOCs were detected in most of the sediment samples at concentrations less than the human health screening criteria.

2-Butanone was detected in four of the five sediment samples with concentrations ranging from 5.8 to 80 ug/kg, which are less than the unrestricted TRG (84,500 ug/kg) and the RSL (28,000,000 ug/kg). An ESV has not been established for 2-butanone.

Acetone was detected in two of the five sediment samples with concentrations ranging from 28 to 220 ug/kg, which are less than the unrestricted TRG (38,000 ug/kg) and the RSL (61,000,000 ug/kg). An ESV has not been established for acetone.

Toluene was detected in one sediment sample at an estimated concentration of 33 J ug/kg, which is less than the unrestricted TRG (7,820,000 ug/kg) and the RSL (5,000,000 ug/kg). An ESV has not been established for toluene.

4.4.2.2 Semivolatile Organics

PAHs were detected in only in sediment sample 01SD0101. The benzo(a)pyrene concentration in this sample, 190 J ug/kg, was greater than the unrestricted TRG (87.5 ug/kg), the RSL (15 ug/kg) and the ESV (88.8 ug/kg). Benzo(b)fluoranthene was reported in this sample at a concentration of 330 J ug/kg, which is greater than the RSL of 150 ug/kg.

Other PAHs detected in this sample at concentrations greater than the ESV, but less than the TRGs and RSL include:

- Chrysene – 400 J ug/kg (ESV = 182 ug/kg)
- Fluoranthene – 1,300 J ug/kg (ESV = 113 ug/kg)
- Phenanthrene – 360 J ug/kg (ESV = 86.7 ug/kg)
- Pyrene – 930 J ug/kg (ESV = 153 ug/kg).

Bis(2-ethylhexyl)phthalate was detected in each of the sediment samples at concentrations less than the TRGs and RSL. The reported concentration in sediment sample 01SD0101 of 450 J ug/kg was greater than the ESV of 182 ug/kg.

4-methylphenol was detected in 01SD0101 at a concentration of 420 J ug/kg which is less than the unrestricted TRG (391,000 ug/kg) and the RSL (310,000 ug/kg). An ESV has not been established for 4-methylphenol.

4.4.2.3 Pesticides/PCBs

Pesticides were detected at low levels in each of the sediment samples. Concentrations were less than human health screening criteria.

Chlordane (total) exceeded the ESV of 1.7 ug/kg at three of the sediment sample locations.

- 01SD0101 – 9.5 ug/kg
- 01SD0401 – 5.7 ug/kg
- 01SD0501 – 7 ug/kg

These samples were collected from the ditches on the east and west sides of Site 1 which receive from input from areas upstream of Site 1. Chlordane concentrations in 01SD0201 or 01SD0301, which were collected from swales on the west side of Site 1 and only receive input from Site 1, were less than the ESV.

Several pesticides were detected at concentrations less than direct exposure screening criteria, but do not have established ESVs; aldrin (1 sample), alpha BHC (1 sample), delta BHC (1 sample), and heptachlor epoxide (1 sample).

PCB concentrations in the sediment samples were less than the laboratory detection limits.

4.4.2.4 Herbicides

Herbicide concentrations in the sediment samples were less than the laboratory detection limits.

4.4.2.5 Inorganics

Arsenic was the only metal detected in Site 1 sediment samples at concentrations exceeding human health direct exposure criteria (TRGs and RSL). Arsenic was detected in 4 of the 5 sediment samples. Arsenic was detected in one sediment sample at a concentration greater than the restricted TRG of 3.82 mg/kg and the ESV of 7.24 mg/kg.

- 01SD0101 19.8 J mg/kg

Arsenic concentrations in 3 of the 5 sediment samples were greater than the unrestricted TRG (0.426 mg/kg) and the residential RSL (0.39 mg/kg).

- 01SD0201 1.37 mg/kg
- 01SD0401 0.81 mg/kg
- 01SD0501 1.5 mg/kg

Aluminum was detected in each of the sediment samples at concentrations ranging from 1,000 to 17,200 mg/kg. Each of the aluminum detections were less than the TRGs and RSL. An ESV has not been established for aluminum in sediment.

Iron was detected in each of the sediment samples at concentrations ranging from 650 mg/kg to 28,100 J mg/kg. The iron concentration reported for 01SD0101 (28,100 J mg/kg) was greater than the unrestricted TRG of 23,500 mg/kg, but less than the RSL of 55,000 mg/kg and the restricted TRG of 613,000 mg/kg. An ESV has not been established for iron in sediment.

Manganese was detected in each of the samples with concentrations ranging from 1.5 mg/kg to 295 J mg/kg, which are less than the TRG (1,560 mg/kg) and the RSL (1,800 mg/kg). An ESV has not been established for manganese in sediment.

Lead was detected in two sediment samples (01SD0101 at 32.1 J mg/kg and 01SD0401 at 31 mg/kg) which are greater than the ESV of 30.2 mg/kg, but less than both the unrestricted TRG and RSL (400 mg/kg).

Vanadium was detected in each of the samples with concentrations ranging from 1.4 to 32.2 J mg/kg, which are less than the TRG (548 mg/kg) and the RSL (390 mg/kg). An ESV has not been established for vanadium in sediment.

Zinc was detected in each of the sediment samples at concentrations ranging from 4.2 mg/kg to 132 J mg/kg. The zinc concentration reported for 01SD0101 (132 J mg/kg) was greater than the ESV of 124 mg/kg, but less than the RSL of 23,000 mg/kg and the unrestricted TRG of 23,500 mg/kg.

Barium was detected in each of the samples with concentrations ranging from 5.3 to 61.2 mg/kg, which are less than the TRG (5,480 mg/kg) and the RSL (15,000 mg/kg). An ESV has not been established for barium.

Beryllium was reported in one sediment sample (01SD0101) at a concentration of 1.1 J mg/kg, which is less than the unrestricted TRG (156 mg/kg) and the RSL (160 mg/kg). An ESV has not been established for beryllium.

4.4.2.6 Summary of Sediment Analytical Results

Relatively few VOCs were detected in Site 1 sediment samples and concentrations were low. A range of pesticides and SVOCs were detected, but many were found only in one sample. Metals were detected

frequently in the sediment samples. Table 4-14 details the screening of COPCs for Site 1 sediments. The chemicals retained as COPCs for evaluation in the RAs are summarized below:

- Direct Exposure (carcinogen) – benzo(a)pyrene, benzo(b)fluoranthene, and arsenic.
- Direct Exposure (non-carcinogen) – aluminum, iron, and manganese.
- Ecological Receptors – chrysene, fluoranthene, phenanthrene, pyrene, bis(2-ethylhexyl)phthalate, and chlordane.
- Ecological Receptors (No ESV) – 2-butanone, acetone, toluene, aldrin, 4-methylphenol, diethyl phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, BHC isomers, heptachlor epoxide, aluminum, barium, beryllium, iron, manganese, and vanadium.

4.5 AIR

Air samples for laboratory analysis were not collected from Site 1 during the RI because the concentrations of volatile contaminants previously detected in soil and groundwater were relatively low. Air monitoring was conducted during the site investigation to identify potential exposure to higher concentrations of volatile contaminants.

To determine the potential for migration of soil contaminants to the atmosphere, the contaminant concentrations were compared to the USEPA SSLs. SSLs have been established for various volatiles, pesticides/PCBs, and metals. Concentrations of these classes of analytes that were detected in soil at Site 1 were less than the default SSL values.

USEPA groundwater volatilization criteria have been established for many of the VOCs detected in groundwater at Site 1. Chemicals that were reported in one or more groundwater samples at concentrations greater than the default criteria, indicating the potential for migration and accumulation of vapors from the groundwater, were retained as COPCs.

4.6 NATURE AND EXTENT CONCLUSIONS

One of the primary objectives of the RI was to evaluate the nature and extent and the impact of the waste disposal at Site 1, and to determine if the resulting site conditions meet the requirements to continue to pursue the current presumptive remedy strategy.

The *Application of the CERCLA Municipal Landfill Presumptive Remedy to Military Landfills* (USEPA, 1996c) identifies the waste characteristics of military landfills that allow the application of the Presumptive Remedy guidance. The guidance states that appropriate characteristics include:

- Risks are low-level except for "hot spots." The results of sampling were generally below screening levels.
- Treatment of wastes is usually impractical due to the volume and heterogeneity of the waste. The vast majority of the material at Site 1 is non-hazardous debris and household type wastes.
- Waste types include household, commercial, non-hazardous sludge, and industrial waste solids. The IAS reports that liquid wastes were disposed of in trenches at the site.
- Lesser quantities of hazardous wastes are present as compared to municipal wastes. The hotspots at the site represent a very small volume of the total waste.
- Land application units, surface impoundments, injection wells, and waste piles are **not** included. There is no reported history, nor any visual evidence of these at Site 1.

The guidance anticipates that military landfills will have industrial solid waste, paints (and paint thinners), pesticides, transformer oils, and other solvents in relatively low proportion to the volume of municipal wastes – including construction debris, commercial/household type garbage, and yard wastes. The types of waste that would exclude a military site from presumptive remedy consideration include chemical warfare agents, munitions, and other explosives.

Based on the site investigation results, Site 1 has the acceptable characteristics necessary to continue with the presumptive remedy. The following section, *Contaminant Fate and Transport*, will examine the potential impact to local receptors and support refinement of the response action objectives necessary to address the contaminant pathways.

**TABLE 4-1
SCREENING CRITERIA
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

	MDEQ			ORNL			USEPA		
	Unrestricted TRG	Restricted TRG	Groundwater TRG	Residential Soil	SSL Migration to GW	Tapwater Screening	SSL Soil to Air	GVC	Region IV ESV
Surface Soil	X	X		X	X		X		X
Subsurface Soil	X	X		X	X		X		
Surface Water			X			X			X
Sediment	X	X		X					X
Groundwater			X			X		X	

Notes:

DPT = direct push technology
 ESV = Ecological Screening Values
 GVC = Groundwater Volatilization Criteria
 MDEQ = Mississippi Department of Environmental Quality

ORNL = Oak Ridge National Laboratory
 SSL = soil screening levels
 TRG = target remediation goal
 USEPA = United States Environmental Protection Agency

References:

MDEQ TRG - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002.

Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. (ORNL, September 12, 2008).

USEPA Soil Screening Levels (SSLs). EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm.

ORNL SSL - Oak Ridge National Laboratory Regional Screening Levels for Chemical Contaminants at Superfund Sites, Risk-based soil screening level for migration to groundwater, September 12, 2008.

Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. (ORNL, September 12, 2008).

USEPA GVC - Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. November 2002. EPA530-F-02-052. Values are from Table 2c (the value for trichloroethene is from Table 2a) and correspond to a target cancer risk level of 1E-6 or HI =1 and an attenuation factor of 0.001.

ESV - USEPA, 2001. Supplemental Guidance to RAGS: Region 4 Bulletins, Ecological Risk Assessment. Waste Management Division, Atlanta, Georgia. Originally published November 1995. Website version last updated November 30, 2001: <http://www.epa.gov/region4/waste/ots/ecolbul.htm>

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS01QT GPT-01-QT-01 8/14/2008	01SS01QT-D GPT-01-QT-01 8/14/2008	01SS02QT GPT-01-QT-02 8/14/2008	01SS03QT GPT-01-QT-03 8/14/2008	01SS04QT GPT-01-QT-04 8/14/2008	01SS05QT GPT-01-QT-05 8/14/2008
Sample Location												
Sample Date												
Top Depth							0	0	0	0	0	0
Bottom Depth							1	1	1	1	1	1
Volatile Organics (µg/kg)												
2-BUTANONE	84500	84500	28000000	1500	24000000	NA	11 U	10 U	11 U	9.7 U	10 U	11 U
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	NA	11 U	10 U	11 U	9.7 U	10 U	11 U
TETRACHLOROETHENE	18200	11900	570	0.052	10000	10	11 U	10 U	11 U	9.7 U	10 U	11 U
Semivolatile Organics (µg/kg)												
BENZO(B)FLUORANTHENE	7840	875	150	47	NA	1100	380 U	380 U	410 U	400 U	78 J	420 U
CAPROLACTAM	102000000	39100000	31000000	5700	NA	NA	380 U	380 U	410 U	400 U	390 U	420 U
DI-N-BUTYL PHTHALATE	2280000	2280000	6100000	11000	NA	200000	380 U	380 U	410 U	400 U	390 U	53 J
DIETHYL PHTHALATE	1970000	1970000	49000000	13000	NA	100000	380 U	380 U	410 U	400 U	390 U	420 U
Pesticides/PCBs (µg/kg)												
4,4'-DDE	16800	1880	1400	60	NA	21	0.76 U	0.76 U	0.82 U	0.8 U	0.58 J	0.84 U
4,4'-DDT	16800	1880	1700	87	750000	21	0.76 U	0.76 U	0.82 U	0.8 U	1.5	0.84 U
ALDRIN	337	37.6	29	0.84	3400	2.5	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
AROCLOR-1260	10000	1000	220	14	NA	20	19 U	19 U	21 U	20 U	19 U	21 U
DIELDRIN	358	39.9	30	0.09	1100	4.9	0.76 U	0.76 U	0.82 U	0.8 U	0.22 R	0.84 U
ENDOSULFAN II	1230000	469000	370000	9700	NA	NA	0.76 U	0.76 U	0.82 U	0.8 U	0.78 U	0.84 U
ENDOSULFAN SULFATE	1230000	469000	370000	9700	NA	NA	0.76 U	0.76 U	0.82 U	0.8 U	0.78 U	0.84 U
ENDRIN ALDEHYDE	61300	23500	18000	230	NA	1	0.76 U	0.76 U	0.82 U	0.8 U	0.78 U	0.84 U
HEPTACHLOR	195	127	110	1.6	4100	NA	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
HEPTACHLOR EPOXIDE	629	70.2	53	0.079	4700	NA	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
METHOXYCHLOR	1020000	391000	310000	16000	NA	NA	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
ALPHA-BHC	908	101	77	0.074	750	2.5	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.26 J
BETA-BHC	3180	355	270	0.26	6000	1	0.38 U	0.38 U	0.41 U	0.16 J	0.39 U	0.22 J
DELTA-BHC	908	101	77	0.074	750	1	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
GAMMA-BHC (LINDANE)	4400	491	520	0.43	NA	0.05	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
ALPHA-CHLORDANE	NA	NA	1600	33	NA	NA	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
GAMMA-CHLORDANE	NA	NA	1600	33	NA	NA	0.38 U	0.38 U	0.41 U	0.4 U	0.39 U	0.42 U
TOTAL CHLORDANE	12300	1820	1600	33	72000	NA	0 U	0 U	0 U	0 U	0 U	0 U

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

NA = No criteria for this constituent

BHC = benzene hexachloride

ESV = Ecological Screening Value

GW = groundwater

ID = identification

ORNL = Oak Ridge National Laboratory

J = estimated value less than quantitation limit

U = less than laboratory method detection limit

R = Value rejected in data validation

PCB = polychlorinated biphenyl

RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS01QT GPT-01-QT-01 8/14/2008	01SS01QT-D GPT-01-QT-01 8/14/2008	01SS02QT GPT-01-QT-02 8/14/2008	01SS03QT GPT-01-QT-03 8/14/2008	01SS04QT GPT-01-QT-04 8/14/2008	01SS05QT GPT-01-QT-05 8/14/2008
Sample Location												
Sample Date												
Top Depth							0	0	0	0	0	0
Bottom Depth							1	1	1	1	1	1
Herbicides (µg/kg)												
2,4,5-T	2040000	782000	610000	110	NA	NA	1.9 U	1.9 U	2.1 U	2 U	1.9 U	2.1 U
DINOSEB	204000	78200	61000	270	NA	NA	9.5 U	9.5 U	10 U	8.8 J	9.7 U	10 U
Inorganics (mg/kg)												
ALUMINUM	2040000	78200	77000	55000	7090000	50	6840	5530	6490	5460	5850	10900
ANTIMONY	81.7	31.3	31	0.66	NA	0.27	1.1 UJ	1.1 UJ	1.2 UJ	1.2 UJ	1.1 UJ	1.2 UJ
ARSENIC	3.82	0.426	0.39	0.0013	769	18	0.83	0.96	1.5	1.1	4.8	1.6
BARIUM	14300	5480	15000	300	709000	330	12.2	11	12.9	10.4	12.9	16.5
CADMIUM	1020	39.1	70	1.4	1840	0.36	0.23 U	0.21 U	0.24 U	0.24 U	0.22 U	0.24 U
CALCIUM	NA	NA	NA	NA	NA	NA	228 U	214 U	244 U	398	8730	241 U
CHROMIUM	381	227	230	2.1	276	26	4.7	3.9	4.7	4.3	6	8.2
COBALT	12300	4690	23	0.49	1180	13	1.1 U	1.1 U	1.2 U	1.2 U	1.1 U	1.2 U
COPPER	8170	3130	3100	51	NA	28	2.8	2.5	1.4	4.1	5.4	2.8
IRON	613000	23500	55000	640	NA	200	2300	2440	4470	2100	3490	2840
LEAD	1700	400	400	14	NA	11	6.1	6.3	5	6.7	20.6	5.4
MAGNESIUM	NA	NA	NA	NA	NA	NA	228 U	214 U	244 U	236 U	3390	278
MANGANESE	4080	1560	1800	57	70900	220	3.5	3.7	5.2	4.9	24.4	5.2
MERCURY	61.3	10	23	0.57	NA	0.1	0.045	0.059	0.016	0.016	0.017	0.022
NICKEL	4080	1560	1500	48	NA	38	2.5	2.2	2.3	1.4	2.4	3.9
SELENIUM	1020	391	390	0.95	NA	0.52	0.69	0.64 U	0.73 U	0.71 U	0.71	1
SODIUM	NA	NA	NA	NA	NA	NA	228 U	214 U	244 U	236 U	219 U	241 U
VANADIUM	1430	548	390	180	NA	7.8	6.6	5.6	8.7	6.1	7.9	11.6
ZINC	61300	23500	23000	680	NA	46	6.7	7	7.3	6.9	23.3	6.7

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

NA = No criteria for this constituent

BHC = benzene hexachloride

ESV = Ecological Screening Value

GW = groundwater

ID = identification

ORNL = Oak Ridge National Laboratory

J = estimated value less than quantitation limit

U = less than laboratory method detection limit

R = Value rejected in data validation

PCB = polychlorinated biphenyl

RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

USEPA = United States Environmental Protection Agency

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 3 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS06QT GPT-01-QT-06 8/14/2008	01SS0701 GPT-01-QT-07 9/11/2008	01SS0801 GPT-01-QT-08 9/11/2008	01SS0901 GPT-01-QT-09 9/11/2008	01SS1001 01SS10 9/11/2008	01SS1101 01SS11 9/11/2008
Sample Location							0	0	0	0	0	0
Sample Date							1	1	1	1	1	1
Top Depth												
Bottom Depth												
Volatile Organics (µg/kg)												
2-BUTANONE	84500	84500	28000000	1500	24000000	NA	9.2 U	1.4 U	1.7 U	1.9 U	1.3 U	1.8 J
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	NA	9.2 U	0.59 U	0.71 U	0.78 U	0.54 U	0.63 U
TETRACHLOROETHENE	18200	11900	570	0.052	10000	10	9.2 U	0.99 UJ	1.2 U	1.3 U	0.9 U	1 U
Semivolatile Organics (µg/kg)												
BENZO(B)FLUORANTHENE	7840	875	150	47	NA	1100	370 U	35 U	34 U	41 U	34 U	39 U
CAPROLACTAM	102000000	39100000	31000000	5700	NA	NA	370 U	74 U	72 U	300 J	73 U	140 J
DI-N-BUTYL PHTHALATE	2280000	2280000	6100000	11000	NA	200000	370 U	190 U	140 U	40 U	33 U	71 U
DIETHYL PHTHALATE	1970000	1970000	49000000	13000	NA	100000	370 U	37 U	36 U	44 U	36 U	50 J
Pesticides/PCBs (µg/kg)												
4,4'-DDE	16800	1880	1400	60	NA	21	0.74 U	0.18 UJ	0.18 UJ	0.22 UJ	1.5 J	0.21 UJ
4,4'-DDT	16800	1880	1700	87	750000	21	0.74 U	0.18 UJ	0.18 UJ	0.22 UJ	2 J	0.21 UJ
ALDRIN	337	37.6	29	0.84	3400	2.5	0.37 U	0.12 UJ	0.12 UJ	0.14 UJ	0.12 UJ	0.14 UJ
AROCLOR-1260	10000	1000	220	14	NA	20	19 U	4.6 UJ	4.5 UJ	5.5 UJ	17 J	5.2 UJ
DIELDRIN	358	39.9	30	0.09	1100	4.9	0.74 U	0.18 UJ	0.91 J	9.5 J	15 J	2.1 J
ENDOSULFAN II	1230000	469000	370000	9700	NA	NA	0.74 U	0.18 UJ	0.32 J	0.22 UJ	0.24 J	0.69 J
ENDOSULFAN SULFATE	1230000	469000	370000	9700	NA	NA	0.74 U	0.18 UJ	0.18 UJ	0.22 UJ	0.18 UJ	0.21 UJ
ENDRIN ALDEHYDE	61300	23500	18000	230	NA	1	0.31 J	0.18 UJ	0.18 UJ	0.22 UJ	2 J	0.21 UJ
HEPTACHLOR	195	127	110	1.6	4100	NA	0.37 U	0.12 UJ	0.19 J	0.14 UJ	0.12 UJ	0.14 UJ
HEPTACHLOR EPOXIDE	629	70.2	53	0.079	4700	NA	0.37 U	0.12 UJ	0.16 R	0.14 UJ	1.7 J	1 J
METHOXYCHLOR	1020000	391000	310000	16000	NA	NA	0.37 U	0.12 UJ	0.12 UJ	0.14 UJ	4.5 J	0.14 UJ
ALPHA-BHC	908	101	77	0.074	750	2.5	0.37 U	0.12 UJ	0.12 UJ	0.14 UJ	0.12 UJ	0.14 UJ
BETA-BHC	3180	355	270	0.26	6000	1	0.37 U	0.12 UJ	0.36 J	0.14 UJ	0.12 UJ	0.14 UJ
DELTA-BHC	908	101	77	0.074	750	1	0.37 U	0.12 UJ	0.12 UJ	0.14 UJ	0.12 UJ	0.14 UJ
GAMMA-BHC (LINDANE)	4400	491	520	0.43	NA	0.05	0.37 U	0.12 UJ	0.12 UJ	0.14 UJ	0.12 UJ	0.14 UJ
ALPHA-CHLORDANE	NA	NA	1600	33	NA	NA	0.37 U	0.57 J	0.12 UJ	0.14 UJ	2.1 J	0.14 UJ
GAMMA-CHLORDANE	NA	NA	1600	33	NA	NA	0.37 U	0.22 J	0.12 UJ	0.14 UJ	1.4 J	0.14 UJ
TOTAL CHLORDANE	12300	1820	1600	33	72000	NA	0 U	0.77	0 U	0 U	3.5	0 U

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

mg/kg = miligrams per kilogram

NA = No criteria for this constituent

BHC = benzene hexachloride

ESV = Ecological Screening Value

GW = groundwater

ID = identification

ORNL = Oak Ridge National Laboratory

J = estimated value less than quantitation limit

U = less than laboratory method detection limit

R = Value rejected in data validation

PCB = polychlorinated biphenyl

RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 4 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS06QT GPT-01-QT-06 8/14/2008	01SS0701 GPT-01-QT-07 9/11/2008	01SS0801 GPT-01-QT-08 9/11/2008	01SS0901 GPT-01-QT-09 9/11/2008	01SS1001 01SS10 9/11/2008	01SS1101 01SS11 9/11/2008
Sample Location												
Sample Date												
Top Depth							0	0	0	0	0	0
Bottom Depth							1	1	1	1	1	1
Herbicides (µg/kg)												
2,4,5-T	20400000	782000	610000	110	NA	NA	1.9 U	0.92 UJ	6 J	1.1 UJ	1.2 J	1 UJ
DINOSEB	204000	78200	61000	270	NA	NA	9.3 U					
Inorganics (mg/kg)												
ALUMINUM	2040000	78200	77000	55000	7090000	50	8320	10500	1770	2010	5020	4510
ANTIMONY	81.7	31.3	31	0.66	NA	0.27	1 UJ	1.1 UJ	1.1 J	1.3 UJ	1.1 UJ	1.2 UJ
ARSENIC	3.82	0.426	0.39	0.0013	769	18	1.3	3.9	0.61 U	0.78 U	3.5	1.7
BARIUM	14300	5480	15000	300	709000	330	17.1	12.8	4.5	2	9.3	11.8
CADMIUM	1020	39.1	70	1.4	1840	0.36	0.21 U	0.22 U	0.2 U	0.26 U	0.21 U	0.24 U
CALCIUM	NA	NA	NA	NA	NA	NA	337	222 U	205 U	261 U	525	431
CHROMIUM	381	227	230	2.1	276	26	6.3	7.9	2.2	3.3	7.7	4.1
COBALT	12300	4690	23	0.49	1180	13	1 U	1.1 U	1 U	1.3 U	1.1 U	1.2 U
COPPER	8170	3130	3100	51	NA	28	1.6	2.7	1 U	1.3 U	3	10.9
IRON	613000	23500	55000	640	NA	200	3290	5030	1010	546	4660	2750
LEAD	1700	400	400	14	NA	11	7.5	4.4	3.2	3.2	18.4	14.4
MAGNESIUM	NA	NA	NA	NA	NA	NA	263	273	205 U	261 U	211 U	240 U
MANGANESE	4080	1560	1800	57	70900	220	4.1	8.3	5.2	1	15.1	4.3
MERCURY	61.3	10	23	0.57	NA	0.1	0.018	0.02	0.014 U	0.016 U	0.013 U	0.052
NICKEL	4080	1560	1500	48	NA	38	2.8	3.7	1 U	1.3 U	1.7	1.4
SELENIUM	1020	391	390	0.95	NA	0.52	1.3	0.67 U	0.61 U	0.78 U	0.63 U	0.72 U
SODIUM	NA	NA	NA	NA	NA	NA	206 U	222 U	205 U	261 U	211 U	240 U
VANADIUM	1430	548	390	180	NA	7.8	8.8	13.3	2.7	3.5	9.7	6
ZINC	61300	23500	23000	680	NA	46	8.3	8.7	15.9	1.7	54.8	12.3

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

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NA = No criteria for this constituent

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SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 5 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS1201 01SS12 9/11/2008	01SS01401 01SS014 9/30/2008	01SS01401-D 01SS014 9/30/2008	01SS01501 01SS015 9/30/2008	01SS01701 01SS017 9/30/2008	01SS02401 01SS024 9/30/2008
Sample Location							0	0	0	0	0	0
Sample Date							1	1	1	1	1	1
Top Depth												
Bottom Depth												
Volatile Organics (µg/kg)												
2-BUTANONE	84500	84500	28000000	1500	24000000	NA	4 J	11 U	10 U	9.9 U	9.8 U	11 U
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	NA	0.58 U	11 U	10 U	1.2 J	9.8 U	11 U
TETRACHLOROETHENE	18200	11900	570	0.052	10000	10	0.98 U	11 U	10 U	9.9 U	9.8 U	11 U
Semivolatile Organics (µg/kg)												
BENZO(B)FLUORANTHENE	7840	875	150	47	NA	1100	36 U	380 U	380 U	370 U	370 U	410 U
CAPROLACTAM	102000000	39100000	31000000	5700	NA	NA	210 J	380 UJ	380 UJ	370 UJ	370 UJ	410 UJ
DI-N-BUTYL PHTHALATE	2280000	2280000	6100000	11000	NA	200000	34 U	380 U	380 U	370 U	370 U	410 U
DIETHYL PHTHALATE	1970000	1970000	49000000	13000	NA	100000	40 J	380 U	380 U	60 J	370 U	410 U
Pesticides/PCBs (µg/kg)												
4,4'-DDE	16800	1880	1400	60	NA	21	0.19 UJ	0.77 U	0.77 U	0.86 J	0.73 U	0.97 J
4,4'-DDT	16800	1880	1700	87	750000	21	0.19 UJ	0.77 UJ	0.32 J	0.23 J	0.73 UJ	1.5 J
ALDRIN	337	37.6	29	0.84	3400	2.5	0.12 UJ	0.38 U	0.38 U	0.37 U	6.3 J	0.41 U
AROCLOR-1260	10000	1000	220	14	NA	20	4.7 UJ	19 U	19 U	18 U	18 U	20 U
DIELDRIN	358	39.9	30	0.09	1100	4.9	0.19 UJ	0.55 J	0.7 J	1.4	0.73 U	0.81 U
ENDOSULFAN II	1230000	469000	370000	9700	NA	NA	0.19 UJ	1.4 J	0.35 J	0.74 U	0.73 U	0.81 U
ENDOSULFAN SULFATE	1230000	469000	370000	9700	NA	NA	0.19 UJ	0.77 U	0.29 J	0.74 U	0.73 U	0.81 U
ENDRIN ALDEHYDE	61300	23500	18000	230	NA	1	0.19 UJ	0.77 U	0.77 U	0.74 U	0.73 U	0.81 U
HEPTACHLOR	195	127	110	1.6	4100	NA	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	0.41 U
HEPTACHLOR EPOXIDE	629	70.2	53	0.079	4700	NA	0.12 UJ	0.56 J	0.3 J	0.37 U	0.37 U	1.2 J
METHOXYCHLOR	1020000	391000	310000	16000	NA	NA	0.12 UJ	0.38 U	0.38 U	0.8 J	140 J	0.41 U
ALPHA-BHC	908	101	77	0.074	750	2.5	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	0.41 U
BETA-BHC	3180	355	270	0.26	6000	1	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	0.19 R
DELTA-BHC	908	101	77	0.074	750	1	0.12 UJ	0.26 J	0.18 R	0.37 U	0.37 U	0.41 U
GAMMA-BHC (LINDANE)	4400	491	520	0.43	NA	0.05	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	0.41 U
ALPHA-CHLORDANE	NA	NA	1600	33	NA	NA	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	4.9 J
GAMMA-CHLORDANE	NA	NA	1600	33	NA	NA	0.12 UJ	0.38 U	0.38 U	0.37 U	0.37 U	3.4 J
TOTAL CHLORDANE	12300	1820	1600	33	72000	NA	0 U	0 U	0 U	0 U	0 U	8.3

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

mg/kg = miligrams per kilogram

NA = No criteria for this constituent

BHC = benzene hexachloride

ESV = Ecological Screening Value

GW = groundwater

ID = identification

ORNL = Oak Ridge National Laboratory

J = estimated value less than quantitation limit

U = less than laboratory method detection limit

R = Value rejected in data validation

PCB = polychlorinated biphenyl

RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS1201 01SS12 9/11/2008	01SS01401 01SS014 9/30/2008	01SS01401-D 01SS014 9/30/2008	01SS01501 01SS015 9/30/2008	01SS01701 01SS017 9/30/2008	01SS02401 01SS024 9/30/2008
Sample Location							0	0	0	0	0	0
Sample Date							1	1	1	1	1	1
Top Depth												
Bottom Depth												
Herbicides (µg/kg)												
2,4,5-T	20400000	782000	610000	110	NA	NA	5.1 J	1.9 U	1.9 U	1.8 U	1.8 U	2 U
DINOSEB	204000	78200	61000	270	NA	NA						
Inorganics (mg/kg)												
ALUMINUM	2040000	78200	77000	55000	7090000	50	8640	7490	5680	9110	7300	2600
ANTIMONY	81.7	31.3	31	0.66	NA	0.27	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ	1.1 UJ
ARSENIC	3.82	0.426	0.39	0.0013	769	18	1.3	1.8	1.7	1	2.7	0.78
BARIUM	14300	5480	15000	300	709000	330	16.3	13.8	11.7	32.7	70	12.8
CADMIUM	1020	39.1	70	1.4	1840	0.36	0.23 U	0.32	0.3	0.21 U	0.22 U	0.23 U
CALCIUM	NA	NA	NA	NA	NA	NA	527	28700	21600	2090	32900	600
CHROMIUM	381	227	230	2.1	276	26	6.8	7.5	5.7	7.5	9.4	3
COBALT	12300	4690	23	0.49	1180	13	1.1 U	1.1 U	1.1 U	1.1 U	6.8	1.1 U
COPPER	8170	3130	3100	51	NA	28	16.6	11.1	9.2	210	3.3	3.6
IRON	613000	23500	55000	640	NA	200	4010	7210	4530	5680	9050	1690
LEAD	1700	400	400	14	NA	11	10	47.3 J	42 J	53 J	10.9 J	7.9 J
MAGNESIUM	NA	NA	NA	NA	NA	NA	241	363	261	233	337	228 U
MANGANESE	4080	1560	1800	57	70900	220	21.3	67.4	49.6	10.7	358	12.3
MERCURY	61.3	10	23	0.57	NA	0.1	0.017	0.018	0.016	0.019	0.015 U	0.016 U
NICKEL	4080	1560	1500	48	NA	38	3.1	2	1.8	2.5	2.4	1.3
SELENIUM	1020	391	390	0.95	NA	0.52	0.67 U	0.69 U	0.67 U	0.64 U	0.66 U	0.68 U
SODIUM	NA	NA	NA	NA	NA	NA	225 U	266	223 U	214 U	271	228 U
VANADIUM	1430	548	390	180	NA	7.8	9.6	13.8	9.8	9.8	16	4.8
ZINC	61300	23500	23000	680	NA	46	15	34.5	34	32	12.3	8

Notes:

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Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

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SSL = soil screening level

TRG = target remediation goal

USEPA = United States Environmental Protection Agency

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 7 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS02501 01SS025 9/30/2008	01SS13701 01SS137 9/30/2008	01SS13801 01SS138 9/30/2008	01SS13901 01SS139 9/30/2008	01SS13901-D 01SS139 9/30/2008	01SS42001 01SS420 9/30/2008
Sample Location							0	0	0	0	0	0
Sample Date							1	1	2	2	2	1
Top Depth												
Bottom Depth												
Volatile Organics (µg/kg)												
2-BUTANONE	84500	84500	28000000	1500	24000000	NA	10 U	9.5 U	10 U	10 U	11 U	9.7 U
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	NA	10 U	0.72 J	0.71 J	10 U	11 U	0.9 J
TETRACHLOROETHENE	18200	11900	570	0.052	10000	10	10 U	0.28 J	10 U	10 U	11 U	0.22 J
Semivolatile Organics (µg/kg)												
BENZO(B)FLUORANTHENE	7840	875	150	47	NA	1100	370 U	360 U	380 U	370 U	400 U	370 U
CAPROLACTAM	102000000	39100000	31000000	5700	NA	NA	370 UJ	360 UJ	380 UJ	370 UJ	400 UJ	370 UJ
DI-N-BUTYL PHTHALATE	2280000	2280000	6100000	11000	NA	200000	370 U	360 U	380 U	370 U	400 U	370 U
DIETHYL PHTHALATE	1970000	1970000	49000000	13000	NA	100000	370 U	360 U	380 U	370 U	400 U	370 U
Pesticides/PCBs (µg/kg)												
4,4'-DDE	16800	1880	1400	60	NA	21	0.75 U	0.72 U	0.76 U	0.74 U	0.8 U	0.74 U
4,4'-DDT	16800	1880	1700	87	750000	21	3.4 R	0.31 J	0.76 UJ	0.74 UJ	0.8 UJ	0.41 J
ALDRIN	337	37.6	29	0.84	3400	2.5	0.29 J	0.36 U	0.38 U	0.37 U	0.4 U	0.16 J
AROCLOR-1260	10000	1000	220	14	NA	20	19 U	18 U	19 U	18 U	20 U	18 U
DIELDRIN	358	39.9	30	0.09	1100	4.9	460 J	0.36 J	0.76 U	0.74 U	0.8 U	0.74 U
ENDOSULFAN II	1230000	469000	370000	9700	NA	NA	0.75 U	0.3 J	0.76 U	0.74 U	0.8 U	1.6
ENDOSULFAN SULFATE	1230000	469000	370000	9700	NA	NA	0.75 U	0.72 U	0.76 U	0.74 U	0.8 U	0.74 U
ENDRIN ALDEHYDE	61300	23500	18000	230	NA	1	0.75 U	0.72 U	0.76 U	0.74 U	0.8 U	0.74 U
HEPTACHLOR	195	127	110	1.6	4100	NA	0.37 U	0.36 U	0.38 U	0.37 U	0.4 U	0.37 U
HEPTACHLOR EPOXIDE	629	70.2	53	0.079	4700	NA	0.25 J	0.36 U	0.38 U	0.37 U	0.4 U	0.37 U
METHOXYCHLOR	1020000	391000	310000	16000	NA	NA	0.37 U	0.36 UJ	0.38 UJ	0.37 UJ	0.4 UJ	0.29 J
ALPHA-BHC	908	101	77	0.074	750	2.5	0.37 U	0.36 U	0.38 U	0.37 U	0.4 U	0.37 U
BETA-BHC	3180	355	270	0.26	6000	1	0.37 U	0.36 U	0.38 U	0.37 U	0.18 J	0.37 U
DELTA-BHC	908	101	77	0.074	750	1	0.37 U	0.36 U	0.38 U	0.37 U	0.4 U	0.37 U
GAMMA-BHC (LINDANE)	4400	491	520	0.43	NA	0.05	0.37 U	0.36 U	0.38 U	0.37 U	0.23 J	0.37 U
ALPHA-CHLORDANE	NA	NA	1600	33	NA	NA	0.23 J	0.32 J	0.38 U	0.37 U	0.4 U	0.37 U
GAMMA-CHLORDANE	NA	NA	1600	33	NA	NA	0.37 U	0.36 U	0.38 U	0.37 U	0.4 U	0.23 J
TOTAL CHLORDANE	12300	1820	1600	33	72000	NA	0.23	0.32	0 U	0 U	0 U	0.23

Notes:

Bold = Positive Detection

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RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

TABLE 4-2
POSITIVE DETECTIONS IN SURFACE SOIL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 8 OF 8

Sample ID	Restricted Soil TRG	Unrestricted Soil TRG	ORNL RSL	ORNL SSL Soil to GW	Soil to Air SSLs	USEPA Region 4 ESV	01SS02501 01SS025 9/30/2008	01SS13701 01SS137 9/30/2008	01SS13801 01SS138 9/30/2008	01SS13901 01SS139 9/30/2008	01SS13901-D 01SS139 9/30/2008	01SS42001 01SS420 9/30/2008
Sample Location							0	0	0	0	0	0
Sample Date							1	1	2	2	2	1
Top Depth												
Bottom Depth												
Herbicides (µg/kg)												
2,4,5-T	20400000	782000	610000	110	NA	NA	1.9 U	1.8 U	1.9 U	1.8 U	2 U	1.8 U
DINOSEB	204000	78200	61000	270	NA	NA						
Inorganics (mg/kg)												
ALUMINUM	2040000	78200	77000	55000	7090000	50	4810	7320	12300	6210	7010	8910
ANTIMONY	81.7	31.3	31	0.66	NA	0.27	1.1 UJ	1.1 UJ	1.1 UJ	1 UJ	1.2 UJ	3.6 J
ARSENIC	3.82	0.426	0.39	0.0013	769	18	1.1	1.9	1.2	0.63 U	1.5	1.5
BARIUM	14300	5480	15000	300	709000	330	10.6	20.7	25	11.3	13.6	17.4
CADMIUM	1020	39.1	70	1.4	1840	0.36	0.22 U	0.21 U	0.22 U	0.21 U	0.24 U	0.22 U
CALCIUM	NA	NA	NA	NA	NA	NA	233	42400	235	1170	838	5030
CHROMIUM	381	227	230	2.1	276	26	4.3	10.5	8.2	4.9	6.7	11
COBALT	12300	4690	23	0.49	1180	13	1.1 U	1.1 U	1.1 U	1 U	1.2 U	1.1 U
COPPER	8170	3130	3100	51	NA	28	1.7	4.5	2.7	1.6	2	3
IRON	613000	23500	55000	640	NA	200	2360	3840	4180	1500 J	3920 J	4130
LEAD	1700	400	400	14	NA	11	5.8 J	14.7 J	5.7 J	4.6 J	5.3 J	70.6 J
MAGNESIUM	NA	NA	NA	NA	NA	NA	222 U	401	267	209 U	239 U	258
MANGANESE	4080	1560	1800	57	70900	220	3.5	89	5.5	5.7	6.8	20.5
MERCURY	61.3	10	23	0.57	NA	0.1	0.023	0.022	0.029	0.016	0.015 U	0.029
NICKEL	4080	1560	1500	48	NA	38	1.7	3.2	5.7	2.6	2.7	3.4
SELENIUM	1020	391	390	0.95	NA	0.52	0.67 U	0.65 U	0.66 U	0.63 U	0.72 U	0.67 U
SODIUM	NA	NA	NA	NA	NA	NA	222 U	329	221 U	209 U	239 U	222 U
VANADIUM	1430	548	390	180	NA	7.8	5.8	8.5	12	5.2	9.7	10.5
ZINC	61300	23500	23000	680	NA	46	8	89	7.4	6.2	6.6	27.7

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening values

µg/kg = micrograms per kilogram

mg/kg = miligrams per kilogram

NA = No criteria for this constituent

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ESV = Ecological Screening Value

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ID = identification

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PCB = polychlorinated biphenyl

RSL - Regional Screening Level

SSL = soil screening level

TRG = target remediation goal

USEPA = United States Environmental Protection Agency

TABLE 4-3

CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Chemical	Detected		Direct Exposure Pathway				Migration Pathways			Ecological Receptors	
	Concentrations		Mississippi Restricted Soil Screening Value	Mississippi Unrestricted Soil Screening Value	ORNL Residential Soil Screening Value	COPC	USEPA SSLs Soil to Air	ORNL SSLs Soil to Groundwater	COPC	Ecological Screening Value	COPC
	Minimum	Maximum									
Volatile Organics (µg/kg)											
2-BUTANONE	1.8	4	8450 N	8450 N	2800000 NS	No	24000000	1500	No	NA	Yes
4-METHYL-2-PENTANONE	0.71	1.2	16300000 N	626000 N	530000 NS	No	2700000	440	No	NA	Yes
TETRACHLOROETHENE	0.22	0.28	18200 C	11900 C	570 C	No	10000	0.052	Yes	10	No
Semivolatile Organics (µg/kg)											
BENZO(B)FLUORANTHENE	78	78	7840 C	875 C	150 C	No	NA	47	Yes	1100	No
TOTAL PAHS	78	78	Evaluated for Ecological Receptors Only							1000	No
CAPROLACTAM	140	300	10200000 N	3910000 N	3100000 N	No	NA	5700	No	NA	Yes
DI-N-BUTYL PHTHALATE	53	53	2280000 Csat	2280000 Csat	610000 N	No	NA	11000	No	200000	No
DIETHYL PHTHALATE	40	60	1970000	1970000 Csat	4900000 N	No	NA	13000	No	100000	No
Pesticides/PCBs (µg/kg)											
4,4'-DDE	0.58	1.5	16800 C	1880 C	1,400 C	No	NA	60	No	21	No
4,4'-DDT	0.23	2	16800 C	1880 C	1,700 C	No	750000	87	No	21	No
TOTAL DDT	0.31	3.5	Evaluated for Ecological Receptors Only							21	No
ALDRIN	0.16	6.3	337 C	37.6 C	29 C	No	3400	0.84	Yes	2.5	Yes
ALPHA-BHC	0.26	0.26	908 C	101 C	77 C	No	750	0.074	Yes	2.5	No
BETA-BHC	0.16	0.36	3180 C	355 C	270 C	No	6000	0.26	Yes	1.0	No
DELTA-BHC	0.26	0.26	908 C	101 C	77 C	No	750	0.074	Yes	1.0	No
GAMMA-BHC (LINDANE)	0.23	0.23	4400 C	491 C	520 C	No	NA	0.43	No	0.05	Yes
ALPHA-CHLORDANE	0.23	4.9	1230 N	1820 C	1,600 C	No	72000	33	No	NA	Yes
GAMMA-CHLORDANE	0.22	3.4	1230 N	1820 C	1600 C	No	72000	33	No	NA	Yes
AROCLOR-1260		17	10000 C	1000 C	220 C	No	NA	14	Yes	20	No
DIELDRIN	0.36	460	358 C	39.9 C	30 C	Yes	1100	0.09	Yes	4.9	Yes
ENDOSULFAN II	0.24	1.6	123000 N	46900 N	37,000 N	No	NA	9700	No	NA	Yes
ENDOSULFAN SULFATE	0.29	0.29	123000 N	46900 N	37,000 N	No	NA	9700	No	NA	Yes
ENDRIN ALDEHYDE	0.31	2	6130 N	2350 N	1,800 N	No	NA	230	No	1.0	Yes
HEPTACHLOR	0.19	0.19	195 C	127 C	110 C	No	4100	1.6	No	NA	Yes
HEPTACHLOR EPOXIDE	0.25	1.7	629 C	70.2 C	53 C	No	4700	0.079	Yes	NA	Yes
METHOXYCHLOR	0.29	140	102000 N	39100 N	31000 N	No	NA	16000	No	NA	Yes
Herbicides (µg/kg)											
2,4,5-T	1.2	6	2040000 N	78200 N	61000 N	No	NA	110	No	NA	Yes
DINOSEB	8.8	8.8	20400 N	7820 N	6100 N	No	NA	270	No	NA	Yes

TABLE 4-3

CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Chemical	Detected		Direct Exposure Pathway				Migration Pathways			Ecological Receptors	
	Concentrations		Mississippi Restricted Soil Screening Value	Mississippi Unrestricted Soil Screening Value	ORNL Residential Soil Screening Value	COPC	USEPA SSLs Soil to Air	ORNL SSLs Soil to Groundwater	COPC	Ecological Screening Value	COPC
	Minimum	Maximum									
Inorganics (mg/kg)											
ALUMINUM	1770	12300	204000 N	7820 N	7700 N	Yes	709000	55000	No	50	Yes
ANTIMONY	1.1	3.6	8.17 N	3.13 N	3.1 N	Yes	NA	0.66	Yes	0.27	Yes
ARSENIC	0.78	4.8	3.82 C	0.426 C	0.39 C	Yes	769	0.0013	Yes	18	No
BARIUM	2	70	1430 N	548 N	1500 N	No	70900	300	No	330	No
CADMIUM	0.3	0.32	102 N	3.91 N	7 N	No	1840	1.4	No	0.36	No
CALCIUM	233	42400	NA	NA	NA	No	NA	NA	No	NA	No
CHROMIUM	2.2	11	381 C	227 C	23 N	No	276	2.1	Yes	26	No
COBALT	6.8	6.8	1230 N	469 N	2.3 N	Yes	1180	0.49	Yes	13	No
COPPER	1.4	210	817 N	313 N	310 N	No	NA	51	Yes	28	Yes
IRON	546	9050	61300 N	2350 N	5500 N	Yes	NA	640	Yes	200	Yes
LEAD	3.2	70.6	1700 C	400	400 N	No	NA	14	Yes	11	Yes
MAGNESIUM	233	3390	NA	NA	NA	No	NA	NA	No	NA	No
MANGANESE	1	358	408 N	156 N	180 N	Yes	7090	57	Yes	220	Yes
MERCURY	0.01175	0.059	6.13 N	1 N	2.3 N	No	NA	0.57	No	0.1	No
NICKEL	1.3	5.7	408 N	156 N	160 N	No	NA	48	No	38	No
SELENIUM	0.505	1.3	102 N	39.1 N	39 N	No	NA	0.95	Yes	0.52	Yes
SODIUM	188.75	329	NA	NA	NA	No	NA	NA	No	NA	No
VANADIUM	2.7	16	143 N	54.8 N	39 N	No	NA	180	No	7.8	Yes
ZINC	1.7	89	6130 N	2350 N	2300 N	No	NA	680	No	46	Yes

Notes:

Soil Screening Values are equal to TRGs and RSLs for carcinogens, 1/10 the TRGs or RSLs for noncarcinogens

Analytes without established ecological screening values are retained as COPCs for the Screening Level Ecological Risk Assessment

SSL = soil screening level

TRG = target remediation goal

ORNL = Oak Ridge National Laboratory

RSL - Regional Screening Level

COPC = Chemical of Potential Concern

µg/kg = micrograms per kilogram

N = noncarcinogen

mg/kg = milligrams per kilogram

C = carcinogen

USEPA = United States Environmental Protection Agency

NA = not applicable

sat = soil saturation concentration

TABLE 4-4
POSITIVE DETECTIONS IN SUBSURFACE SOIL - DITCH SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Sample ID	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	01SBDIT01	01SBDIT02	01SBDIT03	01SBDIT0402	01SBDIT0445	01SBDIT0502	01SBDIT0502-D	01SBDIT0602
Sample Location	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	01SBDIT01	01SBDIT02	01SBDIT03	01SBDIT04	01SBDIT04	01SBDIT05	01SBDIT05	01SBDIT06
Sample Date	Restricted	Unrestricted	Residential	SSL Soil	SSLs	10/1/2008	10/1/2008	10/1/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008	10/29/2008
Top Depth	Soil TRG	Soil TRG	Soil RSL	to GW		2.5	2.5	2.5	0.8	4	0	0	0
Bottom Depth						3.5	3.5	3.5	2	4.5	2	2	2
Volatile Organics (ug/kg)													
2-BUTANONE	84500	84500	28000000	1500	24000000	10 U	12 U	15 U					
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	10 U	1.7 J	15 U					
CARBON DISULFIDE	7970	7970	670000	270	720000	10 U	12 U	15 U					
CHLOROMETHANE	440000	49100	120000	49	2100	10 U	12 U	15 U					
Pesticides/PCBs (ug/kg)													
4,4'-DDE	16800	1880	1400	60	NA	0.35 J	0.83 U	0.95 U					
4,4'-DDT	16800	1880	1700	87	750000	0.73 J	1.4 J	0.95 UJ					
AROCLOR-1242	10000	1000	220	3	NA	18 U	2400 J	24 U	21 U	19 U	18 U	18 U	18 U
DIELDRIN	358	39.9	30	0.09	1100	0.43 J	0.85 R	0.95 U					
ENDOSULFAN II	1230000	469000	370000	9700	NA	0.51 J	4.4 J	0.95 U					
ENDOSULFAN SULFATE	1230000	469000	370000	9700	NA	0.73 U	1.5 J	0.46 J					
ENDRIN	61300	23500	18000	230	NA	0.73 U	7.6 J	0.95 U					
ENDRIN ALDEHYDE	61300	23500	18000	230	NA	0.73 U	12 J	0.95 U					
HEPTACHLOR EPOXIDE	629	70.2	53	0.079	4700	0.33 J	6.2 J	0.47 U					
ALPHA-BHC	908	101	77	0.074	750	0.36 U	4.2 J	0.47 U					
BETA-BHC	3180	355	270	0.26	6000	0.32 J	63 J	0.17 R					
DELTA-BHC	908	101	77	0.074	750	0.36 U	34 J	0.47 U					
TOTAL BHC	908	101	77	0.074	750	0.32	101.2	0 U					
ALPHA-CHLORDANE	NA	NA	1600	33	NA	1.6	0.42 U	0.18 R					
GAMMA-CHLORDANE	NA	NA	1600	33	NA	0.65 J	7.4 R	0.2 R					
TOTAL CHLORDANE	12300	1820	1600	33	72000	2.25	0 U	0 U					
Inorganics (mg/kg)													
ALUMINUM	2040000	78200	77000	55000	7090000	2910	4230	9700					
ARSENIC	3.82	0.426	0.39	0.0013	769	2	0.75 U	1.3					
BARIUM	14300	5480	15000	300	709000	7.8	10.8	15.6					
CALCIUM	NA	NA	NA	NA	NA	582	511	283 U					
CHROMIUM	381	227	230	2.1	276	3.8	3	9.8					
COPPER	8170	3130	3100	51	NA	2.2	1.2 U	2.2					
IRON	613000	23500	55000	640	NA	2060	908	1040					
LEAD	1700	400	400	NA	NA	7.5 J	2.5 J	4.8 J					
MANGANESE	4080	1560	1800	57	70900	8	3.7	3.9					
MERCURY	61.3	10	23	0.57	NA	0.019	0.017 U	0.073					
NICKEL	4080	1560	1500	48	NA	1.1 U	1.2 U	3.9					
VANADIUM	1430	548	390	180	NA	5.4	2.9	5.2					
ZINC	61300	23500	23000	680	NA	22.6	5.3	4.2					

TABLE 4-4
POSITIVE DETECTIONS IN SUBSURFACE SOIL - DPT SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Sample ID	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	01SB0120-22.5	01SB0203-08	01SB0321-26	01SB0402-07	01SB0502-07	01SB0602-07
Sample Location	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	GPT-01-SB-01	GPT-01-SB-02	GPT-01-SB-03	GPT-01-SB-04	GPT-01-SB-05	GPT-01-SB-06
Sample Date	Restricted	Unrestricted	Residential	SSL Soil	SSLs	5/10/2008	5/10/2008	5/10/2008	5/11/2008	5/11/2008	5/11/2008
Top Depth	Soil TRG	Soil TRG	Soil RSL	to GW		20	3	21	2	2	2
Bottom Depth						22.5	8	26	7	7	7
Volatile Organics (ug/kg)											
2-BUTANONE	84500	84500	28000000	1500	24000000	3 J	12 UJ	12 UJ	11 UJ	11 UJ	12 UJ
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	12 UJ	12 UJ	12 UJ	11 U	11 U	12 U
CARBON DISULFIDE	7970	7970	670000	270	720000	12 U	12 U	12 U	11 U	11 U	12 U
CHLOROMETHANE	440000	49100	120000	49	2100	12 UJ	12 UJ	12 UJ	11 U	11 U	12 U

Sample ID	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	01SB0702-07	01SB0802-07	01SB0902-07	01SB1002-07	01SB1002-07-D
Sample Location	Mississippi	Mississippi	ORNL	ORNL	Soil to Air	GPT-01-SB-07	GPT-01-SB-08	GPT-01-SB-09	GPT-01-SB-10	GPT-01-SB-10
Sample Date	Restricted	Unrestricted	Residential	BSSLs	SSLs	5/12/2008	5/12/2008	5/12/2008	5/12/2008	5/12/2008
Top Depth	Soil Criteria	Soil Criteria	Soil			2	2	2	2	2
Bottom Depth						7	7	7	7	7
Volatile Organics (ug/kg)										
2-BUTANONE	84500	84500	28000000	1500	24000000	3.6 J	12 UJ	11 UJ	11 UJ	12 UJ
4-METHYL-2-PENTANONE	163000000	6260000	5300000	440	2700000	12 U	12 UJ	11 UJ	11 UJ	12 UJ
CARBON DISULFIDE	7970	7970	670000	270	720000	2.8 J	12 U	11 U	11 U	12 U
CHLOROMETHANE	440000	49100	120000	49	2100	12 U	12 UJ	11 UJ	0.62 J	12 UJ

Notes:

BSSL = Baseline Soil Screening Level

Bold = Positive Detections

ORNL = Oak Ridge National Laboratory

Shaded = Concentration greater than one or more screening value

SSL = Soil Screening Level

J = estimated value less than quantitation limit

R = Value rejected in data validation

U = concentration is less than the laboratory method detection limit.

ug/kg = micrograms per kilogram

RSL - Regional Screening Level

TABLE 4-6

LANDFILL GAS SCREENING DATA
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Sample Location	Probe Depth	Elapsed Time	GEM 2000			Multi RAE				
			CH ₄ (%)	CO ₂ (%)	O ₂ (%)	O ₂ (%)	CO (PPM)	PID (PPM)	LEL (%)	H ₂ S (PPM)
01LG01	1 Foot bls	5 min	00.0	1.5	19.5					
		10 min	00.0	1.5	19.5	19.5	0	2.1	0	0
01LG02	1 Foot bls	5 min	00.0	0.8	19.9					
		10 min	00.0	0.6	20.2	20.4	2	45.5	0	0
01LG03	1 Foot bls	5 min	00.0	0.2	20.4					
		10 min	00.0	0.2	20.6	20.9	0	4.4	0	0
01LG04	1 Foot bls	5 min	00.0	2.2	19.3					
		10 min	00.0	1.9	19.4	19.6	1	0.0	0	0
01LG05	1 Foot bls	5 min	Pulled water up into tubing, no readings							

bls = below land surface
 min = Minutes
 % = Percent concentration
 PPM = Parts per million
 CH₄ = Methane
 CO₂ = Carbon Dioxide
 O₂ = Oxygen
 CO = Carbon Monoxide
 PID = Photoionization Detector (Volatile Organics)
 LEL = Lower Explosive Limit (of methane)
 H₂S = Hydrogen Sulfide

TABLE 4-7

GRAIN SIZE ANALYTICAL RESULTS
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Sample ID	01GT0101	01GT0201	01GT0301	01GT0401	01GT0501
Sample Location	01GT01	01GT02	01GT03	01GT04	01GT05
Sample Date	20080320	20080320	20080320	20080320	20080320
top depth	0	0	0	0	0
bottom depth	1	1	1	1	1
depth unit	foot	foot	foot	foot	foot
Grain Size (%)					
PERCENT GRAVEL	3	1	0	0	0
PERCENT SAND	77	80	83	73	81
PERCENT SILT	14	11	11	19	15
PERCENT CLAY	6	8	6	8	4

TABLE 4-8

POSITIVE DETECTIONS IN DPT GROUNDWATER
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 3

Sample ID	Mississippi	ORNL	USEPA	01TW0101	01TW0201	01TW0301	01TW0401	01TW0501	01TW0601	01TW0701
Sample Location	GW	Tapwater	GVC	01TW01	01TW02	01TW03	01TW04	01TW05	01TW06	01TW07
Sample Date	Criteria	Criteria	Criteria	5/10/2008	5/10/2008	5/10/2008	5/11/2008	5/11/2008	5/11/2008	5/12/2008
Top Depth - feet				19	3	21	3	3	3	3
Bottom Depth - feet				23	7	25	7	7	7	7

Volatile Organics (ug/L)

2-BUTANONE	1910	7100	440000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	608	22000	220000	5 UJ	4.1 J	5 UJ	4.3 J	4.1 J	3.3 J	3.4 J
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1 U	1 U	0.16 J
CHLOROMETHANE	1.43	190	6.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	0.35 J	1 U	0.41 J	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	0.51 J	1 U	0.32 J	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	0.2 J	1 U	0.22 J	1 U	1 U	1 U	1 U

Sample ID	Mississippi	ORNL	USEPA	01TW0801	01TW0901	01TW1001	01TW1001-D	01QT0101	01QT0201	01QT0301
Sample Location	GW	Tapwater	GVC	01TW08	01TW09	01TW10	01TW10	GPT-01-QT-01	GPT-01-QT-02	GPT-01-QT-03
Sample Date	Criteria	Criteria	Criteria	5/12/2008	5/12/2008	5/12/2008	5/12/2008	5/6/2008	5/6/2008	5/7/2008
Top Depth				3	3	3	3	23.5		27
Bottom Depth				7	7	7	7	27.5		31

Volatile Organics (ug/L)

2-BUTANONE	1910	7100	440000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	608	22000	220000	3.7 J	3.9 J	3.2 J	4.8 J	5 U	5 U	5 U
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CHLOROMETHANE	1.43	190	6.7	1 U	1 U	1 U	0.36 J	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 4-8

POSITIVE DETECTIONS IN DPT GROUNDWATER
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 2 OF 3

Sample ID	Mississippi	ORNL	USEPA	01QT0401	01QT0501	01QT0601	01QT0701	01QT0801	01QT0901	01QT1001
Sample Location	GW	Tapwater	GVC	GPT-01-QT-04	GPT-01-QT-05	GPT-01-QT-06	GPT-01-QT-07	GPT-01-QT-08	GPT-01-QT-09	GPT-01-QT-10
Sample Date	Criteria	Criteria	Criteria	5/7/2008	5/7/2008	5/7/2008	5/8/2008	5/8/2008	5/8/2008	5/8/2008
Top Depth				21	22	23	23	23	21	21
Bottom Depth				25	26	27	27	27	25	25

Volatile Organics (ug/L)

2-BUTANONE	1910	7100	440000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
ACETONE	608	22000	220000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1 U	0.21 J	1 U
CHLOROMETHANE	1.43	190	6.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	0.54 J	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Sample ID	Mississippi	ORNL	USEPA	01QT1101	01QT1101-D	01QT1201	01QT1301	01QT1401	01QT1501	01QT1601
Sample Location	GW	Tapwater	GVC	GPT-01-QT-11	GPT-01-QT-11	GPT-01-QT-12	GPT-01-QT-13	GGT-01-QT-14	GPT-01-QT-15	GPT-01-QT-16
Sample Date	Criteria	Criteria	Criteria	5/8/2008	5/8/2008	5/8/2008	5/8/2008	5/8/2008	5/8/2008	5/9/2008
Top Depth										
Bottom Depth										

Volatile Organics (ug/L)

2-BUTANONE	1910	7100	440000	5 U	5 U	5 U	5 U	5 U	2.4 J	5 U
ACETONE	608	22000	220000	5 U	5 U	5 U	5 U	5 U	5 U	5 U
CARBON DISULFIDE	1040	1000	560	0.5 J	0.66 J	1 U	1 U	1 U	1 U	0.25 J
CHLOROMETHANE	1.43	190	6.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	1 U	1 U	1 U	1 U	1 U	0.26 J	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 4-8

POSITIVE DETECTIONS IN DPT GROUNDWATER
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 3 OF 3

Sample ID	Mississippi GW Criteria	ORNL Tapwater Criteria	USEPA GVC Criteria	01QT1701 GPT-01-QT-17 5/9/2008	01QT1801 GPT-01-QT-18 5/9/2008	01QT1901 GPT-01-QT-19 5/9/2008
Sample Location						
Sample Date						
Top Depth						
Bottom Depth						
Volatile Organics (ug/L)						
2-BUTANONE	1910	7100	440000	1.6 J	5 U	1.8 J
ACETONE	608	22000	220000	5 U	5 U	5 U
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U
CHLOROMETHANE	1.43	190	6.7	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	0.053	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	1.1	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U

Notes:

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

GVC = groundwater volatilization criteria

GW = groundwater

J = estimated value less than quantitation limit.

U = concentration is less than laboratory method detection limit.

ORNL = Oak Ridge National Laboratory

USEPA = United States Environmental Protection Agency

µg/L = micrograms per liter

TABLE 4-9
 POSTIVE DETECTIONS IN MONITORING WELLS
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 4

Sample ID	Mississippi GW Criteria	ORNL Tapwater Criteria	USEPA GVC Criteria	01GW0601 GPT-01-06 20080828	01GW0701 GPT-01-07 20080826	01GW0701-D GPT-01-07 20080826	01GW0801 GPT-01-08 20080826	01GW0901 GPT-01-09 20080828	01GW1001 GPT-01-10 20080827
Sample Location									
Sample Date									
Top Depth				35	15		3	44	14
Bottom Depth				40	25		13	49	24
Volatile Organics (ug/L)									
ACETONE	608	22000	220000	5 UJ	5 UJ	1.6 J	5 UJ	5 UJ	5 UJ
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1.8	1 U
TETRACHLOROETHENE	5	0.11	1.1	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	6	4.8	NA	1.6 UJ	1.9 U	1.9 U	1.9 U	2.7 UJ	2.3 U
NAPHTHALENE	6.2	0.14	150	9.2 UJ	9.2 U	9.2 U	9.2 U	9.2 UJ	9.2 U
Pesticides/PCBs (ug/L)									
4,4'-DDT	0.197	0.2	NA	0.018 U	0.018 U	0.019 UJ	0.018 U	0.02 U	0.02 U
ENDRIN ALDEHYDE	2	11	NA	0.018 U	0.018 U	0.019 UJ	0.018 U	0.02 U	0.02 U
Herbicides (ug/L)									
2,4,5-TP (SILVEX)	50	290	NA	0.046 U	0.049 J	0.05 J	0.05 U	0.049 U	0.048 U
Inorganics (ug/L)									
ALUMINUM	36500	37000	NA	258	91.7	77.7	172	190	143
ARSENIC	50	0.045	NA	3 U	3 U	3 U	3 U	3 U	3 U
BARIUM	2000	7300	NA	418	63.2	61.2	42	178	39
CALCIUM	NA	NA	NA	16400	4880	4760	8470	15700	9890
CHROMIUM	100	110	NA	2 U	2 U	2 U	2 U	2 U	2 U
IRON	11000	26000	NA	8470	3130	3050	4960	11500	2890
LEAD	15	15	NA	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
MAGNESIUM	NA	NA	NA	9990	1000 U	1000 U	1100	5550	1000 U
MANGANESE	730	880	NA	308	36	35.1	153	325	30
POTASSIUM	NA	NA	NA	4600	1000 U	1000 U	1000 U	4250	1000 U
SODIUM	NA	NA	NA	19500	6510	6270	9810	19500	6770
THALLIUM	2	2.4	NA	3 U	3 U	3 U	3 U	3 U	3 U
VANADIUM	256	180	NA	5 U	5 U	5 U	5 U	5 U	5 U
ZINC	11000	11000	NA	5 U	24.3	5 U	5 U	5.7	5 U
Miscellaneous Parameters (ug/L)									
CYANIDE	200	730	NA	2.3 J	5 U	9.6	5 U	9.8 J	2.1 J

Notes:

J = estimated value less than quantitation limit.

R = Value rejected in data validation

U = value is less than laboratory method detection limit

USEPA = United States Environmental Protection Agency

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

µg/L = micrograms per liter

GW = groundwater

GVC = groundwater volatilization criteria

NA - no applicable criteria for this constituent

ORNL = Oak Ridge National Laboratory

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TABLE 4-9

POSTIVE DETECTIONS IN MONITORING WELLS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 4

Sample ID	Mississippi GW Criteria	ORNL Tapwater Criteria	USEPA GVC Criteria	01GW1101 GPT-01-11 20080827	01GW1201 GPT-01-12 20080827	01GW1301 GPT-01-13 20080827	01GW1401 GPT-01-14 20080827	01GW1501 GPT-01-15 20080827	01GW1601 GPT-01-16 20080828
Sample Location									
Sample Date									
Top Depth				35	15	3	20	5	5
Bottom Depth				40	25	13	30	15	15
Volatile Organics (ug/L)									
ACETONE	608	22000	220000	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	1 U	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	6	4.8	NA	3.3 UJ	2.1 U	2.2 U	2.3 U	2.3 U	1.5 UJ
NAPHTHALENE	6.2	0.14	150	9.2 UJ	10 U	9.2 U	9.2 U	10 U	9.2 UJ
Pesticides/PCBs (ug/L)									
4,4'-DDT	0.197	0.2	NA	0.018 U	0.019 U	0.018 U	0.018 U	0.02 U	0.02 U
ENDRIN ALDEHYDE	2	11	NA	0.018 U	0.019 U	0.0088 J	0.018 U	0.02 U	0.02 U
Herbicides (ug/L)									
2,4,5-TP (SILVEX)	50	290	NA	0.047 U	0.073 R	0.03 R	0.046 U	0.047 U	0.082 J
Inorganics (ug/L)									
ALUMINUM	36500	37000	NA	6320	192	201	987	73.5	320
ARSENIC	50	0.045	NA	3 U	3 U	3 U	19.1	14.2	3 U
BARIUM	2000	7300	NA	93.9	87.4	30.5	15.1	41	88.7
CALCIUM	NA	NA	NA	4140	6300	7010	9710	40500	3940
CHROMIUM	100	110	NA	8.1	2 U	2 U	2.6	2 U	2 U
IRON	11000	26000	NA	4700	5020	204	38000	44000	1170
LEAD	15	15	NA	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
MAGNESIUM	NA	NA	NA	1700	1130	1320	1520	4050	1160
MANGANESE	730	880	NA	76.6	33.9	4.4	246	548	9.1
POTASSIUM	NA	NA	NA	1510	1000 U	1000 U	1000 U	1470	1000 U
SODIUM	NA	NA	NA	7640	2770	3150	6720	10100	3720
THALLIUM	2	2.4	NA	3 U	3 U	3 U	3 U	3 U	4.1
VANADIUM	256	180	NA	10.2	5 U	5 U	5 U	5 U	5 U
ZINC	11000	11000	NA	12.4	5 U	5 U	5 U	5 U	5 U
Miscellaneous Parameters (ug/L)									
CYANIDE	200	730	NA	5 UJ	4.9 J	3.3 J	12.5 J	5 UJ	5.2 J

Notes:

J = estimated value less than quantitation limit.

R = Value rejected in data validation

U = value is less than laboratory method detection limit

USEPA = United States Environmental Protection Agency

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

µg/L = micrograms per liter

GW = groundwater

GVC = groundwater volatilization criteria

NA - no applicable criteria for this constituent

ORNL = Oak Ridge National Laboratory

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TABLE 4-9

POSTIVE DETECTIONS IN MONITORING WELLS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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Sample ID	Mississippi GW Criteria	ORNL Tapwater Criteria	USEPA GVC Criteria	01GW1601-D GPT-01-16 20080828	01GW1701 GPT-01-17 20080828	01GW1801 GPT-01-18 20080828	01GW1901 GPT-01-19 20080828	01GW2001 GPT-01-20 20080828	01GW2101 GPT-01-21 20080828
Sample Location									
Sample Date									
Top Depth					5	5	5	5	5
Bottom Depth					15	15	15	15	15
Volatile Organics (ug/L)									
ACETONE	608	22000	220000	5 UJ	5 UJ	5 U	2.8 J	5 U	5 U
CARBON DISULFIDE	1040	1000	560	1 U	1 U	1 U	1 U	1 U	1 U
TETRACHLOROETHENE	5	0.11	1.1	1 U	1 U	1 U	1 U	1 U	1 U
TRICHLOROETHENE	5	1.7	0.053	1 U	1 U	1 U	1 U	0.3 J	1 U
CIS-1,2-DICHLOROETHENE	70	370	210	1 U	1 U	1 U	1 U	1 U	1 U
Semivolatile Organics (ug/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	6	4.8	NA	1.4 UJ	1.6 UJ	1.4 UJ	1.6 UJ	1.8 UJ	1.6 UJ
NAPHTHALENE	6.2	0.14	150	9.6 UJ	9.2 UJ	9.2 UJ	9.2 UJ	9.2 UJ	9.2 UJ
Pesticides/PCBs (ug/L)									
4,4'-DDT	0.197	0.2	NA	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
ENDRIN ALDEHYDE	2	11	NA	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U	0.018 U
Herbicides (ug/L)									
2,4,5-TP (SILVEX)	50	290	NA	0.17 J	0.046 U	0.049 U	0.049 U	0.17	0.079 R
Inorganics (ug/L)									
ALUMINUM	36500	37000	NA	363	268	887	202	297	204
ARSENIC	50	0.045	NA	3 U	3 U	3 U	3 U	3 U	3 U
BARIUM	2000	7300	NA	93.8	41.5	15.5	15.5	37.2	28
CALCIUM	NA	NA	NA	4100	10100	17900	45400	8210	23100
CHROMIUM	100	110	NA	2 U	2 U	2 U	2 U	2 U	2 U
IRON	11000	26000	NA	1240	6020	6690	2160	13900	5810
LEAD	15	15	NA	1.5 U	1.5 U	1.5 U	1.5	1.9	1.6
MAGNESIUM	NA	NA	NA	1210	1650	2050	1160	3100	5800
MANGANESE	730	880	NA	9.4	98.7	79.3	14.1	130	106
POTASSIUM	NA	NA	NA	1000 U	1000 U	1000 U	1000 U	1000 U	1000 U
SODIUM	NA	NA	NA	4150	6620	4200	6120	7650	7220
THALLIUM	2	2.4	NA	3 U	3 U	3 U	3 U	3 U	3 U
VANADIUM	256	180	NA	5 U	5 U	5 U	5 U	5 U	5 U
ZINC	11000	11000	NA	5 U	5 U	5 U	5 U	5 U	5 U
Miscellaneous Parameters (ug/L)									
CYANIDE	200	730	NA	7.8 J	6.3 J	2.4 J	22.2 J	2.7 J	14.3 J

Notes:

J = estimated value less than quantitation limit.

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U = value is less than laboratory method detection limit

USEPA = United States Environmental Protection Agency

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

µg/L = micrograms per liter

GW = groundwater

GVC = groundwater volatilization criteria

NA - no applicable criteria for this constituent

ORNL = Oak Ridge National Laboratory

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TABLE 4-9

POSTIVE DETECTIONS IN MONITORING WELLS
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 4 OF 4

Sample ID	Mississippi GW Criteria	ORNL Tapwater Criteria	USEPA GVC Criteria	01GW2201 GPT-01-22 20080909	01GW2301 GPT-01-23 20080909	01GW2401 GPT-01-24 20080909	01GW2501 GPT-01-25 20080909	01GW2601 GPT-01-26 20080909	01GW2701 GPT-01-27 20080909
Sample Location									
Sample Date									
Top Depth				5	5	5	5	5	5
Bottom Depth				15	15	15	15	15	15
Volatile Organics (ug/L)									
ACETONE	608	22000	220000	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
CARBON DISULFIDE	1040	1000	560	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ	0.15 UJ
TETRACHLOROETHENE	5	0.11	1.1	0.1 U	2.5	0.1 U	0.1 U	0.1 U	0.1 U
TRICHLOROETHENE	5	1.7	0.053	0.23 U	1.3	0.23 U	0.23 U	0.23 U	0.23 U
CIS-1,2-DICHLOROETHENE	70	370	210	0.14 U	0.71 J	0.14 U	0.14 U	0.14 U	0.14 U
Semivolatile Organics (ug/L)									
BIS(2-ETHYLHEXYL)PHTHALATE	6	4.8	NA	1.7 J	1.2 U	1.7 J	2 J	2 J	1.7 J
NAPHTHALENE	6.2	0.14	150	0.42 U	0.42 U	0.43 U	0.42 U	6.7 J	0.42 U
Pesticides/PCBs (ug/L)									
4,4'-DDT	0.197	0.2	NA	0.0048 UJ	0.0046 UJ	0.0068 J	0.0046 UJ	0.005 UJ	0.0047 UJ
ENDRIN ALDEHYDE	2	11	NA	0.0048 U	0.0046 U	0.0049 U	0.0046 U	0.005 U	0.0047 U
Herbicides (ug/L)									
2,4,5-TP (SILVEX)	50	290	NA	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U
Inorganics (ug/L)									
ALUMINUM	36500	37000	NA	166	81.9	103	449	178	88.1
ARSENIC	50	0.045	NA	3 U	3 U	3 U	3 U	3 U	3 U
BARIUM	2000	7300	NA	21.1	38.8	33.9	75.7	26.1	170
CALCIUM	NA	NA	NA	19300	14100	62000	4740	4160	86800
CHROMIUM	100	110	NA	2 U	2.3	2 U	2 U	2 U	2.1
IRON	11000	26000	NA	147	1170	1290	473	849	28800
LEAD	15	15	NA	1.7 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
MAGNESIUM	NA	NA	NA	1000 U	2190	2050	1000	1000 U	9000
MANGANESE	730	880	NA	11.8	40.9	50.9	7.9	6.3	475
POTASSIUM	NA	NA	NA	1000 U	1000 U	1000 U	1000 U	1000 U	3050
SODIUM	NA	NA	NA	7260	7200	6670	2890	8400	18300
THALLIUM	2	2.4	NA	3 U	3 U	3 U	3 U	3 U	3 U
VANADIUM	256	180	NA	5 U	5 U	5 U	5 U	5 U	5 U
ZINC	11000	11000	NA	5 U	5 U	5 U	5 U	5 U	5 U
Miscellaneous Parameters (ug/L)									
CYANIDE	200	730	NA	5 U	5 U	5 U	5 U	5 U	5 U

Notes:

J = estimated value less than quantitation limit.

R = Value rejected in data validation

U = value is less than laboratory method detection limit

USEPA = United States Environmental Protection Agency

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

µg/L = micrograms per liter

GW = groundwater

GVC = groundwater volatilization criteria

NA - no applicable criteria for this constituent

ORNL = Oak Ridge National Laboratory

TABLE 4-10

**CHEMICALS OF POTENTIAL CONCERN IN GROUNDWATER
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical	Detected Concentrations		Direct Exposure Pathway			Migration Pathway	
			MDEQ TRG Based COPC Screening Value	RSL Based COPC Screening Value	COPC	USEPA GVC	COPC
	Minimum	Maximum					
Volatile Organic Compounds (ug/L)							
2-BUTANONE	1.6	2.4	191 N	710 N	No	440000 N	No
ACETONE	1.6	4.8	60.8 N	2200 N	No	220000 N	No
CARBON DISULFIDE	0.16	1.8	104 N	100 N	No	560 N	No
CHLOROMETHANE	0.36	0.36	1.43 C	1.8 C	No	6.7 C	No
CIS-1,2-DICHLOROETHENE	0.22	0.22	70	37 N	No	210 N	No
TETRACHLOROETHENE	0.26	2.5	5	0.11 C	Yes	1.1 C	Yes
TRICHLOROETHENE	0.3	1.3	5 MCL	1.7 C	No	0.053 C	Yes
Semi-volatile Organic Compounds (ug/L)							
BIS(2-ETHYLHEXYL)PHTHALATE	1.7	2	6 MCL	4.8 C	No	NA	No
NAPHTHALENE	6.7	6.7	0.62 N	0.14 C	Yes	NA	No
Pesticides (ug/L)							
4,4'-DDT	0.0068	0.0068	0.197 C	0.2 C	No	NA	No
ENDRIN ALDEHYDE	0.0088	0.0088	2 MCL	1.1 N	No	NA	No
Herbicides (ug/L)							
2,4,5-TP (SILVEX)	0.049	0.17	50 MCL	29 N	No	NA	No
Inorganics (ug/L)							
ALUMINUM	73.5	6320	3650 N	3700 N	Yes	NA	No
ARSENIC	14.2	19.1	50 MCL	0.045 C	Yes	NA	No
BARIUM	15.1	418	2000 MCL	730 N	No	NA	No
CALCIUM	3940	86800	NA	NA	No	NA	No
CHROMIUM	2.1	8.1	100 MCL	11 N	No	NA	No
IRON	147	44000	1100 N	2600 N	Yes	NA	No
LEAD	1.5	1.9	15 MCL	15	No	NA	No
MAGNESIUM	1000	9990	NA	NA	No	NA	No
MANGANESE	4.4	548	73 N	88 N	Yes	NA	No
POTASSIUM	1470	4600	NA	NA	No	NA	No
SODIUM	2770	19500	NA	NA	No	NA	No
THALLIUM	4.1	4.1	2 MCL	0.24 N	Yes	NA	No
VANADIUM	10.2	10.2	25.6 N	18 N	No	NA	No
ZINC	5.7	24.3	1100 N	1100 N	No	NA	No
CYANIDE	2.1	22.2	200 MCL	73 N	No	NA	No

MDEQ TRG Based COPC Screening = TRG for carcinogens, 0.1 X TRG for non-carcinogens

RSL BASED COPC Screening Value = RSL for carcinogens, 0.1 X RSL for non-carcinogens

MDEQ = Mississippi Department of Environmental Quality

RSL - Regional Screening Level

COPC = chemical of potential concern

MCL = maximum contaminant level

N = noncarcinogen

C = carcinogen

GVC = groundwater volatilization criteria

TRG = target risk goal

TABLE 4-11

**SURFACE WATER POSITIVE DETECTIONS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Sample ID	Mississippi Groundwater	ORNL Tapwater	USEPA Region 4	01SW0101 01SW01	01SW0201 01SW02	01SW0301 01SW03	01SW0301-D 01SW03	01SW0401 01SW04	01SW0501 01SW05
Sample Location	TRG	RSL	ESV	3/20/2008	3/20/2008	3/20/2008	3/20/2008	3/20/2008	3/20/2008
Sample Date									
Volatile Organics (ug/L)									
1,1,2-TRICHLOROTRIFLUOROETHANE	59400	59000	NA	1 U	1 U	1 U	1 U	6.6	1 U
ACETONE	608	22000	NA	5 J	5.1	4.9 J	4.3 J	4 J	3.4 J
CARBON DISULFIDE	1040	1000	NA	1 U	0.19 J	0.18 J	0.2 J	1 U	1 U
TOLUENE	1000	2300	175	1 U	1 U	1 U	1 U	0.22 J	1 U
Semivolatile Organics (ug/L)									
CAPROLACTAM	18300	18000	NA	1.1 J	0.95 J	1.1 J	1.4 J	2.1 J	0.91 J
Pesticides/PCBs (ug/L)									
ALPHA-CHLORDANE	2	0.19	0.0043	0.0092 U	0.0097 U	0.0098 U	0.0092 U	0.004 J	0.0094 U
Herbicides (ug/L)									
2,4,5-TP (SILVEX)	50	290	NA	0.067 J	0.069 U	0.055 J	0.051 J	0.044 J	0.046 J
Inorganics (ug/L)									
ALUMINUM	36500	37000	87	430	471	487	450	1690	1120
ARSENIC	50	0.045	190	3.4	3 U	3 U	3 U	3 U	3 U
BARIIUM	2000	7300	NA	29.8	29	27.8 B	27.6	27.4	30.1
CALCIUM	NA	NA	NA	19700	14900	13200	13200	24800	18600
IRON	11000	26000	1000	2410	1750	1740	1720	2360	2140
LEAD	15	NA	1.32	1.5 U	1.5 U	1.6	2	1.7	1.5 U
MAGNESIUM	NA	NA	NA	1280	1180	1160	1180	1560	1460
MANGANESE	730	880	NA	53.1	38.9	39	38.8	26.3	33.8
POTASSIUM	NA	NA	NA	1000 U	1000 U	1000 U	1000 U	1080	1000 U
SODIUM	NA	NA	NA	5940	5840	5910	5910	5330	5220
ZINC	11000	11000	58.91	5.4	5.5	6	5.5	8.4	10.4

Notes

Positive detections in bold

Screening criteria exceedances shaded

TRG - Target Remediation Goal

RSL - Regional Screening Level

ESV - Ecological Screening Value

ORNL = Oak Ridge National Laboratory

USEPA = United States Environmental Protection Agency

µg/L = micrograms per liter

NA - no applicable criteria for this constituent

U = value is less than method detection limit

J = estimated value less than quantitation limit.

TABLE 4-12

**CHEMICALS OF POTENTIAL CONCERN IN SURFACE WATER
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical	Detected Concentrations		Direct Exposure Pathway				Ecological Receptors		
			MDEQ TRG Based COPC Screening Value	RSL Based COPC Screening Value	COPC	ESV	COPC		
	Minimum	Maximum							
Volatile Organics (µg/L)									
1,1,2-TRICHLOROTRIFLUOROETHANE	6.6	6.6	5940	N	5900	N	No	NA	Yes
ACETONE	3.4	5.1	60.8	N	2200	N	No	NA	Yes
CARBON DISULFIDE	0.18	0.2	104	N	100	N	No	NA	Yes
TOLUENE	0.22	0.22	1000	MCL	230	N	No	175	No
Semivolatile Organics (µg/L)									
CAPROLACTAM	0.91	2.1	1830	N	1800	N	No	NA	Yes
Pesticides/PCBs (µg/L)									
ALPHA-CHLORDANE	0.004	0.004	2		0.19	C	No	0.0043	No
Herbicides (µg/L)									
2,4,5-TP (SILVEX)	0.044	0.067	50		29	N	No	NA	Yes
Inorganics (µg/L)									
ALUMINUM	430	1690	3650	N	3700	N	No	87	Yes
ARSENIC	3.4	3.4	50	MCL	0.045	C	Yes	190	No
BARIUM	20.75	30.1	2000		730	N	No	NA	Yes
CALCIUM	13200	24800	NA		NA		No	NA	No
IRON	1720	2410	1100	N	2600	N	Yes	1000	Yes
LEAD	1.6	2	15		NA		No	1.32	Yes
MAGNESIUM	1160	1560	NA		NA		No	NA	No
MANGANESE	26.3	53.1	73	N	88	N	No	NA	Yes
POTASSIUM	1080	1080	NA		NA		No	NA	No
SODIUM	5220	5940	NA		NA		No	NA	No
ZINC	5.4	10.4	1100	N	1100	N	No	58.91	No

Notes

MDEQ TRG Based COPC Screening Value

RSL BASED COPC Screening Value

N = noncarcinogen

C = carcinogen

MCL = maximum contaminant level

NA - no applicable criteria for this constituent

TRG = Target Remediation Goal

RSL - Regional Screening Level

COPC = chemical of potential concern

ESV - Ecological Screening Value

µg/L = micrograms per liter

TABLE 4-13
SEDIMENT POSITIVE DETECTIONS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Sample ID Sample Location Sample Date	Mississippi Soil TRG Restricted	Mississippi Soil TRG Unrestricted	ORNL Soil RSL Residential	USEPA Region IV ESV	01SD0101 01SD01 3/20/2008	01SD0201 01SD02 3/20/2008	01SD0301 01SD03 3/20/2008	01SD0301-D 01SD03 3/20/2008	01SD0401 01SD04 3/20/2008	01SD0501 01SD05 3/20/2008
Volatile Organics (ug/kg)										
2-BUTANONE	84500	84500	28000000	NA	80 J	13	12 U	12 U	6.2 J	5.8 J
ACETONE	104000000	7820000	61000000	NA	220 J	28 J	12 UJ	12 UJ	12 UJ	12 UJ
TOLUENE	38000	38000	5000000	670	33 J	12 U	12 U	12 U	12 U	12 U
Semivolatile Organics (ug/kg)										
4-METHYLPHENOL	10200000	391000	310000	NA	420 J	470 UJ	400 UJ	400 UJ	420 UJ	410 UJ
BENZO(A)PYRENE	784	87.5	15	88.8	190 J	470 U	400 U	400 U	420 U	410 U
BENZO(B)FLUORANTHENE	7840	875	150	NA	330 J	470 U	400 U	400 U	420 U	410 U
BENZO(K)FLUORANTHENE	78400	8750	1500	NA	220 J	470 U	400 U	400 U	420 U	410 U
BIS(2-ETHYLHEXYL)PHTHALATE	409000	45600	35000	182	450 J	83 J	75 J	74 J	130 J	85 J
CHRYSENE	784000	87500	15000	108	400 J	470 U	400 U	400 U	420 U	410 U
DIETHYL PHTHALATE	1970000	1970000	49000000	630	220 J	470 U	52 J	65 J	100 J	410 U
FLUORANTHENE	81700000	3130000	2300000	113	1300 J	470 U	400 U	400 U	420 U	410 U
PHENANTHRENE	61300000	2350000	1700000	86.7	360 J	470 U	400 U	400 U	420 U	410 U
PYRENE	61300000	2350000	1700000	153	930 J	470 U	400 U	400 U	420 U	410 U
Pesticides/PCBs (ug/kg)										
4,4'-DDE	16800	1880	1400	2.07	3.5 UJ	0.96 U	0.81 U	0.91	0.41 J	0.8 J
ALDRIN	337	37.6	29	NA	1.7 UJ	0.48 U	0.4 U	0.45 J	0.42 U	0.43 U
DIELDRIN	358	39.9	30	0.02	3.5 UJ	1.2 J	1.8	1	0.73 J	0.43 U
HEPTACHLOR EPOXIDE	629	70.2	53	NA	1.7 UJ	0.48 UJ	0.4 UJ	0.36 UJ	0.3 UJ	0.46 J
ALPHA-BHC	908	101	77	NA	1.7 UJ	0.48 UJ	0.4 UJ	0.41 UJ	0.42 UJ	0.17 J
DELTA-BHC	NA	NA	77	NA	2.1 J	0.48 U	0.4 U	0.41 U	0.42 U	0.43 U
ALPHA-CHLORDANE	12300	1820	1600	NA	6 J	0.85	0.4 U	0.41 U	3.3	4.4
GAMMA-CHLORDANE	12300	1820	1600	NA	3.5 J	0.52 J	0.4 U	0.41 U	2.4	2.6
TOTAL CHLORDANE	12300	1820	1600	1.7	9.5	1.37	0	0	5.7	7

TABLE 4-13
SEDIMENT POSITIVE DETECTIONS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Sample ID	Mississippi	Mississippi	ORNL	USEPA	01SD0101	01SD0201	01SD0301	01SD0301-D	01SD0401	01SD0501
Sample Location	Soil TRG	Soil TRG	Soil RSL	Region IV	01SD01	01SD02	01SD03	01SD03	01SD04	01SD05
Sample Date	Restricted	Unrestricted	Residential	ESV	3/20/2008	3/20/2008	3/20/2008	3/20/2008	3/20/2008	3/20/2008
Inorganics (mg/kg)										
ALUMINUM	2040000	78200	77000	NA	17200 J	2070	1040	1000	1780	2570
ARSENIC	3.82	0.426	0.39	7.24	19.8 J	1.1	0.74 U	0.74 U	0.81	1.5
BARIUM	14300	5480	15000	NA	61.2 J	8.1	5.6	6.6	5.3	7.2
BERYLLIUM	1020	156	160	NA	1.1 J	0.29 U	0.24 U	0.25 U	0.25 U	0.26 U
CALCIUM	NA	NA	NA	NA	5050 J	415	245 U	336	254 U	259 U
CHROMIUM	450	210	280	52.3	17.6 J	2.3	1.3	1.1	11.9	3.1
COPPER	8170	3130	3100	18.7	11.7 J	1.5 U	1.2 U	1.2 U	1.3 U	1.3 U
IRON	613000	23500	55000	NA	28100 J	2390	835	688	650	1260
LEAD	1700	400	400	30.2	32.1 J	4	2.1	1.9	31	4.9
MANGANESE	4080	1560	1800	NA	295 J	9.9	2.6	2.5	1.5	2.6
NICKEL	4080	1560	1500	15.9	6.4 J	1.5 U	1.2 U	1.2 U	1.3 U	1.3 U
VANADIUM	1430	548	390	NA	32.2 J	3.4	1.7	1.4	4.1	4.9
ZINC	61300	23500	23000	124	132 J	15.6	4.5	4.2	8.2	10

Notes:

J = estimated value less than quantitation limit.

U = value is less than laboratory method detection limit.

USEPA = United States Environmental Protection Agency

Bold = Positive Detection

Shaded = Concentration greater than one or more screening value

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

NA - no applicable criteria for this constituent

ORNL = Oak Ridge National Laboratory

RSL - Regional Screening Level

ESV = Ecological Screening Value

TRG = Target Remediation Goal

TABLE 4-14

CHEMICALS OF POTENTIAL CONCERN IN SEDIMENT
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Chemical	Detected Concentrations		Mississippi Restricted Soil Criteria	Mississippi Unrestricted Soil Criteria	ORNL Residential Soil Criteria	COPC	Ecological Screening Value	COPC
	Minimum	Maximum						
Volatile Organics (µg/kg)								
2-BUTANONE	5.8	80	8450 N	84500 N	2800000 NS	No	NA	Yes
ACETONE	28	220	10400000 N	782000 N	6100000 N	No	NA	Yes
TOLUENE	33	33	3800 N	3800 N	500000 NS	No	NA	Yes
Semivolatile Organics (µg/kg)								
4-METHYLPHENOL	420	420	1020000 N	39100 N	31000 N	No	NA	Yes
BIS(2-ETHYLHEXYL)PHTHALATE	74	450	409000 C	45600 C	35000 C	No	182	Yes
DIETHYL PHTHALATE	52	220	1970000 Csat	1970000 Csat	4900000 N	No	NA	Yes
BENZO(A)PYRENE	190	190	784 C	87.5 C	15 C	Yes	330	No
BENZO(B)FLUORANTHENE	330	330	7840 C	875 C	150 C	Yes	NA	Yes
BENZO(K)FLUORANTHENE	220	220	78400 C	8750 C	1500 C	No	NA	Yes
CHRYSENE	400	400	784000 C	87500 C	15000 C	No	330	Yes
FLUORANTHENE	1300	1300	8170000 N	313000 N	230000 N	No	330	Yes
PHENANTHRENE	360	360	6130000 N	235000 N	170000 N	No	330	Yes
PYRENE	930	930	6130000 N	235000 N	170000 N	No	330	Yes
TOTAL PAHs	3730	3730					1684	Yes
Pesticides/PCBs (µg/kg)								
4,4'-DDE	0.41	0.91	16800 C	1880 C	1400 C	No	3.3	No
ALDRIN	0.325	0.45	337 C	37.6 C	29 C	No	NA	Yes
ALPHA-BHC	0.17	0.17	908 C	101 C	77 C	No	NA	Yes
DELTA-BHC	2.1	2.1	908 C	101 C	77 C	No	NA	Yes
DIELDRIN	0.73	1.8	358 C	39.9 C	30 C	No	3.3	No
ALPHA-CHLORDANE	0.85	6	1230 N	1820 C	1600 C	No	1.7	Yes
GAMMA-CHLORDANE	0.52	3.5	1230 N	1820 C	1600 C	No	1.7	Yes
HEPTACHLOR EPOXIDE	0.46	0.46	629 C	70.2 C	53 C	No	NA	Yes

TABLE 4-14

CHEMICALS OF POTENTIAL CONCERN IN SEDIMENT
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 2 OF 2

Chemical	Detected Concentrations		Mississippi Restricted Soil Criteria	Mississippi Unrestricted Soil Criteria	ORNL Residential Soil Criteria	COPC	Ecological Screening Value	COPC
	Minimum	Maximum						
Inorganics (mg/kg)								
ALUMINUM	1000	17200	204000 N	7820 N	7700 N	Yes	NA	Yes
ARSENIC	0.81	19.8	3.82 C	0.426 C	0.39 C	Yes	7.24	Yes
BARIIUM	5.3	61.2	1430 N	548 N	1500 N	No	NA	Yes
BERYLLIUM	1.1	1.1	102 N	15.6 N	16 N	No	NA	Yes
CALCIUM	229.25	5050	NA	NA	NA	No	NA	No
CHROMIUM	1.1	17.6	381 C	227 C	23 N	No	52.3	No
COPPER	11.7	11.7	817 N	313 N	310 N	No	18.7	No
IRON	650	28100	61300 N	2350 N	5500 N	Yes	NA	Yes
LEAD	1.9	32.1	1700 C	400 C	400 N	No	30.2	Yes
MANGANESE	1.5	295	408 N	156 N	180 N	Yes	NA	Yes
NICKEL	6.4	6.4	408 N	156 N	160 N	No	15.9	No
VANADIUM	1.4	32.2	143 N	54.8 N	39 N	No	NA	Yes
ZINC	4.2	132	6130 N	2350 N	2300 N	No	124	Yes

Notes:

N = noncarcinogen

C = carcinogen

PAH = Polynuclear aromatic hydrocarbon

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

COPC - chemical of potential concern

sat = soil saturation concentration

NA = not applicable

P:/GIS/GULFPORT_CBC/MapDocs/MXD/SITE1_TOTAL_MAG_FIELD.MXD 10/07/09 SS



NOTE: Geometrics G858 single sensor data shown. G858 data collected along approximately 10-foot spaced survey lines (oriented north-south).

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY Y. MARTINEZ	DATE 10/07/09
COST SCHEDULE AREA	
SCALE AS NOTED	



TOTAL MAGNETIC FIELD COLOR CONTOUR MAP
SITE 1 - RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 4-1	REV 0

P:\GIS\GULFPORT_CBC\MAPDOCS\MXD\SITE1_EM31_CONTOUR_OP.MXD 10/07/09 SS



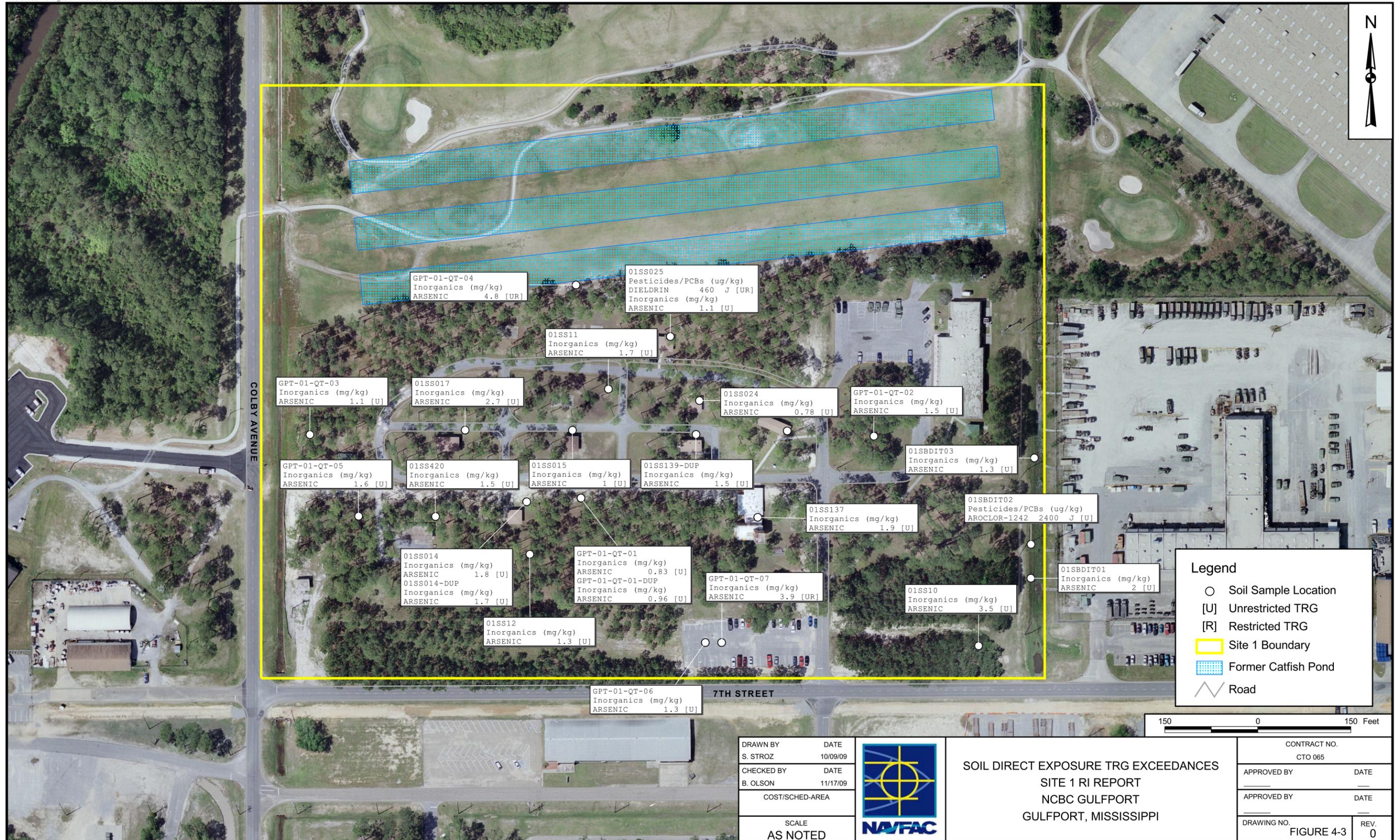
NOTE: EM31-MK2 quadrature-phase response shown. EM31 data collected along approximately 10-foot spaced survey lines (oriented north-south).

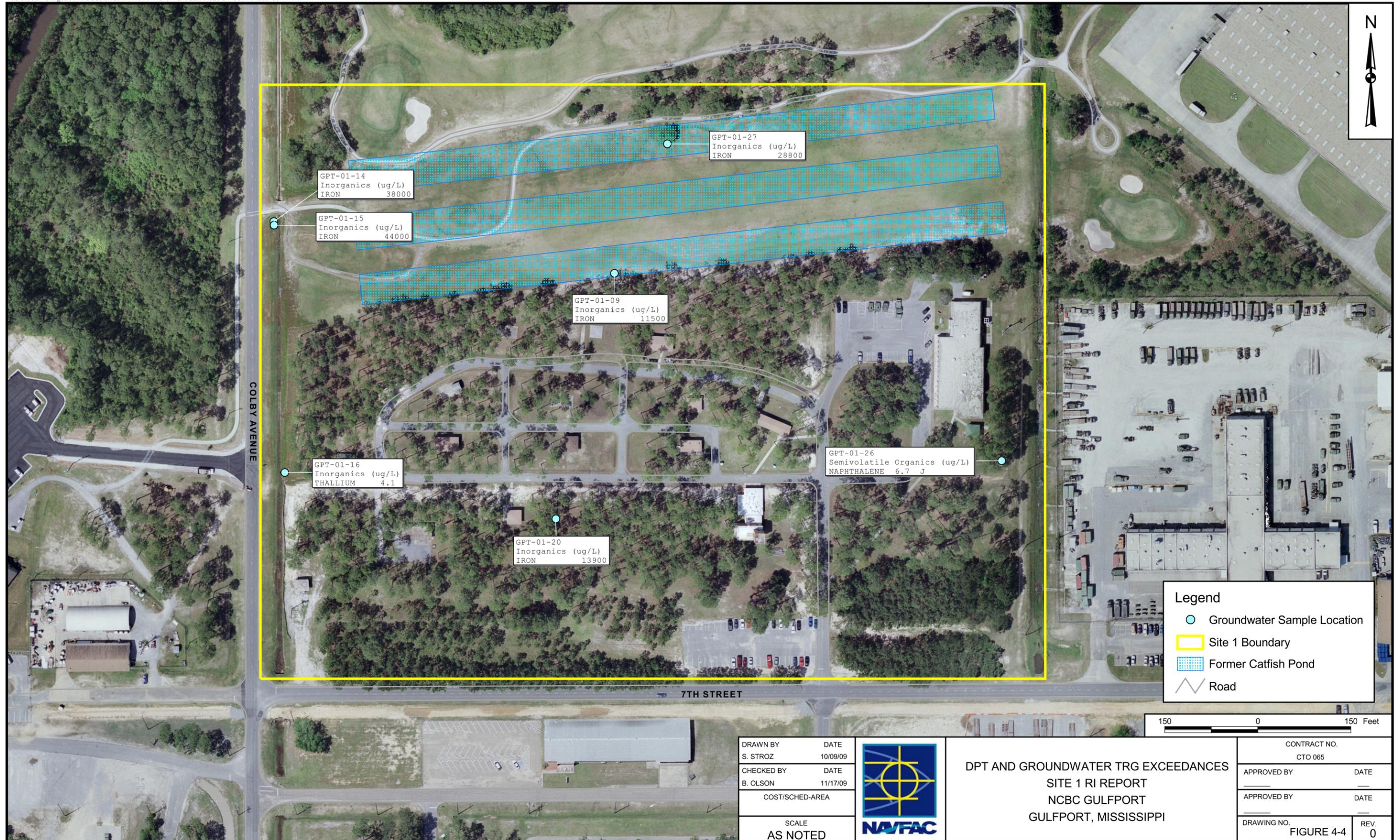
DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY Y. MARTINEZ	DATE 10/06/09
COST SCHEDULE AREA	
SCALE AS NOTED	



EM31 COLOR CONTOUR MAP (QUADATURE-PHASE)
SITE 1 - RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 4-2	REV 0



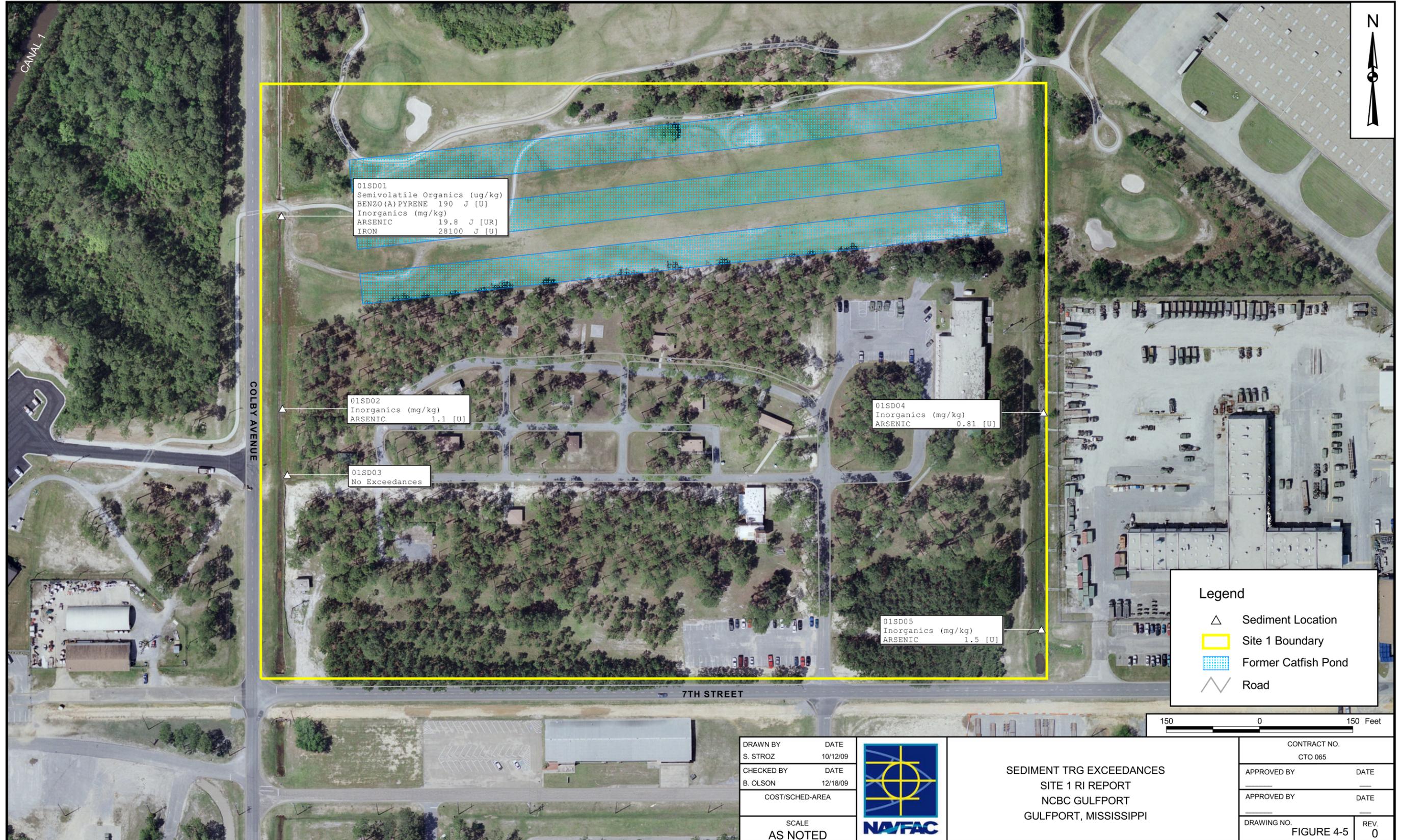


DRAWN BY S. STROZ	DATE 10/09/09
CHECKED BY B. OLSON	DATE 11/17/09
COST/SCHED-AREA	
SCALE AS NOTED	



**DPT AND GROUNDWATER TRG EXCEEDANCES
SITE 1 RI REPORT
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

CONTRACT NO. CTO 065	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 4-4	REV. 0



5.0 CONTAMINANT FATE AND TRANSPORT

The behavior of contaminants released into the environment, particularly the potential for a contaminant to migrate from a release area and persist in an environmental medium, can influence whether the release will result in an adverse human health or ecological effect. The movement of contaminants in the environment will be controlled by certain properties of the contaminant and the availability of suitable pathways for contaminant movement. The fate and transport discussion for this report is limited to the chemicals retained as COPCs as presented in Section 4.0.

5.1 POTENTIAL ROUTES OF MIGRATION

The movement of contaminants in the environment will be controlled by the source and nature and extent of the contaminants and the availability of suitable pathways for contaminant movement.

5.1.1 Potential Contaminant Sources

A review of disposal practices and interviews with site workers during the IAS (Envirodyne, 1985) indicated that during the time this landfill was operated, 1942 to 1948, liquid wastes were buried at the site.

At Site 1, the waste disposal boundary was established by evaluating the results of the geophysical survey. The landfill area as defined by the geophysical survey is approximately 1.5 acres.

The current surface soil cover at Site 1 was emplaced after land filling activities were completed; therefore, surface soil contamination would not be the result of landfill activities unless landfill material was mixed with the soil cover or part of the disposal area was not covered.

5.1.2 Preliminary Site Conceptual Model

The preliminary site conceptual model was developed to evaluate the relationships between the contaminant sources at Site 1, potentially effected media, and contamination migration pathways. Buried waste in the landfill cells was considered the primary source for contaminants at the site. The primary release mechanism is the direct contact of subsurface soil and groundwater with the buried waste, leaching of contaminants to soil and groundwater, and potential migration of liquid wastes disposed of at the site.

Surface soil was considered a secondary source of contaminants because it is fill material of unknown origin emplaced after landfill operations ceased.

5.1.3 Potential Pathways for Contaminant Migration

Based on the evaluation of existing conditions at Site 1, the following potential contaminant transport pathways may exist at the site:

- Leaching of soil contaminants to groundwater.
- Surface migration of soil contaminants to surface water or sediment.
- Migration of groundwater contaminants and discharge to surface water or sediment.
- Volatilization from groundwater and volatilization or particulate migration from surface soil to the atmosphere.

5.1.3.1 Leaching of Soil Contaminants to Groundwater

Contaminants that adhere to soil particles or have accumulated in soil pore spaces can be remobilized and transported to groundwater as a result of infiltration or precipitation. The rate and extent of this leaching are influenced by the following:

- Depth of the water table
- Amount of precipitation
- Rate of infiltration
- Physical and chemical properties of the soil
- Physical and chemical properties of the contaminant

The mobility of chemicals at Site 1 will be influenced by the relatively shallow water table, potentially high rates of precipitation, and sandy soil in the area, which may allow a higher rate of infiltration. The contaminants identified at Site 1 generally have physical and chemical properties that result in low mobility and persistence in the environment.

5.1.3.2 Surface Migration of Soil Contaminants

Contaminants that adhere to soil particles or have accumulated in soil pore spaces can be remobilized and transported mechanically to surface water bodies and associated sediment. The rate and extent of this surface transport are influenced by the following:

- Amount of precipitation
- Physical and chemical properties of the soil

- Physical and chemical properties of the contaminant
- Proximity to receiving waters

The mobility of chemicals at Site 1 could be influenced by the potentially high rates of precipitation and the sandy soil in the area, which may allow mechanical transport. Transport by surface water flow will be inhibited by the grass cover at the site.

5.1.3.3 Migration of Groundwater Contaminants

Contaminants can migrate in a dissolved phase or as an immiscible liquid. A contaminant that is present in water at concentrations greater than its solubility concentration will form an immiscible liquid. Based on the specific gravity of the contaminant, it will either float or sink in the water. In the case of chlorinated solvents (e.g., trichloroethene), the contaminant will sink in the water because it has a higher specific gravity than water. Subsurface transport of immiscible contaminants is governed by a set of factors different from those of dissolved contaminants.

The groundwater data at Site 1 do not provide evidence of immiscible contaminants at concentrations exceeding water solubility levels. For example, VOCs were detected at concentrations less than their water solubilities. Therefore, the migration of groundwater contaminants, for the most part, is likely governed by factors that govern the movement of dissolved contaminants. Three general processes govern the migration of dissolved constituents in groundwater: advection, dispersion, and retardation. Advection is a process by which solutes are carried by groundwater movement. Dispersion is a mixing of contaminated and uncontaminated water during advection. Retardation is a slowing of contaminant migration caused by the reaction of the solute with the aquifer soil.

Contaminant concentrations may be affected by one or more mechanisms during transport. Volatilization or precipitation may physically transform contaminants. Contaminants may be chemically transformed through photolysis, hydrolysis, or oxidation/reduction. Contaminants may also be biologically transformed by biodegradation.

Hydrogeologic data were collected to evaluate movement of groundwater in the shallow surficial aquifer at Site 1. These data were used to estimate the site-specific groundwater flow direction and velocity.

The dissolved contaminants in groundwater may migrate downgradient with the natural flow of groundwater and discharge as seeps to the drainage ditches that run along the eastern side of the site. Contaminants can then migrate in the direction of surface water flow as dissolved constituents in surface water or bound to sediment. Three general processes govern the migration of dissolved contaminants caused by the flow of surface water: movement caused by the flow of surface water, movement caused

by the irregular mixing of water, and chemical mechanisms occurring during the movement of surface water. Sediment particles can disassociate from the sediment into surface water and migrate by one of the aforementioned methods.

At Site 1, contaminants in drainage ditches and swales adjacent to the site may allow transport of contaminants to the north. Storm events are of particular concern because of greater flow velocities, which can mobilize bedload sediments that are usually not disturbed under normal flow conditions. Because most of the site has maintained grass, erosion and overland transport of particulate matter from on-site surface soil do not appear to be important transport mechanisms at Site 1.

5.1.3.4 Volatilization from Soil or Groundwater

Chemicals in soil can migrate into ambient air either as vapors or by adhering to particulate matter (dusts). Chemicals that have a significant volatility are likely to enter ambient air as vapors. Once in groundwater, volatile chemicals may migrate or they may volatilize through the capillary zone and overlying soil layers into ambient air or inside buildings.

Chemicals in the vapor phase may migrate horizontally or vertically and can enter buildings through cracks in the foundation or through foundation walls. Once inside buildings, the air concentrations in buildings are subject to various factors such as building dimensions and ventilation rates. Upon entering ambient air, the vapors are not expected to persist for long periods of time because half-lives of VOCs in the atmosphere are typically measured in hours or a few days. The air concentrations of vapors in ambient air are likely to be quickly diluted by the action of winds. Vapors may also be released directly to ambient air from soil or groundwater during excavation activities.

Many of the contaminants detected in soil and groundwater samples at Site 1 are not especially volatile and are not expected to vaporize into the air. Because most of the site is grass covered, little dust is generated under normal conditions. However, there is a potential for particulate exposure in areas without grass if the soil is heavily disturbed (e.g., during excavation).

5.2 CONTAMINANT PERSISTENCE

The persistence of contaminants after they are released to the environment is controlled by the susceptibility of the contaminants to certain chemical and biological processes that may degrade the contaminants and reduce their remaining mass.

5.2.1 Physical and Chemical Factors Affecting Contaminant Fate

The following properties can be used to evaluate the potential environmental mobility and fate of contaminants:

- Specific gravity
- Vapor pressure
- Water solubility
- Octanol/water partition coefficient (K_{ow})
- Organic carbon partition coefficient (K_{oc})
- Henry's Law constant
- Bioconcentration factor (BCF)
- Mobility index

Table 5-1 presents the physical and chemical properties of the organic compounds detected at Site 1. The relative mobilities of metals as a function of environmental conditions are provided in Table 5-2.

5.2.1.1 Specific Gravity

Specific gravity is the ratio of the weight of a given volume of pure chemical at a specified temperature to the weight of the same volume of water at a given temperature. Specific gravity is used to determine whether a chemical will have a tendency to float or sink in water when present as a pure chemical or at very high concentrations. Non-aqueous-phase chemicals with specific gravities greater than 1 will tend to sink and chemicals with specific gravities less than 1 will tend to float. The groups of chemicals detected at Site 1, particularly chlorinated VOCs, generally have specific gravities greater than 1.

5.2.1.2 Vapor Pressure

Vapor pressure provides an indication of the rate at which a chemical volatilizes from both soil and water. Chemicals with higher vapor pressures are expected to enter the atmosphere much more readily than chemicals with lower vapor pressures. Volatilization is a significant loss process for VOCs in surface water or surface soil and is of primary importance at environmental interfaces such as surface soil/air and surface water/air. Volatilization is not as important when evaluating contaminated groundwater and subsurface soils that are not exposed to the atmosphere. Vapor pressures for halogenated VOCs are typically one or more orders of magnitude higher than vapor pressures for polynuclear aromatic hydrocarbons (PAHs), and volatilization is not significant for metals other than mercury.

5.2.1.3 Water Solubility

The rate at which a chemical may be leached from a solid matrix (e.g., soil or waste deposit) by infiltrating precipitation is proportional to its water solubility. More soluble chemicals are more readily leached than less soluble chemicals. The water solubilities presented in Table 5-1 indicate that trichloroethene is slightly more soluble than PAHs, which are not especially water soluble.

The solubility of inorganics is strongly influenced by their valence state(s) and forms (hydroxides, oxides, carbonates, etc.). The solubility is also dependent on pH, Eh (redox potential), temperature, and other ionic species in solution (the Debye-Huckel theory). The solubility products reported in the literature vary with the type of complex formed, but generally, for example, cadmium and copper complexes are more soluble than lead and nickel complexes.

5.2.1.4 Octanol/Water Partition Coefficient

The K_{ow} is a measure of the equilibrium partitioning of chemicals between octanol and water. A linear relationship between the K_{ow} and the uptake of chemicals by fatty tissues of animal and human receptors (the BCF) has been established. K_{ow} values are also useful in characterizing the sorption of compounds by organic soils where experimental values are not available. PAHs are more likely to partition to fatty tissues than the more soluble VOCs. The K_{ow} is also used to estimate BCFs in aquatic organisms.

5.2.1.5 Organic Carbon Partition Coefficient

The K_{oc} indicates the tendency of a chemical to adhere to soil particles containing organic carbon. Chemicals with high K_{oc} values generally have low water solubilities and vice versa. This parameter may be used to infer the relative rates at which more mobile chemicals (ketones, monocyclic aromatics, and halogenated aliphatics) partition to groundwater. Most PAHs are relatively immobile in soil and are preferentially bound to the soil. These compounds are not as likely to be transported in the dissolved phase by groundwater to the same extent as compounds with higher water solubilities. However, these preferentially bound chemicals are easily transported by erosional processes when they are present in surface soil and the soil particles to which they have adsorbed are mobilized.

5.2.1.6 Henry's Law Constant

Vapor pressure and water solubility are used in determining volatilization rates from surface water bodies and from groundwater. The ratio of these two parameters, the Henry's Law constant, is used to calculate the equilibrium chemical concentrations in the vapor (air) phase versus the liquid (water) phase for the dilute solutions commonly encountered in environmental settings. In general, chemicals having a Henry's Law constant of less than 1×10^{-5} atm-m³ per mole should volatilize very little and be present only in

minute amounts in the atmosphere or soil gas. For chemicals with Henry's Law constants greater than 5×10^{-3} atm-m³ per mole, volatilization and diffusion in soil gas could be significant.

5.2.1.7 Bioconcentration Factor

The BCF represents the ratio of aquatic animal-tissue concentration to water concentration. The ratio is both contaminant and species specific. When site-specific values are not measured, literature values are used or BCFs are derived from K_{ow} values. Many PAHs will bioconcentrate in aquatic animal tissue at levels three to five orders of magnitude greater than those concentrations found in the water in which the organisms reside, whereas trichloroethene does not bioconcentrate to any significant degree.

5.2.1.8 Distribution Coefficient

The distribution coefficient (K_d) is a measure of the equilibrium distribution of a chemical or ion in soil/water systems. The distribution of organic chemicals is a function of both the K_{oc} and the amount of organic carbon in the soil. For an ion (e.g., metal), the K_d is the ratio of the concentration adsorbed on soil surfaces to the concentration in water. K_d values for metals vary over several orders of magnitude because the K_d is dependent on the size and charge of the ion and the soil properties governing exchange sites on soil surfaces. Coulomb's Law predicts that the ion with the smallest hydrated radius and the largest charge will be preferentially accumulated over ions with larger radii and smaller charges.

5.2.1.9 Mobility Index

The mobility index (MI) is a quantitative assessment of chemical mobility in the environment based on the water solubility (S), vapor pressure (VP), and the K_{oc} of a given material (Laskowski et al., 1983) as follows:

$$MI = \log ((S*VP)/K_{oc})$$

The MI for a given chemical is evaluated using the following scale (Ford and Gurba, 1984):

<u>Relative MI</u>	<u>Mobility Description</u>
> 5	extremely mobile
0 to 5	very mobile
-5 to 0	slightly mobile
-10 to -5	immobile
< -10	very immobile

Trichloroethene has a MI close to 5 and is considered very mobile. Pesticides such as BHC have MIs between -5 and -10 and are classified as immobile. Lighter molecular weight PAHs, such as naphthalene, have MIs ranging from -5 to 0 and are considered slightly mobile, and heavier molecular weight PAHs (e.g., benzo(a)pyrene) are classified as very immobile, having MIs less than -10 (Table 5-1).

5.2.2 VOCs

The predominant VOCs detected at Site 1, halogenated aliphatics including tetrachloroethene, trichloroethene, and dichloroethene, are generally volatile at normal temperatures and are typically considered to be fairly soluble in water with a low capacity for retention by soil organic carbon; therefore, these organic compounds are frequently detected in groundwater. The high volatility and water solubility of these chemicals dominate their fate in the environment. These chemicals may migrate through the soil column after being released by a spill event or by subsurface waste burial as infiltrating precipitation solubilizes them. Some fraction of these chemicals is retained by the soil, but most will continue migrating downward to the water table. Upon reaching the water table, migration occurs primarily in the direction of the horizontal hydraulic gradient.

Compounds with specific gravities greater than that of water (e.g., trichloroethene) are often used in various industrial applications such as degreasing. If a large enough spill of these solvents occurs, these chemicals may also migrate as a bulk liquid but will not stop at the water table (i.e., these chemicals will mix with and/or sink into the aquifer).

In general, chlorinated VOCs are subject to abiotic dehydrohalogenation. This process is an elimination reaction that results in the formation of an ethene from a saturated halogenated compound. Research indicates that microbial degradation of highly chlorinated ethanes is a relatively slow process. Chlorinated ethenes are subject to degradation via the action of soil microorganisms. The biodegradation of these compounds in the soil matrix is dependent on the abundance of microflora, nutrient availability, soil reaction (pH), temperature, etc. However, the continued presence of chlorinated VOCs at the site over time suggests that one or more factors are limiting the reductive dechlorination process.

Monocyclic aromatics such as benzene are subject to degradation via the action of both soil and aquatic microorganisms. The biodegradation of these compounds in the soil matrix is dependent on the abundance of microflora, macronutrient availability, soil reaction (pH), temperature, etc. Although these compounds are amenable to microbial degradation, it is not anticipated that degradation will occur at an appreciable rate at Site 1, although macronutrient availability is not known.

Under certain conditions, volatilization is a significant fate process for these compounds. Volatilization is only significant at the air-soil or air-water interface. Compounds may volatilize rapidly to the atmosphere

from soil or surface water due to low soil adsorption. Adsorption is not considered an important fate for these types of compounds when compared to more hydrophobic compounds. BCFs indicate that these compounds should not bioaccumulate.

5.2.3 PAHs

The SVOCs most frequently detected at Site 1 include bis(2-ethylhexyl)phthalate and PAHs. SVOCs as a class of compounds, and PAHs in particular, are considered to be persistent in the environment. SVOCs in soil are much more likely to bind to soil and be transported via mass transport mechanisms than to go into solution. PAHs are subject to degradation via aerobic bacteria but may be relatively persistent in the absence of microbial population or macronutrients such as phosphorus and nitrogen. Land-spreading applications have indicated that PAHs are highly amenable to microbial degradation in soil. The rate of degradation is influenced by temperature, pH, oxygen concentrations, initial chemical concentrations, and moisture. Photolysis, hydrolysis, and oxidation are not important fate processes for the degradation of PAHs in soil.

SVOCs are generally considered to be fairly immobile chemicals in the environment because they are large molecules with high K_{oc} values and low solubilities compared to volatile organics. However, some of the lighter molecular weight PAHs (a subgroup of SVOCs) are more water soluble and environmentally mobile. SVOC compounds in soil generally do not migrate vertically to a great extent and are more likely to adhere to soil particles and be removed from the site via surface runoff and erosional processes.

PAHs are frequently released to the environment through emissions from the incineration of municipal and chemical wastes and in exhaust from internal combustion engines. The PAHs detected at Site 1 may be a by-product of wastes burned at the site.

PAHs generally have very low solubilities, vapor pressures, and Henry's Law constants and high K_{oc} and K_{ow} values. The low molecular weight PAHs (e.g., acenaphthene, anthracene, fluorene, and phenanthrene) may volatilize from surface waters and high molecular weight PAHs (e.g., benzo(a)pyrene, benzo(a)anthracene, chrysene, etc.) are less likely to volatilize.

5.2.4 Pesticides

Pesticides can enter the environment by spraying, dusting, or direct application to soil. Pesticides are expected to have been used as part of maintenance activities at Site 1 and applied per manufacturers' instructions. Many of the compounds detected are no longer licensed for general sale and use in the United States. Pesticides as a class of compounds are not considered to be very mobile in the

environment. These chemicals, upon application or disposal, tend to remain affixed to soil particles. Migration of pesticides generally occurs primarily by erosion via the action of wind or water.

Bioconcentration of pesticides in the food chain is another important fate mechanism. Hydrolysis, oxidation, and photolysis are not generally important fate mechanisms for pesticides in soil or water. Hydrolysis half-lives for several pesticides are reported in periods of months to years. Fate and transport information for some of the more common pesticides detected at Site 1 is summarized as follows:

- **4,4' DDT and its metabolites** are considered to be persistent chemicals. They undergo extensive adsorption to soil and are not highly soluble. Biodegradation may occur under both aerobic and anaerobic conditions in the presence of certain soil microorganisms. Under aerobic conditions, 4,4'-dichlorodiphenyltrichloroethane (DDT) may be transformed to dichlorodipenyldichloroethylene (DDE), and under anaerobic conditions, 4,4'-dichlorodipenyldichloroethane (DDD) may result. These compounds are, however, somewhat volatile, with a reported half-life of 100 days for 4,4'-DDT. These compounds are highly lipophilic and therefore readily bioaccumulate. 4,4'-DDT is no longer in production in the United States.
- **Aldrin** is readily converted to **dieldrin**. Dieldrin is a particularly persistent pesticide but is no longer registered for general use. In soil, dieldrin will persist for long periods of time (more than 7 years) and may slowly evaporate. It does not readily leach to groundwater. Once in surface waters (via runoff), dieldrin adsorbs strongly to sediment and bioconcentrates and slowly photodegrades. Biodegradation and hydrolysis are not significant.
- **Endrin and its metabolites** are no longer produced or used in the United States. These compounds will remain in soil and do not leach significantly, with half-lives of greater than 14 years in sediment. One common transportation and degradation mechanism is photochemical degradation. In water, endrin would not be expected to biodegrade or hydrolyze to any significant extent and therefore will bioconcentrate in aquatic organisms.
- **Chlordane** is extremely persistent in the environment and, in some soils, may persist for greater than 20 years. Volatilization is an important removal mechanism in water and soil. Leaching to groundwater may occur where there are high levels of organic solvents.
- The use of **heptachlor** was restricted to underground termite control in 1983. Heptachlor epoxide is formed by the biological transformation of heptachlor in the environment. These compounds sorb strongly to soil. Heptachlor is subject to biodegradation (forming heptachlor epoxide, which is highly resistant to biodegradation) and hydrolysis. Bioconcentration of both compounds is significant, and volatilization and photolysis are very slow.

PCBs

PCBs were detected only in soil samples at Site 1. Their presence in soil, but not in any aqueous samples, is evidence of their low water solubility and tendency to adhere to particulate matter. PCBs are considered to be very persistent organic chemicals. Biodegradation is the only process known to transform PCBs under environmental conditions, and only the lighter compounds are measurably biodegraded. Although some microorganisms may biodegrade PCBs, such biota may not exist in local soil. There is experimental evidence to suggest that heavier PCBs (five or more chlorines per molecule) can undergo photolytic degradation, but there are no data to suggest that this process operates under environmental conditions. Base-, acid-, and neutral-promoted hydrolysis are considered to be inconsequential degradation mechanisms for PCBs.

5.2.6 Metals

Metals are highly persistent environmental contaminants. They do not biodegrade, photolyze, or hydrolyze. Metals released to the environment generally adsorb to the soil matrix (compared to being part of the soil structure) and bioaccumulate. Because metals are frequently incorporated into the soil matrix and remain bound to particulate matter, they migrate from source areas via bulk movement processes (erosion).

The mobility of metals is influenced primarily by their physical and chemical properties, in combination with the physical and chemical characteristics of the soil matrix. Factors that assist in predicting the mobility of inorganic species are the soil/pore water pH, soil/pore water oxidation reduction potential (Eh) of groundwater, and cation exchange capacity. The mobility of metals generally increases with decreasing soil pH and cation exchange capacity (Table 5-2). Metals are more mobile under acidic conditions. In these cases, it is possible for metals to migrate vertically through the soil column and reach the groundwater.

The detected concentrations of arsenic in environmental media at Site 1 may be attributed to naturally occurring conditions. Pettry and Switzer (2001) evaluated arsenic concentrations in soil in Mississippi and reported data from five sample locations in the Coastal Flatwoods in Jackson County and one in Hancock County. The reported concentrations of arsenic in the Coastal Flatwoods samples ranged from 0.38 to 4.78 mg/kg. The arsenic levels reported at Site 1 were in the lower range of the background concentrations in the area.

5.3 CONTAMINANT MIGRATION

Transport of contaminants after they are released to the environment is controlled by the following:

- Nature and extent of contamination
- Physical properties of the contaminants
- Potential migration pathways

These factors determine whether the contaminant partitions to more mobile media (air or groundwater) or less mobile media (soil or sediment particles).

5.3.1 Site Conceptual Model

The primary release mechanism is the direct contact of subsurface soil and groundwater with the buried waste, leaching of contaminants to soil and groundwater, and potential migration of liquid wastes disposed of at the site.

Surface soil was considered a secondary source of contaminants because it is fill material of unknown origin emplaced after landfill operations had ceased and may also have been affected by site activities not related to the landfill operation.

The potential pathways for contaminant migration at Site 1 are shown in Table 5-3.

5.3.2 Surface Soil/Subsurface Soil/Groundwater Pathway

The potential for contaminants to leach from surface soil to subsurface soil and groundwater is evaluated because contaminants were reported in Site 1 soil at concentrations greater than default leaching criteria. The COPCs detected in each of these media are compared in Table 5-4 and summarized as follows:

- VOCs – 2-butanone was reported infrequently in each of the media in this pathway. The 2-butanone concentrations in surface and subsurface soil were comparable. The concentrations in groundwater were less than the screening criteria.
- SVOCs- benzo(b)fluoranthene and caprolactam were the only SVOCs detected in surface soil, but were not reported in subsurface soil or groundwater samples. Naphthalene was detected in one monitoring well sample, but not in any soil samples.

- Pesticides – Endrin aldehyde was reported infrequently in each of the media in this pathway, although this chemical was retained as a COPC only for surface soil. Aldrin, BHC isomers, dieldrin, and heptachlor epoxide were detected in surface soil samples at concentrations greater than the leaching SSLs. These same pesticides, excluding aldrin, were also detected in subsurface soil samples at concentrations greater than the leaching SSLs. None of these pesticides were reported in the groundwater samples.
- PCBs – Aroclor 1260 was reported in one surface soil sample and none of the other media in this pathway. Aroclor 1242 was reported only in one subsurface soil sample.
- Metals – A number of metals were frequently detected in the media sampled at Site 1. Antimony, arsenic, chromium, cobalt, copper, iron, lead, manganese, and selenium were detected in one or more surface soil samples at concentrations greater than the SSLs for the soil leaching pathway. Only arsenic, chromium, and iron were detected in subsurface soil samples at concentrations greater than the SSLs. Aluminum, arsenic, iron, manganese, and thallium were detected in groundwater samples at concentrations exceeding screening criteria.

5.3.3 Surface Soil/Surface Water/Sediment Pathway

Because contaminants were detected in surface soil samples at concentrations exceeding screening criteria, the surface soil-to-sediment and surface water pathways are evaluated. The site was capped with fill material of unknown origin at some time after landfill operations ceased. Routine maintenance activities, which may have included pesticide applications, have been conducted in the subsequent years. The analytes detected in each of these media are compared in Table 5-5 and summarized as follows:

- VOCs – 2-butanone was detected in surface soil and sediment samples. The 2-butanone concentrations in the sediments were up to an order of magnitude greater than the concentrations reported in surface soil, suggesting that sources other than Site 1 are contributing to the 2-butanone in sediments. Acetone and toluene were identified as COPCs for sediment and/or surface water. These analytes were not reported in surface soil samples from Site 1, indicating that this migration pathway was not complete.
- SVOCs- benzo(b)fluoranthene and caprolactam were the only SVOC COPCs detected in surface soil. Diethyl phthalate, while not a surface soil COPC, was detected in three of the sediment samples. The diethyl phthalate concentrations in the sediments were up to an order of magnitude greater than the concentrations reported in surface soil, suggesting that sources other than Site 1 are contributing to the diethyl phthalate in sediments.

- PCBs – Aroclor 1260 was reported in one surface soil sample and none of the other media in this pathway.
- Metals – A number of metals were frequently detected in the media sampled at Site 1. Antimony, arsenic, chromium, cobalt, copper, iron, lead, manganese, and selenium were detected in one or more surface soil samples at concentrations greater than screening criteria. Only arsenic, chromium, iron, lead, and manganese were retained as COPCs for surface water and sediment.

5.3.4 Groundwater/Surface Water/Sediment Pathway

The east and west ditches may receive groundwater discharge from Site 1. Therefore, the groundwater-to-surface water and sediment pathways are evaluated. The analytes detected in each of these media are compared in Table 5-6 and summarized as follows:

- VOCs – 2-butanone was detected in groundwater and sediment samples. 2-butanone was reported more frequently and at higher concentrations in the sediment samples suggesting that sources other than Site 1 are contributing to the 2-butanone in sediments. Acetone was reported in each of the media in this pathway. Acetone concentrations in groundwater and surface water were comparable. Carbon disulfide, while not a groundwater COPC, was detected in two of the surface water samples. The carbon disulfide concentrations in the surface water were up to an order of magnitude less than the concentrations reported in groundwater. Toluene was identified as a COPC for sediment and surface water. Toluene was not reported in groundwater samples from Site 1, indicating that this migration pathway was not complete.
- SVOCs- Bis(2-ethylhexyl)phthalate was detected in groundwater and sediment samples. The concentrations in the sediments were greater than the concentrations reported in groundwater, suggesting that sources other than Site 1 are contributing to the 2-butanone in sediments.
- Pesticides –The pesticide that was detected in groundwater at Site 1, Endrin aldehyde, was not detected in surface water or sediment samples.

5.3.5 Soil and Groundwater to Air Pathway

To determine the potential for migration of soil or groundwater contaminants to the atmosphere, contaminant concentrations in these media were compared to USEPA SSLs (surface and subsurface soil) and USEPA groundwater volatilization criteria. Table 5-7 compares the analytes detected in each of these media. SSLs have been established for various volatiles, pesticides/PCBs, and metals. Concentrations of these classes of analytes detected in soil at Site 1 were less than the default SSLs.

Surface soil- and subsurface soil-to-air and inhalation pathways are not considered complete because concentrations of contaminants detected in soil were less than the default SSLs.

USEPA groundwater volatilization criteria have been established for many of the VOCs detected in groundwater at Site 1. Tetrachloroethene and trichloroethene were detected in one or more groundwater samples at concentrations greater than the default criteria, indicating the potential for migration and accumulation of vapors from groundwater. Further evaluation of these COPCs is included in the HHRA.

TABLE 5-1
ENVIRONMENTAL FATE AND TRANSPORT PARAMETERS FOR ORGANIC CHEMICALS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Chemical	Specific Gravity (@ 20/4°C)(2)	Vapor Pressure (mm Hg @ 20°C)(2)	Solubility (mg/L @ 20°C)(2)	Octanol/Water Partition Coefficient(2)	Organic Carbon Partition Coefficient(4)	Henry's Law Constant (atm-m ³ /mole)(2)	Bioconcentration Factor (mg/L/mg/kg)(4)	Mobility Index log((solubility*VP)/K _{oc})
KETONES								
Acetone	0.7899	2.66E+2 (25°C)	Miscible	5.75E-01	7.08E+03 (10)	4.276E-5 (25°C)	3.81E-1(6)	NA
2-Butanone	0.8054	1.0E+2 (25°C)	2.75E+05	1.82E+00	4.44E+0(9)	4.66E-5 (25°C)	9.3E-1(6)	6.79E+00
MONOCYCLIC AROMATICS								
Benzene	0.8765	9.50E+01	1.75E+03	1.35E+02	5.89E+01	5.55E-03	3.70E+01	3.45E+00
HALOGENATED ALIPHATICS								
Chloroethane	0.92 (0/4°C)	1.00E+03	5.74E+03	1.54E+00	1.52E+00	8.48E-3 (25°C)	6.7E-01-8.6E-01	6.58E+00
Chloroform	1.4832	1.60E+02	9.3E+3 (25°C)	9.33E+01	3.98E+01 (10)	3.39E-3 (25°C)	2.60E+01	4.57E+00
cis-1,2-Dichloroethene	1.2837	2.02E+2 (25°C)	8.00E+02	1.58E+02	3.55E+01 (10)	4.08E-3 (24.8°C)	1.4E+1(3)	3.66E+00
1,1-Dichloroethane	1.1757	2.34E+2 (25°C)	5.50E+03	1.67E+01	3.13E+01 (10)	5.871E-3 (25°C)	1.90E+01	4.61E+00
1,1-Dichloroethene	1.218	5.91E+2 (25°C)	2.1E+2 (25°C)	3.02E+01	5.89E+01 (10)	2.286E-2 (25°C)	5.30E+01	3.32E+00
MISCELLANEOUS VOLATILE ORGANICS								
Carbon disulfide	1.2632	2.98E+02	2.90E+03	1.45E+04	4.57E+01 (10)	1.921E-2 (25°C)	2.6E+1 (6)	4.28E+00
POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)								
Acenaphthene	1.07	5.00E-03	4.24E+02	8.32E+03	7.08E+03	1.55E-04	1.10E+03	-3.52E+00
Acenaphthylene	1.02	2.30E-02	1.61E+01	1.17E+04	2.00E+03	1.14E-04	3.80E+02	-3.73E+00
Anthracene	1.283 (25/4°C)	1.95E-4 (25°C)	1.29E+0 (25°C)	2.82E+04	2.95E+04 (10)	8.6E-5 (25°C)	4.70E+03	-8.07E+00
Benzo(a)anthracene	1.274	5.00E-09	1E-2 (24°C)	4.07E+05	3.98E+05 (10)	6.60E-07	5.30E+04	-1.59E+01
Benzo(b)fluoranthene	NA	5.00E-07	1.2E-3 (25°C)	3.72E+06	1.23E+06 (10)	1.20E-05	1.40E+05	-1.53E+01
Benzo(k)fluoranthene	NA	9.59E-11	5.5E-4 (25°C)	6.92E+06	1.23E+06 (10)	1.04E-03	1.40E+05	-1.94E+01
Benzo(g,h,i)perylene	NA	1.00E-10	2.6E-4 (25°C)	1.70E+07	1.60E+06	1.4E-7 (25°C)	3.50E+05	-1.98E+01
Benzo(a)pyrene	1.351	5.00E-09	3.8E-3 (25°C)	9.55E+05	1.02E+06 (10)	4.9E-7 (25°C)	1.40E+05	-1.67E+01
Carbazole	1.1	1.37E-06	7.48E+00	3.89E+03	3.39E+03	1.53E-08	5.01E+02	-8.52E+00
Chrysene	1.274 (20°C)	6.3E-9 (25°C)	6E-3 (25°C)	4.07E+05	3.98E+05 (10)	1.05E-6 (25°C)	5.30E+04	-1.60E+01
Dibenzo(a,h)anthracene	1.282	1.00E-10	5E-4 (25°C)	9.33E+05	3.80E+06 (10)	7.3E-8 (25°C)	6.90E+05	-1.99E+01
Fluoranthene	1.252	5.0E-6 (25°C)	2.65E-1 (25°C)	2.14E+05	1.07E+05 (10)	6.5E-6 (25°C)	1.20E+04	-1.09E+01
Fluorene	1.202	1.00E+01	1.98E+00	1.62E+04	1.38E+04	6.36E-05	3.80E+03	-2.84E+00
Indeno(1,2,3-cd)pyrene	NA	1E-10 (25°C)	6.20E-02	4.57E+07	3.47E+06 (10)	6.95E-8 (25°C)	3.50E+05	-1.77E+01
Phenanthrene	0.980 (4°C)	1E+0 (118.2°C)	8.16E-1 (21°C)	2.88E+04	1.40E+04	3.93E-5 (25°C)	4.70E+03	-4.23E+00
Pyrene	1.271 (23/4°C)	2.5E+0 (200°C)	1.6E-1 (26°C)	1.51E+05	1.05E+05 (10)	5.1E-6 (25°C)	1.20E+04	-5.42E+00
PHTHALATE ESTERS								
Bis(2-ethylhexyl)phthalate	0.99 (20/20°C)	1.2E+0 (200°C)	4E-1 (25°C)	2.00E+05	1.51E+07 (10)	3.00E-07	2.30E+08	-7.50E+00

TABLE 5-1
ENVIRONMENTAL FATE AND TRANSPORT PARAMETERS FOR ORGANIC CHEMICALS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Chemical	Specific Gravity (@ 20/4°C)(2)	Vapor Pressure (mm Hg @ 20°C)(2)	Solubility (mg/L @ 20°C)(2)	Octanol/Water Partition Coefficient(2)	Organic Carbon Partition Coefficient(4)	Henry's Law Constant (atm-m ³ /mole)(2)	Bioconcentration Factor (mg/L/mg/kg)(4)	Mobility Index log((solubility*VP)/K _{oc})
PESTICIDES								
Aldrin	1.18	2.31E-05	1.80E-01	3.16E+06	2.45E+06	6.97E-03	1.10E+02	-1.18E+01
alpha-Chlordane (11)	1.61 (25°C)	1E-5 (25°C)	5.60E-02	6.03E+02	1.20E+05	4.79E-05 (25°C)	4.00E+04	-1.13E+01
4,4'-DDD	1.476	1.0E-06 (30°C)	1.6E-1 (24°C)	9.77E+05	1.00E+06 (10)	2.16E-05	1.80E+05	-1.28E+01
4,4'-DDE	NA	6.50E-06	4.00E-02	4.90E+05	4.47E+06 (10)	2.34E-05	8.90E+05	-1.32E+01
4,4'-DDT	1.5 (15/4°C)	1.50E-07	3.1E-3 (25°C)	1.55E+06	2.63E+06 (10)	3.89E-5 (25°C)	8.00E+06	-1.58E+01
Dieldrin	1.75	1.8E-7 (25°C)	1.86E-01	1.23E+04	2.14E+04 (10)	5.84E-5 (25°C)	7.10E+02	-1.18E+01
Endosulfan II	1.745 (20/20°C)	2.40E-5 (25°C)	5.1E-01(3)	1.26E+04(3)	2.04E+03(3)	1.12E-05(3)	2.9E+02(5)	-8.22E+00
Endosulfan sulfate	NA	9.00E-03	1.17E-01	3.66E+00	3.76E+00	4.70E-07	3.56E+02	-3.55E+00
Endrin	1.65 (25°C)	2.0E-7 (25°C)	2.5E-01(3)	1.15E+05(3)	1.08E+04(3)	7.52E-06(3)	1.8E+03(5)	-1.13E+01
Endrin aldehyde	1.65 (25°C)	2.0E-7 (25°C)	2.5E-01(3)	1.15E+05(3)	1.08E+04(3)	7.52E-06(3)	1.8E+03(5)	-1.13E+01
Endrin ketone	NA	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane (11)	1.61 (25°C)	1E-5 (25°C)	5.60E-02	6.03E+02	1.20E+05	4.79E-05 (25°C)	4.00E+04	-1.13E+01
Heptachlor epoxide	NA	3.00E-04	3.5E-1(15°C)	5.00E+00	8.32E+04	3.90E-04	7.50E+03	-8.90E+00
Methoxychlor	1.41 (25°C)	NA	4.0E-02 (24°C)	4.91E+00	1.07E+05	1.60E-05	8.10E+03	NA
PCBs								
Aroclor-1242	1.392	2.50E-04	2.00E-02	1.29E+04	5.03E+05	5.60E-04	3.6E+03 - 4.3E+04	-1.10E+01
Aroclor-1260	1.58 (25°C)(4)	4.05E-5(4)	2.7E-3(4)	1.4E+7(4)	6.70E+06	7.4E-1(4)	1.30E+06	-1.38E+01

- 1 NA - Not Available
- 2 USEPA, September 1992, Handbook of RCRA Groundwater Monitoring Constituents: Chemical and Physical Properties.
- 3 Lyman et al., 1990; Equation 5-3, Handbook of Chemical Property Estimation Methods.
- 4 USEPA, December 1982, Aquatic Fate Process Data for Organic Priority Pollutants.
- 5 ATSDR, October 1989, Toxicity Profile for Xylenes.
- 6 Lyman et al., 1990, Eq. 5-2
- 7 Verschueren, 1983, Handbook of Environmental Data of Organic Chemicals.
- 8 Howard, 1989, Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Volume 1.
- 9 Lyman et al., 1990; Equation 4-5
- 10 USEPA, July 1996, Soil Screening Guidance.
- 11 Chlordane data used

TABLE 5-2

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RELATIVE MOBILITIES OF METALS AS A FUNCTION OF ENVIRONMENTAL CONDITIONS (Eh,pH)
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Relative Mobility	Environmental Conditions			
	Oxidizing	Acidic	Neutral/ Alkaline	Reducing
Very High			Selenium	
High	Selenium Zinc	Selenium Zinc Copper Nickel Mercury Silver		
Medium	Copper Nickel Mercury Silver Arsenic Cadmium	Arsenic Cadmium	Arsenic Cadmium	
Low	Lead Barium Beryllium	Lead Barium Beryllium	Lead Barium Beryllium	
Very Low	Iron Chromium	Chromium	Chromium Zinc Copper Nickel Mercury Silver	Chromium Selenium Zinc Copper Nickel Mercury Lead Barium Beryllium Silver

TABLE 5-3

CONTAMINANT MIGRATION PATHWAYS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

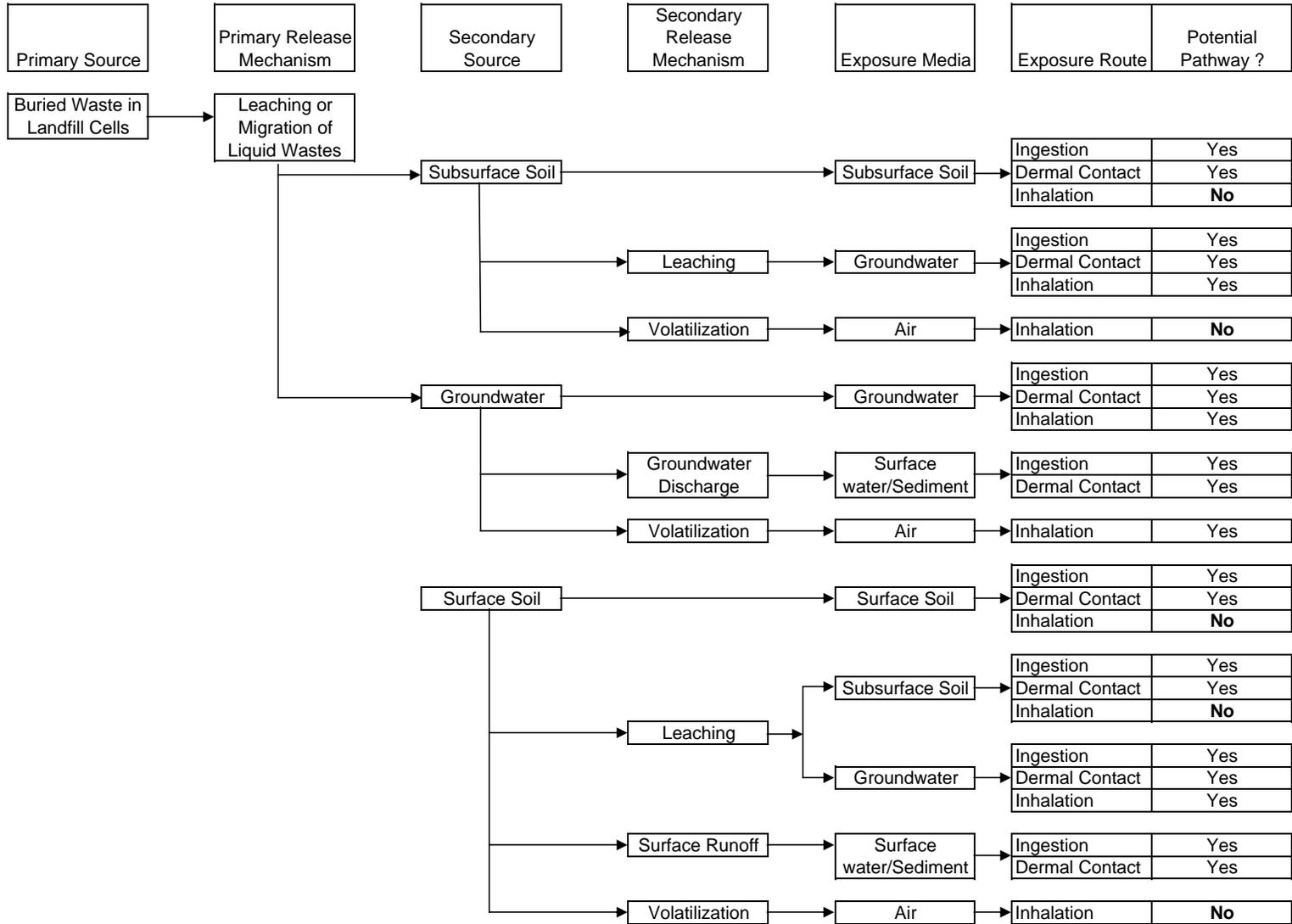


TABLE 5-4
SURFACE SOIL TO SUBSURFACE SOIL AND GROUNDWATER PATHWAY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

SURFACE SOIL

Chemical	Frequency of Detection	Range of Detected Concentrations		Leaching COPC?
		Minimum	Maximum	
Volatile Organics (µg/kg)				
TETRACHLOROETHENE	2/21	0.22	0.28	Yes
Semivolatile Organics (µg/kg)				
BENZO(B)FLUORANTHENE	1/21	78	78	Yes
Pesticides/PCBs (µg/kg)				
ALDRIN	3/21	0.16	6.3	Yes
ALPHA-BHC	1/21	0.26	0.26	Yes
BETA-BHC	4/20	0.16	0.36	Yes
DELTA-BHC	1/21	0.26	0.26	Yes
DIELDRIN	8/20	0.36	460	Yes
ENDRIN ALDEHYDE	2/21	0.31	2	Yes
HEPTACHLOR EPOXIDE	5/20	0.25	1.7	Yes
AROCLOR-1260	1/21	17	17	Yes
Inorganics (mg/kg)				
ALUMINUM	21/21	1770	12300	No
ANTIMONY	2/21	1.1	3.6	Yes
ARSENIC	19/21	0.78	4.8	Yes
CHROMIUM	21/21	2.2	11	No
COBALT	1/21	6.8	6.8	Yes
COPPER	19/21	1.4	210	Yes
IRON	21/21	546	9050	Yes
LEAD	21/21	3.2	70.6	Yes
MANGANESE	21/21	1	358	Yes
SELENIUM	4/21	0.505	1.3	Yes

Notes:
COPC = chemical of potential concern
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
PCB = polychlorinated biphenyl

µg/L = micrograms per liter

SUBSURFACE SOIL

Chemical	Frequency of Detection	Range of Detected Concentrations		Leaching COPC?
		Minimum	Maximum	
Volatile Organics (µg/kg)				
COPCs not detected in this media				
Semivolatile Organics (µg/kg)				
COPCs not detected in this media				
Pesticides/PCBs (µg/kg)				
ALPHA-BHC	1/3	4.2	4.2	Yes
BETA-BHC	2/2	0.32	63	Yes
DELTA-BHC	1/3	34.0	34	Yes
DIELDRIN	1/2	0.43	0.43	Yes
ENDRIN ALDEHYDE	1/3	12.0	12	No
HEPTACHLOR EPOXIDE	2/3	0.33	6.2	Yes
AROCLOR-1242	1/7	2400	2400	Yes
Inorganics (mg/kg)				
ALUMINUM	3/3	2910	9700	No
ARSENIC	2/3	1.3	2	Yes
CHROMIUM	3/3	3	9.8	No
COPPER	2/3	2.2	2.2	No
IRON	3/3	908	2060	Yes
LEAD	3/3	2.5	7.5	No
MANGANESE	3/3	3.7	8	No

GROUNDWATER

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC ?
		Minimum	Maximum	
Volatile Organics (µg/L)				
TETRACHLOROETHENE	5/46	0.26	2.5	Yes
TRICHLOROETHENE	2/46	0.3	0.32	Yes
Semivolatile Organics (µg/L)				
NAPHTHALENE	1/21	6.7	6.7	Yes
Pesticides/PCBs (µg/L)				
ENDRIN ALDEHYDE	1/21	0.0088	0.0088	No
Inorganics (µg/L)				
ALUMINUM	21/21	73.5	6320	Yes
ARSENIC	2/21	14.2	19.1	Yes
CHROMIUM	3/21	2.1	8.1	No
IRON	21/21	147	44000	Yes
LEAD	3/21	1.5	1.9	No
MANGANESE	21/21	4.4	548	Yes
THALLIUM	1/21	4.1	4.1	Yes

TABLE 5-5
SURFACE SOIL TO SEDIMENT AND SURFACE WATER PATHWAY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

SURFACE SOIL

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/kg)				
2-BUTANONE	2/21	1.8	4	Yes
Semivolatile Organics (µg/kg)				
BENZO(B)FLUORANTHENE	1/21	78	78	Yes
CAPROLACTAM	3/21	140	300	Yes
DIETHYL PHTHALATE	3/21	40	60	No
Pesticides/PCBs (µg/kg)				
ALDRIN	3/21	0.16	6.3	Yes
ALPHA-BHC	1/21	0.26	0.26	Yes
BETA-BHC	4/20	0.16	0.36	Yes
DELTA-BHC	1/21	0.26	0.26	Yes
ALPHA-CHLORDANE	5/21	0.23	4.9	Yes
GAMMA-CHLORDANE	4/21	0.22	3.4	Yes
DIELDRIN	8/20	0.36	460	Yes
ENDRIN ALDEHYDE	2/21	0.31	2	Yes
HEPTACHLOR EPOXIDE	5/20	0.25	1.7	Yes
AROCLOR-1260	1/21		17	Yes
Inorganics (mg/kg)				
ALUMINUM	21/21	1770	12300	Yes
ANTIMONY	2/21	1.1	3.6	Yes
ARSENIC	19/21	0.78	4.8	Yes
CHROMIUM	21/21	2.2	11	Yes
COBALT	1/21	6.8	6.8	Yes
COPPER	19/21	1.4	210	Yes
IRON	21/21	546	9050	Yes
LEAD	21/21	3.2	70.6	Yes
MANGANESE	21/21	1	358	Yes
SELENIUM	4/21	0.505	1.3	Yes
VANADIUM	21/21	2.7	16	Yes
ZINC	21/21	1.7	89	Yes

Notes:

COPC = chemical of potential concern µg/L = micrograms per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
PCB = polychlorinated biphenyl

SEDIMENT

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/kg)				
2-BUTANONE	4/5	5.8	80	Yes
ACETONE	2/5	28	220	Yes
TOLUENE	1/5	33	33	Yes
Semivolatile Organics (µg/kg)				
BENZO(B)FLUORANTHENE	1/5	330	330	Yes
DIETHYL PHTHALATE	3/5	52	220	Yes
Pesticides/PCBs (µg/kg)				
ALDRIN	1/5	0.325	0.45	Yes
ALPHA-BHC	1/5	0.17	0.17	Yes
DELTA-BHC	1/5	2.1	2.1	Yes
ALPHA-CHLORDANE	4/5	0.85	6	Yes
GAMMA-CHLORDANE	4/5	0.52	3.5	Yes
DIELDRIN	3/5	0.73	1.8	No
HEPTACHLOR EPOXIDE	1/5	0.46	0.46	Yes
Inorganics (mg/kg)				
ALUMINUM	5/5	1000	17200	Yes
ARSENIC	4/5	0.81	19.8	Yes
CHROMIUM	5/5	1.1	17.6	No
COPPER	1/5	11.7	11.7	Yes
IRON	5/5	650	28100	Yes
LEAD	5/5	1.9	32.1	Yes
MANGANESE	5/5	1.5	295	Yes
VANADIUM	5/5	1.4	32.2	Yes
ZINC	5/5	4.2	132	Yes

SURFACE WATER

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/L)				
ACETONE	5/5	3.4	5.1	Yes
TOLUENE	1/5	0.22	0.22	No
Semivolatile Organics (µg/L)				
CAPROLACTAM	5/5	0.91	2.1	Yes
Pesticides/PCBs (µg/L)				
ALPHA-CHLORDANE	1/5	0.004	0.004	No
Inorganics (µg/L)				
ALUMINUM	5/5	430	1690	Yes
ARSENIC	1/5	3.4	3.4	Yes
IRON	5/5	1720	2410	Yes
LEAD	2/5	1.6	2	Yes
MANGANESE	5/5	26.3	53.1	Yes
ZINC	5/5	5.4	10.4	No

TABLE 5-6

GROUNDWATER TO SURFACE WATER AND SEDIMENT PATHWAY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

GROUNDWATER

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/L)				
2-BUTANONE	3/46	1.6	2.4	No
ACETONE	10/46	1.6	4.8	No
CARBON DISULFIDE	4/46	0.16	1.8	No
TETRACHLOROETHENE	5/46	0.26	2.5	Yes
TRICHLOROETHENE	2/46	0.3	0.32	Yes
Semivolatile Organics (µg/L)				
BIS(2-ETHYLHEXYL)PHTHALATE	5/21	1.7	2	No
NAPHTHALENE	1/21	6.7	6.7	Yes
Pesticides/PCBs (µg/L)				
COPCs not detected in this media				
Herbicides (µg/L)				
2,4,5-TP (SILVEX)	3/18	0.049	0.17	No
Inorganics (µg/L)				
ALUMINUM	21/21	73.5	6320	Yes
ARSENIC	2/21	14.2	19.1	Yes
BARIUM	21/21	15.1	418	No
IRON	21/21	147	44000	Yes
LEAD	3/21	1.5	1.9	No
MANGANESE	21/21	4.4	548	Yes
THALLIUM	1/21	4.1	4.1	Yes
VANADIUM	1/21	10.2	10.2	No
ZINC	3/21	5.7	24.3	No

Notes:

COPC = chemical of potential concern

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

PCB = polychlorinated biphenyl

µg/L = micrograms per liter

SURFACE WATER

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/L)				
ACETONE	5/5	3.4	5.1	Yes
CARBON DISULFIDE	2/5	0.18	0.2	Yes
TOLUENE	1/5	0.22	0.22	No
Semivolatile Organics (µg/L)				
COPCs not detected in this media				
Pesticides/PCBs (µg/L)				
ALPHA-CHLORDANE	1/5	0.004	0.004	No
Herbicides (µg/L)				
2,4,5-TP (SILVEX)	4/5	0.044	0.067	Yes
Inorganics (µg/L)				
ALUMINUM	5/5	430	1690	Yes
ARSENIC	1/5	3.4	3.4	No
BARIUM	5/5	20.75	30.1	Yes
IRON	5/5	1720	2410	Yes
LEAD	2/5	1.6	2	Yes
MANGANESE	5/5	26.3	53.1	Yes
ZINC	5/5	5.4	10.4	No

SEDIMENT

Chemical	Frequency of Detection	Range of Detected Concentrations		COPC?
		Minimum	Maximum	
Volatile Organics (µg/kg)				
2-BUTANONE	4/5	5.8	80	Yes
ACETONE	2/5	28	220	Yes
TOLUENE	1/5	33	33	Yes
Semivolatile Organics (µg/kg)				
BIS(2-ETHYLHEXYL)PHTHALATE	5/5	74	450	Yes
Pesticides/PCBs (µg/kg)				
ALPHA-CHLORDANE	4/5	0.85	6	Yes
Inorganics (mg/kg)				
ALUMINUM	5/5	1000	17200	Yes
ARSENIC	4/5	0.81	19.8	Yes
BARIUM	5/5	5.3	61.2	Yes
IRON	5/5	650	28100	Yes
LEAD	5/5	1.9	32.1	Yes
MANGANESE	5/5	1.5	295	Yes
VANADIUM	5/5	1.4	32.2	Yes
ZINC	5/5	4.2	132	Yes

TABLE 5-7
MIGRATION TO AIR PATHWAY
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

SURFACE SOIL

Chemical	Frequency of Detection	Range of Detected Concentrations		SSL
		Minimum	Maximum	
Volatile Organics (µg/kg)				
2-BUTANONE	2/21	1.8	4	24000000
4-METHYL-2-PENTANONE	4/21	0.71	1.2	2700000
TETRACHLOROETHENE	2/21	0.22	0.28	10000
Pesticides/PCBs (µg/kg)				
4,4'-DDE	4/21	0.58	1.5	NA
4,4'-DDT	7/20	0.23	2	750000
ALDRIN	3/21	0.16	6.3	3400
ALPHA-BHC	1/21	0.26	0.26	750
BETA-BHC	4/20	0.16	0.36	6000
DELTA-BHC	1/21	0.26	0.26	750
GAMMA-BHC (LINDANE)	1/21	0.23	0.23	NA
ALPHA-CHLORDANE	5/21	0.23	4.9	72000
GAMMA-CHLORDANE	4/21	0.22	3.4	72000
DIELDRIN	8/20	0.36	460	1100
ENDOSULFAN II	6/21	0.24	1.6	NA
ENDOSULFAN SULFATE	1/21	0.29	0.29	NA
ENDRIN ALDEHYDE	2/21	0.31	2	NA
HEPTACHLOR	1/21	0.19	0.19	4100
HEPTACHLOR EPOXIDE	5/20	0.25	1.7	4700
METHOXYCHLOR	4/21	0.29	140	NA
AROCLOR-1260	1/21	17	17	NA
Inorganics (mg/kg)				
ALUMINUM	21/21	1770	12300	7090000
ANTIMONY	2/21	1.1	3.6	NA
ARSENIC	19/21	0.78	4.8	769
BARIIUM	21/21	2	70	70900
CADMIUM	1/21	0.3	0.32	1840
CHROMIUM	21/21	2.2	11	276
COBALT	1/21	6.8	6.8	1180
COPPER	19/21	1.4	210	NA
IRON	21/21	546	9050	NA
LEAD	21/21	3.2	70.6	NA
MANGANESE	21/21	1	358	7090
MERCURY	16/21	0.01175	0.059	2.9
NICKEL	19/21	1.3	5.7	13800
SELENIUM	4/21	0.505	1.3	NA
VANADIUM	21/21	2.7	16	NA
ZINC	21/21	1.7	89	NA

Notes:
COPC = chemical of potential concern
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
PCB = polychlorinated biphenyl

µg/L = micrograms per liter
SSL = soil screening level

SUBSURFACE SOIL

Chemical	Frequency of Detection	Range of Detected Concentrations		SSL
		Minimum	Maximum	
Volatile Organics (µg/kg)				
2-BUTANONE	2/13	3	3.6	24000000
4-METHYL-2-PENTANONE	1/13	1.7	1.7	2700000
CARBON DISULFIDE	1/13	2.8	2.8	720000
CHLOROMETHANE	1/13	0.62	0.62	2100
Pesticides/PCBs (µg/kg)				
4,4'-DDE	1/3	0.35	0.35	NA
4,4'-DDT	2/3	0.73	1.4	750000
ALPHA-BHC	1/3	4.2	4.2	750
BETA-BHC	2/2	0.32	63	6000
DELTA-BHC	1/3	34.0	34	750
ALPHA-CHLORDANE	1/2	1.6	1.6	72000
GAMMA-CHLORDANE	1/1	0.65	0.65	72000
DIELDRIN	1/2	0.43	0.43	1100
ENDOSULFAN II	2/3	0.51	4.4	NA
ENDOSULFAN SULFATE	2/3	0.46	1.5	NA
ENDRIN	1/3	7.6	7.6	NA
ENDRIN ALDEHYDE	1/3	12.0	12	NA
HEPTACHLOR EPOXIDE	2/3	0.33	6.2	4700
AROCLOR-1242	1/7	2400	2400	NA
Inorganics (mg/kg)				
ALUMINUM	3/3	2910	9700	7090000
ARSENIC	2/3	1.3	2	769
BARIIUM	3/3	7.8	15.6	70900
CHROMIUM	3/3	3	9.8	276
COPPER	2/3	2.2	2.2	NA
IRON	3/3	908	2060	NA
LEAD	3/3	2.5	7.5	7090
MANGANESE	3/3	3.7	8	7090
MERCURY	2/3	0.019	0.073	2.9
NICKEL	1/3	3.9	3.9	13800
VANADIUM	3/3	2.9	5.4	NA
ZINC	3/3	4.2	22.6	NA

GROUNDWATER

Chemical	Frequency of Detection	Range of Detected Concentrations		GVC
		Minimum	Maximum	
Volatile Organics (µg/L)				
2-BUTANONE	3/46	1.6	2.4	440000
ACETONE	10/46	1.6	4.8	220000
CARBON DISULFIDE	4/46	0.16	1.8	560
CHLOROMETHANE	1/46	0.36	0.36	6.7
TETRACHLOROETHENE	5/46	0.26	2.5	1.1
TRICHLOROETHENE	2/46	0.3	0.32	0.053
CIS-1,2-DICHLOROETHENE	1/46	0.22	0.22	210

6.0 HUMAN HEALTH RISK ASSESSMENT

This baseline HHRA was performed to characterize and quantify potential health risks at Site 1, Disaster Recovery Disposal Area at the NCBC Gulfport. The objective of the risk assessment is to determine whether detected concentrations of chemicals within the study areas pose a significant threat to potential human receptors under current and/or future land use. The risk assessment for Site 1 is based on chemical data for surface soil, subsurface soil, groundwater, surface water, and sediment collected between March and October of 2008. The potential risks to human receptors are estimated based on the assumption that no actions are taken to control contaminant releases. The baseline risk assessment consists of five major components:

- Data evaluation and identification of COPCs
- Identification of significant exposure pathways
- Toxicity assessment
- Estimation of potential human health risks
- Characterization of uncertainty in the risk assessment

Section 6.1 lists USEPA and MDEQ guidance used to prepare the baseline HHRA. Section 6.2 describes the methods used to evaluate data usability for the risk assessment. Methods for selecting COPCs to be evaluated quantitatively in the risk assessment are described in Section 6.3. COPCs are selected to represent those compounds likely to have the highest potential health risk, based on chemical concentration, toxicity, and mobility. The COPC screening process involves comparing maximum site concentrations to risk-based screening levels.

Section 6.4 presents an overview of the Exposure Assessment, which characterizes potential receptor populations and the pathways by which they may come into contact with contaminants at the site. Discussions of current and future land uses, potential human receptors, exposure scenarios, and methods used to estimate chemical intakes are included. In addition, specific exposure parameters used to calculate chemical intakes are presented. The chemical intake estimates are based on chemical concentrations at receptor locations, human activity patterns, physiological factors, and exposure duration and frequency. Current and reasonable future exposure scenarios are developed on the basis of site characteristics, land use and zoning plans, human activity patterns, potential chemical migration pathways, and other pertinent information.

Section 6.5 presents an overview of the Toxicity Assessment and the chemical-specific toxicity criteria used in quantifying potential human health risks. When integrated with chemical intake estimates developed in the Exposure Assessment, these toxicity factors provide a basis for quantifying potential human health risks.

Methods used for characterizing risks associated with noncarcinogenic and carcinogenic effects for exposure to COPCs are presented in Section 6.6.

The quantitative risk estimates are based on a number of assumptions about exposure and toxicity. Thus, the risk estimates may over- or underestimate the level of potential human health risks associated with a site. The Uncertainty Analysis (Section 6.7) describes in qualitative and semi-quantitative terms the sources of uncertainty in the risk assessment. Section 6.8 presents the summary and conclusions of the risk assessment.

6.1 RISK ASSESSMENT GUIDANCE

The following guidance was used to prepare the HHRA:

- Risk Assessment Guidance for Superfund (RAGS), Volume I. Human Health Evaluation Manual, Part A. Interim Final (USEPA, 1989).
- RAGS, Volume I. Human Health Evaluation Manual: Standard Default Exposure Factors (USEPA, 1991b).
- Selecting Exposure Routes and Contaminants of Concern by Risk-Based Screening. Region 3 Technical Guidance Manual Risk Assessment (USEPA, 1993b).
- Distribution of Preliminary Review Draft: "Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure" (USEPA, 1993d).
- Soil Screening Guidance: Technical Background Document (USEPA, 1996b).
- Exposure Factors Handbook (USEPA, 1997c).
- RAGS, Human Health Evaluation Manual, Part D: "Standardized Planning, Reporting, and Review of Superfund Risk Assessments" (RAGS Part D) (USEPA, 2001d).
- Risk Evaluation Procedures for Voluntary Cleanup and Development of Brownfield Sites, MDEQ (MDEQ, 2002a).
- Supplemental Guidance For Developing Soil Screening Levels For Superfund Sites, OSWER 9355.4-24, Office of Solid Waste and Emergency Response Washington, D.C. (USEPA, 2002b).
- Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous OSWER 9285.6-10. Waste Sites. Office of Emergency and Remedial Response, Washington, D.C., (USEPA, 2002c).
- Work Plan for RI at Site 1 – Disaster Recovery Disposal Area, NCBC, Gulfport, Mississippi (TTNUS, 2009).

- RAGS: Volume I, Human Health Evaluation Manual, Part E, Supplemental Guidance for Dermal Risk Assessment) Interim Guidance (USEPA, 2004c).
- Guidelines for Carcinogen Risk Assessment (USEPA, 2005e).
- Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, March 2005c).
- RAGS: Volume I, Human Health Evaluation Manual, Part F, Supplemental Guidance for Inhalation Risk Assessment (USEPA, 2009).

In addition, USEPA's online database, Integrated Risk Information System (IRIS) (USEPA, online, April 2009), was used to identify the most recently published toxicity criteria for the identified COPCs.

6.2 DATA EVALUATION

Information associated with data usability of the data collected at Site 1 is provided in this section.

The HHRA presented in this report is based on the most recent analytical data collected at Site 1 (the data were collected by TtNUS between March and October 2008). Historical soil, groundwater, surface water, and sediment data were not used in the quantitative risk assessment. A summary of the analytical data from these investigations is presented in Section 3.1 of the Work Plan for the RI at Site 1 (TtNUS, January 2009).

Fixed-base laboratory analytical results for target analytes from the field investigation were used in the quantitative risk evaluation. Unfiltered results for groundwater and surface water are used to assess risks associated with these media. Field measurements and data regarded as unreliable (i.e., qualified as "R" during the data validation process) were not used in the quantitative risk assessment. Analytical data qualified as estimated ("J", or "UJ") were used, even though the reported positive concentrations or sample-specific quantitation limits may be somewhat imprecise. The use of estimated data adds to the uncertainty associated with the risk assessment; however, the associated uncertainty is expected to be negligible compared with the other uncertainties inherent in the risk evaluation process (i.e., uncertainties with land uses, exposure scenarios, toxicological criteria, etc.). Analytical data qualified for blank contamination were used in the baseline risk assessment. When determining exposure concentrations via statistical procedures, analytical results qualified because of blank contamination and non-detected results were conservatively assumed to be present at concentrations equal to one-half the sample-specific quantitation limit.

All analytical data used in the quantitative estimation of potential risks were validated.

6.3 SELECTION OF CHEMICALS OF POTENTIAL CONCERN

The selection of COPCs is a qualitative screening process used to limit the number of chemicals and exposure routes quantitatively evaluated in the HHRA to those site-related constituents that dominate overall potential risks. Screening of site data against risk-based concentrations (RBCs) is used to focus the risk assessment on meaningful chemicals and exposure routes.

In general, a chemical is selected as a COPC and retained for further quantitative risk evaluation in the HHRA if the maximum detection in a sampled medium exceeds a conservative screening value(s) and the chemical is determined to be present at concentrations exceeding background levels, if available. Chemicals eliminated from further evaluation at this time are assumed to present minimal risks to potential human receptors.

6.3.1 Derivation of Screening Criteria

Screening concentrations based on the ORNL RSLs, MDEQ TRGs, and USEPA MCLs were used to select COPCs for Site 1. The risk-based screening concentrations (i.e., those based on the ORNL RSLs and MDEQ TRGs) correspond to a systemic HQ of 0.1 (for noncarcinogens) or a lifetime cancer risk of 1×10^{-6} (for carcinogens). Note that the ORNL RSLs and the MDEQ TRGs are based on a HQ of 1.0 and the screening concentrations are based on a HQ of 0.1. This is because the screening levels for non-carcinogenic chemicals have been divided by a factor of 10 to further account for the potential cumulative effects of several chemicals affecting the same target organ or producing the same adverse noncarcinogenic health effect.

Screening levels based on the following standards/criteria were used to select COPCs for soil:

- ORNL RSLs for Residential Soil (ORNL, 2009).
- MDEQ Tier 1 TRGs for restricted and unrestricted land use (MDEQ, 2002b).
- USEPA generic SSLs for the inhalation of volatiles and fugitive dusts calculated online at http://risk.lsd.ornl.gov/calc_start.shtml based on methodology from the USEPA's Soil Screening Guidance (USEPA, 1996b).

Screening levels based on the following criteria were used to select COPCs for sediment:

- ORNL RSLs for Residential Soil (ORNL, 2009).
- MDEQ Tier 1 TRGs for restricted and unrestricted land use (MDEQ, 2002b)

Screening levels based on the following criteria were used to select COPCs for groundwater:

- ORNL RSLs for Tap water (ORNL, 2009).
- MDEQ Tier 1 TRGs for Groundwater (MDEQ, 2002b)
- USEPA MCLs (USEPA, August 2006)

Screening levels based on the following criteria were used to select COPCs for surface water:

- ORNL RSLs for Tap water (ORNL, 2009).
- MDEQ Tier 1 TRGs for Groundwater (MDEQ, 2002b)

If the maximum concentration of a constituent exceeded any of these criteria, then the chemical was selected as a COPC and carried through the quantitative risk assessment.

Soil data were also compared to ORNL SSLs for migration from soil to groundwater (ORNL, 2009). The soil-to-groundwater SSLs were not used to select COPCs for quantitative risk evaluation but to provide an evaluation of potential impact of chemicals detected in soil on groundwater. Exceedances of the soil-to-groundwater SSLs are discussed in Section 6.3.2.

Lead as a COPC

Limited criteria are available to evaluate the potential risks associated with lead. There are no RBCs for this chemical because USEPA has not developed toxicity values [i.e., Cancer Slope Factors (CSFs), Reference Doses (RfDs)] for lead. However, recommended screening levels are available for lead in soil that are used to indicate the need for response activities.

Guidance from both the Office of Prevention, Pesticides, and Toxic Substances (OPPTS) and the Office of Solid Waste and Emergency Response (OSWER) recommend 400 mg/kg as the lowest screening level for lead-contaminated soil in a residential setting where children are frequently present (USEPA, July 1994b). OPPTS identifies 2,000 to 5,000 mg/kg as an appropriate range for areas where contact with soil by children in a residential setting is less frequent. A value of 400 mg/kg was used as the screening level for soil and sediment in the HHRA for Site 1.

The Safe Drinking Water Act (SDWA) Action Level (15 µg/L) was used as the screening level for lead in groundwater and surface water.

Essential Nutrients and Chemicals without Toxicity Criteria

The essential nutrients calcium, magnesium, potassium, and sodium were not identified as COPCs because these inorganic chemicals are naturally abundant in environmental matrices and are only toxic at

high doses. In addition, because of the lack of toxicity criteria, risk-based COPC screening levels are not available for some chemicals (i.e., phenanthrene, alpha- and gamma-chlordane, delta-BHC, endosulfan II, endosulfan sulfate, and endrin aldehyde). Appropriate surrogates were selected for some of these chemicals based on similar chemical structures. Pyrene was used as the surrogate for phenanthrene, chlordane was used as a surrogate for alpha- and gamma-chlordane, alpha-BHC was used as a surrogate for delta-BHC, endosulfan was used as a surrogate for endosulfan II and endosulfan sulfate, and endrin was used as a surrogate for endrin aldehyde.

Determination of Site-Related Chemicals (Background Evaluation)

No background sample data are available for soil, sediment, or surface water at NCBC Gulfport. Therefore, a background screen (i.e., a comparison of site-data to background data) was not used in the selection of COPCs for these media. One monitoring well sample and four DPT samples (plus one duplicate) were used as background data for COPC selection in the monitoring well and DPT groundwater datasets, respectively. A comparison of the maximum detected concentrations in both site and background datasets was conducted. Ideally, chemicals exceeding the risk-based screening levels but below site background concentrations would not be selected as COPCs. However, no chemicals were eliminated from COPC selection on the basis of background for Site 1.

A discussion of the chemicals identified as COPCs and the rationale for their selection are provided in the following sections.

6.3.2 COPC Selection for Surface Soil

This section presents the results of the COPC selection process for surface soil. Table 6-1 shows the results of the comparison of the maximum detected surface soil concentrations to screening levels based on the ORNL RSLs and MDEQ TRGs. The following chemicals were retained as COPCs for surface soil:

- One pesticide (dieldrin)
- Inorganics (aluminum, antimony, arsenic, cobalt, iron, manganese)

These constituents were identified as COPCs in surface soil because maximum concentrations exceeded one or more of the screening criteria. The maximum concentration for cobalt exceeded the ORNL residential soil criterion only. The maximum detected concentrations of aluminum, antimony, iron, and manganese exceeded the ORNL residential soil criteria and MDEQ Tier 1 TRGs for unrestricted land use but did not exceed the MDEQ Tier 1 TRGs for restricted land use. Both dieldrin and arsenic exceeded the ORNL residential criteria and both unrestricted and restricted MDEQ TRGs. The only organic compound selected as a COPC, dieldrin, was detected in 8 of 20 samples. Antimony was detected in only 2 of 21 samples, arsenic was detected in 19 of 21 samples, and cobalt was detected in only 1 of

21 samples. Aluminum, iron, and manganese were detected in all 21 surface soil samples. No site-specific background data are available for NCBC Gulfport for these chemicals. Therefore, a background screen was not used in the COPC selection process for surface soil. Note that the maximum concentrations for aluminum, antimony, cobalt, iron, and manganese did not exceed the associated MDEQ unrestricted and ORNL residential soil criteria if a noncancer benchmark of HI = 1 (i.e., the published screening level) were used instead of an hazard index (HI) = 0.1.

Although no site-specific background data were available for surface soil, the maximum concentrations of all inorganic COPCs for surface soil are well within naturally occurring background levels found in U.S. soil (Dragun, 1988). Additionally, the maximum concentration of arsenic (4.8 mg/kg), was within the range of background concentrations detected in the state of Mississippi (0.26 – 24.43 mg/kg) as determined in a study of arsenic in Mississippi soils performed by Mississippi State University in 2001 (Pettry and Switzer, 2001). Therefore, based on the scientific literature consulted, the concentrations of aluminum, antimony, arsenic, cobalt, iron, and manganese in surface soil at Site 1 may reflect background conditions..

The maximum concentrations of all chemicals detected in surface soil were also compared to USEPA Generic SSLs for migration from soil to air (inhalation), when available. As shown in Table 6-1, the maximum concentrations of all constituents were less than the inhalation SSLs. Therefore, potential risks from inhalation of chemicals detected in surface soil are expected to be minimal and this pathway is not evaluated further in the risk assessment.

Migration of Chemicals from Surface Soil to Groundwater

In Table 6-2, maximum concentrations in surface soil were also compared to the USEPA SSLs for the groundwater protection calculated using a dilution/attenuation factor of 1 (DAF = 1) (ORNL, 2009). The following chemicals were detected in the surface soils at maximum concentrations exceeding the COPC screening levels for contaminant migration from soil to groundwater:

- One volatile (tetrachloroethene)
- One semivolatile (benzo(b)fluoranthene)
- Pesticides/PCBs (aldrin, alpha-BHC, Aroclor-1260, beta-BHC, delta-BHC, dieldrin, heptachlor epoxide)
- Inorganics (antimony, arsenic, chromium, cobalt, copper, iron, lead, manganese, selenium)

These exceedances of the SSLs may indicate the potential for chemicals in soil to leach to groundwater and impact water quality. However, of the chemicals that exceeded the migration-to-groundwater SSLs,

only tetrachloroethene, aluminum, arsenic, chromium, iron, lead, and manganese were detected in groundwater samples collected at the site.

Tetrachloroethene was the only organic COPC selected for the migration to groundwater pathway that was also detected in site groundwater. This chlorinated volatile organic chemical was detected in only 2 of 21 surface soil samples, in 3 of 25 DPT groundwater samples, and in none of the monitoring well groundwater samples (although tetrachloroethene was detected in the background sample for the monitoring well data set). The soil data for organic chemicals suggests that the surface soils are not a significant residual contaminant source for groundwater contamination at Site 1. Further evidence of this is the fact that of the chlorinated VOCs detected in both the monitoring well and DPT samples (i.e., acetone, carbon disulfide, trichloroethene) and in the DPT samples alone (i.e., 2-butanone, chloromethane, cis-1,2-dichloroethene, tetrachloroethene), only 2-butanone and tetrachloroethene were detected in surface soil. Note that neither 2-butanone nor tetrachloroethene was detected in any monitoring well samples (although tetrachloroethene was detected in the monitoring well background sample).

All metals exceeding the migration from soil-to-groundwater SSLs except for antimony, cobalt, copper, and selenium were detected in groundwater samples. The maximum concentrations of all migration to groundwater COPCs for surface soils except for copper were within the range of soil background levels reported in the continental U.S. (Dragun, 1988). The maximum concentration of copper was within one order of magnitude of the upper limit for the typical range of soil concentrations and well within the extreme limits range reported for this element in native soil. Of the migration COPCs detected in site groundwater samples, arsenic, iron, and manganese were the only COPCs detected in groundwater. The maximum arsenic concentration exceeds the associated MCL, and the maximum iron and manganese concentrations exceed the associated secondary MCLs. However, as mentioned previously, soil concentrations of arsenic and manganese are within published background levels. The maximum concentration of iron in groundwater was also within published background levels (see Section 6.3.4). The available data indicate that groundwater quality at Site 1 has not been adversely impacted by the migration of metals from soil to groundwater.

An additional consideration is the fact that the SSLs (DAF = 1) are very conservative because a DAF of 1 assumes that no dilution or attenuation occurs as a chemical migrates from soil to groundwater. The USEPA in the Soil Screening Guidance (USEPA, 1996b) recommends that a DAF of 20 be used as the default DAF and states that "A DAF of 20 is protective for sources up to 0.5 acre in size". Further analyses presented in the SSL guidance indicate that it can be protective of larger sources as well. If SSLs for a DAF of 20 were calculated from the ORNL values presented in Table 6-2 (i.e., the ORNL SSLs were multiplied by a factor of 20), only the maximum concentrations of dieldrin, heptachlor epoxide, and

arsenic would exceed their respective SSLs. However, as discussed previously, the maximum concentration of arsenic detected in surface soil may be due to naturally occurring background levels.

6.3.3 COPC Selection for Subsurface Soil

This section presents the results of the COPC selection process for subsurface soil. The COPC screening process for subsurface soil and the results of the screening are presented in Table 6-3. The subsurface soil data set consists of 17 samples (and 2 duplicates) collected in May and October of 2008. The following chemicals were retained as COPCs for subsurface soil:

- One PCB (Aroclor-1242)
- Inorganics (aluminum, arsenic)

These constituents were identified as COPCs in subsurface soil because maximum concentrations exceeded one or more of the human health risk screening levels for residential land use (i.e., ORNL risk-based screening levels for residential soil and/or MDEQ Tier 1 TRGs for restricted and unrestricted land use). The maximum detected concentrations of Aroclor-1242, aluminum, and arsenic exceeded the ORNL residential soil RSLs and MDEQ Tier 1 TRGs for unrestricted land use but did not exceed the MDEQ Tier 1 TRGs for restricted land use. No site-specific background data are available for NCBC Gulfport for these chemicals. Therefore, a background screen was not used in the COPC selection process. The maximum concentration of Aroclor-1242 (2.4 mg/kg) is within one order of magnitude of the Toxic Substances Control Act soil cleanup level of 1 mg/kg, which applies to high occupancy areas (USEPA, November 2005). Additionally, Aroclor-1242 was detected in only one of seven samples. The maximum concentration of arsenic is well within naturally occurring background levels, and the maximum concentration of aluminum is slightly less than the lower limit for the typical range of background levels found in U.S. soil (Dragun, 1988). In addition, the maximum concentration of arsenic (2 mg/kg) is within the range of background concentrations determined in a study of arsenic in Mississippi soils (Pettry and Switzer, 2001). Based on a comparison of site data to the available background data presented in the scientific literature, the concentrations of aluminum and arsenic detected in subsurface soil at Site 1 may reflect background conditions.

The maximum concentrations were also compared to USEPA Generic SSLs for migration from soil to air (inhalation), when available. As shown in Table 6-3, the maximum concentrations of all constituents were less than the inhalation SSLs. Therefore, potential risks from inhalation of chemicals detected in soil are expected to be minimal and this pathway is not evaluated further in the risk assessment.

Migration of Chemicals from Subsurface Soil to Groundwater

In Table 6-4, maximum concentrations in subsurface soil were also compared to the ORNL SSLs for the groundwater projection calculated using a dilution/attenuation factor of 1 (DAF = 1) (ORNL, 2009). The following chemicals were detected in the subsurface soils at maximum concentrations exceeding the COPC screening levels for contaminant migration from soil to groundwater:

- One volatile (chloromethane)
- Pesticides/PCBs (alpha-BHC, Aroclor-1242, beta-BHC, delta-BHC, dieldrin, heptachlor epoxide)
- Inorganics (arsenic, chromium, iron)

These exceedances of the SSLs may indicate the potential for chemicals in soil to leach to groundwater and impact water quality. However, of the organic chemicals that exceeded the migration-to-groundwater SSLs, only chloromethane was detected in any site groundwater samples. Chloromethane was detected in 1 of 25 DPT groundwater samples only (and was not detected in any monitoring well samples). Additionally, chloromethane was only detected in 1 of 13 subsurface soil samples. Alpha-BHC was detected in 1 of 3 subsurface soil samples, and Aroclor-1242 was detected in 1 of 7 samples. Beta-BHC, delta-BHC, dieldrin and heptachlor epoxide have detection frequencies of 2/2, 1/3, 1/2, and 2/3, respectively. The soil data for organic chemicals suggests that the subsurface soils are not a significant residual contaminant source for groundwater contamination at Site 1. Further evidence of this is the fact that of the chlorinated VOCs detected in both the monitoring well and DPT samples (i.e., acetone, carbon disulfide, trichloroethene) and in the DPT samples alone (i.e., 2-butanone, chloromethane, cis-1,2-dichloroethene, tetrachloroethene), only carbon disulfide, 2-butanone, and chloromethane were detected in subsurface soil. Note that neither 2-butanone nor chloromethane was detected in any monitoring well samples; however, tetrachloroethene was detected in the monitoring well background sample.

All of the metals exceeding the migration from soil-to-groundwater SSLs were detected in groundwater samples. The maximum arsenic concentration exceeds the associated MCL, and the maximum iron concentration exceeds the associated secondary MCL. However, the maximum concentration of chromium does not exceed the associated MCL. The maximum concentrations of arsenic and chromium in subsurface soil are within the typical range of naturally occurring background levels, and the maximum concentration of iron is well below the lower limit for the typical range of naturally occurring background concentrations (Dragun, 1988). Of the inorganic migration to groundwater COPCs, arsenic and iron are also groundwater COPCs (chromium is not). However, the maximum concentration of arsenic in subsurface soil is less than/within typical U.S. background levels (as mentioned above), and arsenic and iron concentrations in groundwater are within U.S. background levels (see Section 6.3.4). The available

data indicate that groundwater quality at Site 1 has not been adversely impacted by the migration of metals from soil to groundwater.

An additional factor to consider is the fact that the SSLs (DAF=1) are very conservative because a DAF of 1 assumes that no dilution or attenuation occurs as a chemical migrates from soil to groundwater. The USEPA in the Soil Screening Guidance (USEPA, 1996b) recommends that a DAF of 20 be used as the default DAF and states that "A DAF of 20 is protective for sources up to 0.5 acre in size". Further analyses presented in the SSL Guidance indicate that a DAF of 20 can be protective of larger sources as well. If SSLs for a DAF of 20 were used in the comparisons presented in Table 6-4 (i.e., if the ORNL SSLs were multiplied by a factor of 20), chloromethane, dieldrin, chromium, and iron would not be selected as COPCs. As previously discussed, the concentrations of the metals detected in subsurface soil may be due to naturally occurring background concentrations.

6.3.4 COPC Selection for Groundwater

A comparison of the maximum detected DPT and monitoring well groundwater concentrations to screening levels based on the ORNL RSLs for tap water, MDEQ TRGs for groundwater, and USEPA MCLs is presented in Tables 6-5 and 6-6, respectively. The following chemicals were retained as COPCs for groundwater:

DPT samples:

- One volatile (tetrachloroethene)

Monitoring well samples:

- One semivolatile (naphthalene)
- Inorganics (aluminum, arsenic, iron, manganese, thallium)

For the DPT samples, the only COPC, tetrachloroethene, exceeded the ORNL RSL for tap water; the MDEQ groundwater TRG and the USEPA MCL were not exceeded. For the monitoring well samples, all COPCs except for naphthalene and arsenic exceeded the ORNL tap water RSLs, the USEPA MCLs or SMCLs, and the MDEQ TRGs. Naphthalene exceeded both the ORNL RSL and the MDEQ groundwater TRG; however, no MCL is available for naphthalene. Arsenic exceeded the ORNL tap water RSL only and was detected in only 2 of 21 groundwater samples.

Tetrachloroethene was detected in only 3 of 25 DPT groundwater samples and was not detected in any monitoring well samples. However, tetrachloroethene was also detected at a concentration of 2.5 ug/L in sample 01GW2301 from location GPT-01-23. Location GPT-01-23 was designated as upgradient and used as a background location. Naphthalene and arsenic were only detected in 1/21 and 2/21 samples, respectively. The remaining COPCs, aluminum, iron, and manganese, were detected in all (21/21) samples. High sample turbidity (>10 Nephelometric Turbidity Units) was reported for 4 of the 22 monitoring well locations (including the background location). However, no maximum concentrations of metals were reported from the wells with high turbidity. The maximum concentrations of arsenic (19.1 ug/L), iron (44,000 ug/L) and manganese (548 ug/L) are well within the typical background ranges reported in Dragun, 1988 (typical background range for arsenic is < 1.0 – 30 ug/L; typical background range for iron is 10 – 10,000 ug/L; typical background range for manganese is < 1.0 – 1000 ug/L). Aluminum (maximum concentration = 6320 ug/L) exceeded the upper limit of the typical groundwater background range published in Dragun, 1988 (upper limit: 1000 ug/L); however, the maximum concentration of aluminum was within one order of magnitude of the aforementioned upper limit.

Vapor Intrusion Pathway from Groundwater to Soils

Vapor Intrusion is the migration of volatile chemicals from the subsurface into overlying buildings. Volatile chemicals in buried wastes, soils, and/or contaminated groundwater can emit vapors which may migrate from subsurface strata and into indoor air spaces of overlying or adjoining buildings (USEPA, 2002a). Because volatile organic chemicals were detected in groundwater samples at Site 1, COPCs for groundwater were also selected based on a comparison of maximum detected concentrations to EPA screening designed to conservatively evaluate the potential for vapor intrusion into a building. The results of the comparison of maximum concentrations in groundwater to the USEPA Groundwater Volatilization Criteria are presented in Table 6-7 (DPT samples) and in Table 6-8 (monitoring well samples). The following chemical was detected in the groundwater at maximum concentrations exceeding the COPC screening levels for vapor intrusion from groundwater to soils and was retained as a COPC:

DPT samples:

- One volatile (trichloroethene)

Monitoring well samples:

- One volatile (trichloroethene)

Trichloroethene was selected as a COPC for the vapor intrusion pathway in both the DPT and the monitoring well groundwater samples. It should be noted that the maximum concentrations of

trichloroethene were less than the maximum background concentrations from the upgradient locations in both the DPT and monitoring well datasets. In addition, trichloroethene was only detected in 1 of 25 DPT samples and 1 of 21 monitoring well samples. However, conservatively, trichloroethene was retained as a COPC for the vapor intrusion pathway.

6.3.5 COPC Selection for Surface Water

A comparison of the maximum detected surface water concentrations to screening levels based on the ORNL RSLs for tap water and MDEQ TRGs for groundwater is presented in Table 6-9. The following chemicals were retained as COPCs for surface water:

- Inorganics (arsenic, iron)

These constituents exceeded the ORNL RSLs and MDEQ Tier 1 TRGs for groundwater. Note that the use of these criteria for surface water assumes that the surface water is used as a drinking source (i.e., potential receptors ingest 2 liters of water per day for 350 days per year). Groundwater criteria are used because surface water criteria for human health are currently not available. Using these criteria is extremely conservative because groundwater criteria assume that the water is a potential drinking source. However, it is unlikely that the water in Canal No. 1 downgradient of the site would ever be used as a source of drinking water.

6.3.6 COPC Selection for Sediment

This section presents the results of the COPC selection process for sediment. Table 6-10 shows the results for the comparison of the maximum detected sediment concentrations to screening levels based on the ORNL residential soil RSLs and MDEQ TRGs and summarizes the COPC selection process for sediment at Site 1. The following chemicals were retained as COPCs for sediment:

- Semivolatiles (Benzo(a)pyrene equivalents)
- Inorganics (aluminum, arsenic, iron, manganese)

These constituents were identified as COPCs for sediment because the maximum detected concentrations exceeded screening levels based on the ORNL RSLs for residential soil and MDEQ Tier 1 TRGs for unrestricted land use. In addition, the maximum concentration of arsenic also exceeded the MDEQ TRG for restricted soil. The use of the ORNL residential soil RSLs and MDEQ TRGs for soil to evaluate COPC concentrations in sediment is conservative because these criteria were established assuming residential land use scenarios (e.g., routine daily contact with soils). However, it is anticipated that a human receptor would be exposed to the sediments at Site 1 on a less frequent basis than is

assumed for a typical residential exposure to soil. Consequently, the use of soil criteria for COPC screening and risk estimation is likely to overestimate potential risks from exposure to sediment.

6.3.7 Summary

Table 6-11 summarizes the chemicals retained as COPCs for soil, groundwater, surface water, and sediment at Site 1. RAGS Part D tables for COPC selection are included in Appendix E-1.

6.4 EXPOSURE ASSESSMENT

The exposure assessment estimates the extent of human contact with COPCs by characterizing potentially exposed populations of individuals (i.e., receptors), identifying actual or potential pathways of exposure that are appropriate for each potential receptor, and estimating the extent of human exposure.

An exposure pathway identifies the exposure routes for potentially complete pathways at the site and describes the mechanism by which human receptors may come into contact with site-related COPCs. Exposure pathways are dependent on both current and future land use. An exposure pathway is defined by four elements (USEPA, 2005f):

- A source material and mechanism of constituent release to the environment.
- An environmental migration or transport medium (e.g., soil) for the COPCs.
- A point of potential human contact with the medium of interest (e.g., potential exposure to the contaminated soil).
- An exposure route (e.g., ingestion, dermal contact) at the point of contact.

An exposure pathway is considered "complete" if all elements are present. If complete and significant, these pathways are quantitatively evaluated in the risk assessment.

The potential for exposure at Site 1 is based on several factors, including current and future land uses, human activity patterns, site access controls, chemical behavior in the environment, and the presence of human receptors. Based on these variables, exposure scenarios are developed which characterize the potential for human exposure under both current and future site conditions. The future scenario accounts for potential or anticipated changes in land use and site characteristics that may alter exposure conditions at the site. The Exposure Assessment assumes that, in general, chemical compositions for environmental media are identical under current and future site conditions.

The Exposure Assessment presented in this section of the report describes the physical site setting and the potential receptors of concern, identifies the potential contaminant migration and exposure pathways,

defines the contaminant concentrations at the point of exposure, and presents the equations used to quantify exposure in terms of contaminant intake (dose). Appendix E-1 presents calculations of the chemical-specific intakes for all receptors and exposure pathways and Appendix E-2 contains example calculations of the chemical intakes.

A summary of the potentially significant exposure pathways identified for quantitative evaluation for Site 1 is provided in Table 6-12. Rationales for the selection or elimination of exposure pathways are presented in RAGS-Part D Table 1 in Appendix E-1.

6.4.1 Land Use and Site Access

Site 1 is a former landfill approximately 9 acres in size and located north of 7th street and east of Colby Avenue. The site has most recently been used as a mock disaster recovery training village and as a training facility.

As indicated in Section 2 of the work plan, solid wastes along with some liquid wastes, including waste fuel, oil, solvents, paint thinners, were disposed of at the site during the site landfill's operation between 1942 and 1948. Liquid wastes were reportedly transported to the site in 55-gallon drums and buried. The waste disposal area was covered with soil when disposal activities ended in 1948, and additional fill has been added since then due to parking lot and road construction. As mentioned above, Site 1 has most recently been used as a training facility. Access to the site is not restricted and older children could potentially play on the site.

6.4.2 Conceptual Site Model (CSM)

The development of a CSM is an essential component of the exposure assessment. The CSM integrates information regarding the physical characteristics of the site, exposed populations, sources of contamination, and contaminant mobility (fate and transport) to identify potential exposure routes and receptors to be evaluated in the risk assessment. A well-developed CSM will allow for a better understanding of the risks at a site and will aid risk managers in identifying the potential need for both environmental sampling and remediation. The site-specific CSM for Site 1 is presented in this section.

Table 6-12 presents a summary of the exposure pathways that are addressed quantitatively for each human receptor. The CSM depicts the relationships among the following elements:

- Site sources of contamination
- Contaminant release mechanisms
- Transport/migration pathways

- Exposure routes/pathways, and
- Potential receptors

These elements of the CSM for Site 1 are discussed in the following sections.

6.4.2.1 Site Sources of Contamination/Release Mechanisms/Migration Pathways

Previous investigations have identified that liquid and solid wastes (e.g., paint disposal waste containing metals) were landfilled at Site 1. Contaminant migration (e.g., migration from wastes/soils to groundwater) has occurred as a consequence of the leaching of the waste materials interred at the landfill.

Based on historical site data and sampling, the following parameters are among the site-related chemical contaminants known to be present or potentially present in environmental media at Site 1:

- VOCs (e.g. vinyl chloride, trichloroethene)
- SVOCs (e.g. benzo(a)pyrene equivalents)
- Pesticides/PCBs (alpha-BHC, dieldrin)
- Metals (e.g. arsenic, iron)

The topography at Site 1 is relatively flat and the ground surface is primarily fill dirt and native sand with predominantly grassy vegetative cover. Roads and structures from the disaster recovery training area are present at the site. Surface water drainage at the site is to the west to the ditch adjacent to Colby Avenue, which drains into Canal No. 1. Canal No. 1 conveys surface water north where it exits the base through a culvert under 28th Street. The depth to groundwater at Site 1 is approximately 3 feet bls. The surface material is a fine to medium sand with minor silt, which is unlikely to prevent infiltration into the landfill.

Potential contaminant release mechanisms at Site 1 include the mobilization of contaminants from wastes buried in subsurface soil to local groundwater by infiltration of precipitation and dissolution of soluble contaminants. Soluble constituents can then be transported to the shallow aquifer by rainwater infiltration, at which point they may continue to move hydrologically downgradient. It is also possible that contaminants may migrate vertically. It should be noted that, drinking water supply wells in this area are typically screened at approximately 500 feet bls, and a significant confining layer is present at about 150 to 250 feet bls. This confining layer was identified and reported by the Office of Land and Water Resources in Public Water Supply (PWS). Report PWS-ID: 240005 Source ID: 12 (1993) and pertains to wells installed within 2 miles of Site 1.

Contaminant transport is affected by the chemical and physical properties of both the soil and the contaminants. Figure 3-2 presents the site conceptual model that illustrates these potential contaminant migration pathways for Site 1. Another potential contaminant migration mechanism for Site 1 is the discharge of the local, shallow groundwater to drainage ditches on the site. If disturbed, contaminants in surface soil could also migrate from the site as consequence of airborne particulate emissions or volatilization of VOCs.

6.4.2.2 Potential Receptors

NCBC Gulfport is an active facility and will remain active for the foreseeable future. Site 1 is currently a training facility and is expected to be used for this purpose in the foreseeable future. Access to the site is not restricted and older children could potentially play on the site. Because the site is currently active and access is not limited, the baseline HHRA considered receptor exposure under residential, industrial, and trespasser/recreational user land use scenarios. Based on current and potential future land use, the following potential receptors described below and in Table 6-12 may be exposed to contaminated environmental media within the study area.

Construction/Excavation Workers – Receptors under future land use. Construction activities are currently planned for the study area. Construction workers are considered for future land use only and are assumed to be exposed to surface/subsurface soil and sediment (by ingestion and dermal contact), groundwater (by dermal contact and inhalation of volatiles), surface water (by ingestion and dermal contact), and air (by fugitive dust and vapors if subsurface soil is excavated).

Site Commercial/Industrial Workers – Receptors under current and future land use. This includes adult military and civilian personnel working daily at Site 1. These workers are assumed to be exposed to surface soil, subsurface soil, and sediment (by ingestion and dermal contact) and to surface water (by dermal contact and ingestion).

On-Site Maintenance Workers – Receptors under current and future land use. This receptor scenario includes adult military and civilian personnel assigned to routine maintenance/security tasks for the training facility and base security. This receptor is assumed to be exposed to surface soil, subsurface soil, and sediment (by ingestion and dermal contact) and to surface water (by dermal contact and ingestion).

Recreational Users/Trespassers (Adolescent and Adult) – Receptors under current and future land use. This receptor is assumed to be exposed to surface soil, subsurface soil, and sediment (by ingestion and dermal contact) and to surface water (by dermal contact and ingestion).

Residents (Child and Adult) – Receptors under future land use. Although a future on-site residential scenario is highly unlikely, a future residential scenario is typically evaluated in a risk assessment for decision-making purposes. It is assumed that a hypothetical resident may be exposed to surface soil, subsurface soil, and sediment (by ingestion and dermal contact), groundwater (by ingestion, dermal contact, and inhalation of volatiles), and surface water (by dermal contact and ingestion). Because the potential for residential housing on land adjacent to the site cannot be entirely discounted, off-site residents are considered plausible receptors under future land use. Conservatively, off-site residents are assumed to be exposed to site contaminants in the same manner as on-site residents would be.

6.4.3 Central Tendency Exposure vs. Reasonable Maximum Exposure

Traditionally, exposures evaluated in the HHRA were based on the concept of a reasonable maximum exposure (RME) only, which is defined as "the maximum exposure that is reasonably expected to occur at a site" (USEPA, 1989). However, recent risk assessment guidance (USEPA, 1992) indicates the need to address an average case or central tendency exposure (CTE).

To provide a full characterization of potential exposure, both RME and CTE are evaluated for Site 1. The available guidance (USEPA, 1993d) concerning the evaluation of CTE is limited and, at times, vague. Therefore, professional judgment was exercised when defining CTE conditions for a particular receptor. Exposure factors and assumptions for the CTE are presented and discussed in Section 6.4.5.

6.4.4 Exposure Point Concentrations

The exposure point concentration (EPC), which is calculated for COPCs only, is a reasonable maximum estimate of the chemical concentration that is likely to be contacted over time by a receptor and is used to calculate estimated exposure intakes.

The following guidelines were used to calculate the EPCs for soil, groundwater, surface water and sediment at Site 1:

- If a soil, surface water, or sediment dataset contained fewer than 10 samples, the EPC for the RME and CTE cases was defined as the maximum detected concentration.
- If a soil, surface water, or sediment dataset contained 10 or more samples, the 95-percent upper confidence limit (UCL) on the arithmetic mean, which was based on the distribution of the data set, was selected as the EPC for the RME and CTE cases. EPCs were calculated following USEPA's Calculating UCLs for EPCs at Hazardous Waste Sites (USEPA, 2002c) using the USEPA's ProUCL software and guidance (USEPA, 2007a). In general, the concentration

selected for the EPC is the value recommended by the ProUCL software, subject to final review by a statistician.

- USEPA Region IV (USEPA, 2000a) makes an exception to the use of the UCL as the EPC for groundwater. According to the Region IV guidance, groundwater EPCs should be the arithmetic average of the wells in the highly concentrated area of the plume. However, evaluating the locations of positive detections for groundwater COPCs did not reveal a well-defined contaminant plume. Therefore, the maximum detected concentrations were used as EPCs for groundwater COPCs. Using maximum concentrations is a more conservative approach than using the average concentrations from wells of the area of highest concentration because it assumes that receptors are exposed to the greatest concentration at the site for the entire exposure duration, which is unlikely.

Prior to statistical analysis (e.g., distribution analyses, the calculation of basic descriptive statistics and UCLs, etc.), non-detect results were assigned a value of one-half the sample quantitation limit. Rejected values ("R" flagged during data validation) were eliminated from further consideration because they were regarded as unreliable. Estimated and biased values (flagged "J") were used at the reported value with the realization that some uncertainty is associated with the reported numerical result. When duplicate sample pairs are reported, the sample and duplicate were considered as two separate samples when determining the minimum and maximum detected concentrations, but the average of the original and duplicate samples was used for all calculations.

USEPA Region IV has adopted a Toxicity Equivalence Factor (TEF) approach to evaluate potentially carcinogenic PAHs. These TEFs are based on the relative potency of each compound relative to that of benzo(a)pyrene. The TEFs are used to convert each individual carcinogenic PAH concentration into an equivalent concentration of benzo(a)pyrene. Using individual benzo(a)pyrene equivalent concentrations, an EPC for carcinogenic PAHs is derived. If all the carcinogenic PAHs were not detected in a sample, then one half the sample quantitation limit for benzo(a)pyrene was used as the equivalent concentration for that sample. The TEF approach was used for the sediment dataset only, because in all other media carcinogenic PAHs were either not detected or only one carcinogenic PAH was detected.

The EPCs for the chemicals identified as COPCs in environmental media at Site 1 are presented in Table 6-13 and the RAGS-Part D Tables in Appendix E-1.

6.4.5 Intake Estimation Methods and Exposure Parameters

To determine potential human health risks associated with Site 1, an estimate of chemical intake was made in accordance with current USEPA guidance. Exposure parameters and exposure concentrations are used

to derive estimates of chemical intake for each exposure route, pathway, and receptor. The resulting chemical intakes are integrated with the toxicity factors discussed in Section 6.5 to develop quantitative risk estimates for potential receptors at the site. Intakes for the identified potential receptor groups are calculated using current USEPA risk assessment guidance (USEPA, 1989; 2004c) and presented in the risk assessment spreadsheets (Appendix E-1). In accordance with current USEPA guidance chemical intakes (and risks) are estimated for both the CTE and RME conditions. Values of exposure parameters used to quantify exposure for each receptor are presented in Tables 6-14 and 6-15 for the RME and CTE, respectively.

The following sections present the equations used to estimate chemical intakes for the exposure routes identified for quantitative evaluation. Example calculations for estimated intakes are provided in Appendix E-2. Calculations of estimated intakes for all potential receptors are contained in Appendix E-1.

6.4.5.1 Exposure to COPCs in Soil/Sediment

The HHRA assumes that site maintenance workers, construction/excavation workers, industrial workers, trespassers (adults and adolescents), and potential future residents may come into contact with chemicals detected in soil or sediment at the site. Soil/sediment exposure routes are incidental ingestion and dermal contact. A description of the methods and assumptions used to quantify soil and sediment exposure follows.

Incidental Ingestion of Soil/Sediment. Intakes associated with soil ingestion are estimated using the following equation (USEPA, 1989):

$$\text{Intake} = \frac{C \times IR \times FI \times EF \times ED \times CF}{BW \times AT}$$

where:

Intake	=	ingestion intake
C	=	chemical concentration in soil or sediment (mg/kg)
IR	=	soil/sediment ingestion rate (mg/day)
FI	=	fraction ingested from contaminated source (unitless)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
CF	=	conversion factor (1 x 10 ⁻⁶ kg/mg)
BW	=	body weight (kg)
AT	=	averaging time (days)
		for noncarcinogens: 365 days/year x ED
		for carcinogens: 365 days/year x 70 years

Incidental ingestion rates for potential receptors are based on the recommendations contained in current risk guidance for the evaluation of the CTE and RME (USEPA, 1993d). Children are assumed to ingest more soil than adults as a result of normal behavior such as purposely placing dirty objects in their mouth and unintentional hand-to-mouth activities. The following ingestion rates for the CTE are used to quantify risks in this HHRA: 100 mg/day for child residents, 50 mg/day for adult residents, adult and adolescent trespassers, industrial workers, and site maintenance workers. Construction workers are expected to have higher than average soil ingestion rates (165 mg/day) because of the increased potential for soil contact typically associated with ground-intrusive activities (USEPA, 2002c). For the RME, the following ingestion rates are used to quantify risks: 200 mg/day for child residents, 100 mg/day for adult residents, adolescent trespassers, and site maintenance workers, 50 mg/day for adult trespassers and industrial workers, and 330 mg/day for construction workers. The fraction of soil ingested from the contaminated source is conservatively assumed to be 1.0 for both the CTE and RME.

Site maintenance workers are assumed to be exposed to soil 12 days/year for 9 years for the CTE and 24 days/year for 25 years for the RME. Construction workers are assumed to be exposed to soil 250 days/year for one year for the RME and 125 days/year for one year for the CTE. Industrial workers are assumed to be exposed to soil 250 days/year for 25 years for the RME and 219 days/year for 9 years for the CTE. Adolescent trespassers are assumed to be exposed to soil 15 days/year for 11 years for the CTE and 30 days/year for 11 years for the RME. Adult trespassers are assumed to be exposed to soil 15 days/year for 19 years for the CTE and 30 days/year for 19 years for the RME. Residents are assumed to be exposed to soil 234 days per year for 9 years (2 years child + 7 years adult) for the CTE and 350 days/year for 30 years (6 years child + 24 years adult) for the RME.

For exposure to sediment, site maintenance workers and industrial workers are assumed to be exposed 24 days/year for the RME and 12 days/year for the CTE. Adolescent trespassers are assumed to be exposed to sediment 30 days/year for the RME and 15 days/year for the CTE. Adult trespassers are assumed to be exposed to sediment 30 days/year for the RME and 15 days/year for the CTE. Construction/excavation workers and future residents are assumed to be exposed to sediment 30 days/year for the RME and 15 days/year for the CTE.

Adults (workers, trespassers, and residents) are assumed to weigh 70 kilograms (kg). The body weight for adolescent trespassers (ages 6 to 16) is specified as 45 kg, and the weight of the child resident (0 to 6 years) is assumed to be 15 kg.

Exposure parameters for the soil ingestion route are summarized in Tables 6-14 and 6-15.

Dermal Absorption of Soil/Sediment. Doses for dermal contact with soil and sediment are estimated using the following equation (USEPA, 2004c):

$$DEX = \frac{C \times SA \times AF \times ABS \times EF \times ED \times CF}{BW \times AT}$$

where:

DEX	=	dermal dose (mg/kg-day)
C	=	chemical concentration in soil or sediment (mg/kg)
SA	=	skin surface area available for contact (cm ² /day)
AF	=	soil-to-skin adherence factor (mg/cm ²)
ABS	=	absorption factor (unitless)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
CF	=	conversion factor (1 x 10 ⁻⁶ kg/mg)
BW	=	body weight (kg)
AT	=	averaging time (days)
		for noncarcinogens: 365 days/year x ED
		for carcinogens: 365 days/year x 70 years

Exposed surface areas of the body available for dermal contact are determined for each receptor based on assumed human activities and clothing worn during exposure events. USEPA guidance (USEPA, 1997c; 2004c) was used to develop the default assumptions concerning the amount of skin surface area available for contact for a receptor. The skin surface areas used in risk assessment calculations and the rationale for the selection of the surface areas are defined as follows:

- For adolescent trespassers, 25 percent of the total surface area is assumed to be available for contact with soil. This skin surface area is assumed to be 3,250 square centimeters (cm²) for the RME and CTE scenarios (USEPA, 1997c).
- The head, hands, and forearms of site maintenance workers, industrial workers, and excavation/construction workers are assumed to be available for contact (assuming that they wear a short-sleeved shirt, long pants, and shoes). As recommended in RAGS Part E (USEPA, 2004c), this skin surface area is assumed to be 3,300 cm² for the RME and CTE scenarios. This value represents the average of the 50th percentile areas of males and females more than 18 years old.
- For adult trespassers and adult residents assumed to be exposed to soil and sediment, the exposed surface areas available for contact are the values for the adult skin surface area for

exposure to soil recommended in RAGS Part E (USEPA, 2004c), 5,700 cm² for the RME and for the CTE. This skin area assumes that the head, hands, forearms, and lower legs of the adult are available for contact.

- For child residents assumed to be exposed to soil and sediment, the exposed surface areas available for contact are the values for child skin surface area for exposure to soil recommended in RAGS Part E (USEPA, 2004c), 2,800 cm² for the RME and for the CTE. This skin area assumes that the head, hands, forearms, lower legs, and feet of the child are available for contact.

The soil to skin adherence factors and chemical-specific dermal absorption factors provided in RAGS Part E (USEPA, 2004c) are used to evaluate risks from exposure to soil. The following soil adherence factors are used for the RME and CTE exposure scenarios:

- Industrial and site maintenance workers – 0.2 (mg/cm²) for the RME and 0.02 mg/cm² for the CTE (Exhibit 3.5, USEPA, 2004c).
- Construction workers – 0.3 mg/cm² for the RME and 0.1 mg/cm² for the CTE (Exhibit 3.3, USEPA, 2004c).
- Adult trespassers and adult residents – 0.07 mg/cm² for the RME and 0.01 mg/cm² for the CTE (Exhibit 3.5, USEPA, 2004c).
- Adolescent trespassers – 0.4 mg/cm² for the RME and 0.04 mg/cm² for the CTE (Exhibit 3.3, USEPA, 2004c).
- Child residents – 0.2 mg/cm² for the RME and 0.04 mg/cm² for the CTE (Exhibit 3.5, USEPA, 2004c).

For the constituents identified as COPCs in soil and sediment, the following dermal absorption factors are used in this HHRA (USEPA, July 2004):

- PAHs - 0.13
- Dieldrin – 0.1
- Aroclor-1242 – 0.14

- Arsenic – 0.03
- Other Metals and Volatiles - not evaluated for dermal contact with soil (RAGS-Part E does not provide absorption factors for metals other than arsenic and cadmium).

The same exposure frequencies, exposure durations, and body weights previously identified for ingestion route of exposure are used to characterize dermal contact with soil and sediment. Exposure parameters for the soil/sediment dermal absorption route are summarized in Tables 6-14 and 6-15.

6.4.5.2 Exposure to Groundwater

Future residential and construction worker, scenarios were developed for exposure to groundwater primarily using current risk assessment guidance (USEPA, December 1989, May 1993, and July 2004). The applicable groundwater exposure frequencies, exposure durations, and body weights for residents are identical to those previously identified for soil contact.

Ingestion of Groundwater

Intakes for direct ingestion of groundwater are estimated using the following general equation (USEPA, 1989):

$$\text{Intake} = \frac{C \times IR \times EF \times ED}{BW \times AT}$$

where:

Intake	=	ingestion intake (mg/kg-day)
C	=	chemical concentration in groundwater (mg/L)
IR	=	ingestion rate (L/day)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
BW	=	body weight (kg)
AT	=	averaging time (days)
		for noncarcinogens: 365 days/year x ED
		for carcinogens: 365 days/year x 70 years

Water ingestion rates for the adult resident are specified as 1.4 L/day (CTE) and 2.0 L/day (RME). For the child resident, water ingestion rates are 0.66 L/day (CTE) and 1.5 L/day (RME).

Dermal Contact with Groundwater

The following equations are used to estimate doses resulting from dermal contact with groundwater (USEPA, 2004c):

$$DAD = \frac{DA_{event} \times EV \times EF \times ED \times A}{BW \times AT}$$

where:

DAD	=	dermal dose (mg/kg-day)
DA _{event}	=	dose per event (mg/cm ² /event)
EV	=	event frequency (events/day)
ED	=	exposure duration (years)
EF	=	exposure frequency (days/year)
A	=	skin surface area available for contact (cm ²)
BW	=	body weight (kg)
AT	=	averaging time (days)

for noncarcinogens: 365 days/year x ED
for carcinogens: 365 days/year x 70 years

The absorbed dose per event (DA_{event}) is estimated using a nonsteady-state approach for organic compounds and a traditional steady-state approach for inorganics. The following equations apply for organic chemicals:

$$\text{If } t_{event} < t^*, \text{ then: } DA_{event} = 2 \times FA \times K_p \times C \times CF \times \left(\frac{\sqrt{6 \tau t_{event}}}{\pi} \right)$$

$$\text{If } t_{event} > t^*, \text{ then: } DA_{event} = FA \times K_p \times C \times CF \times \left(\frac{t_{event}}{1+B} + 2 \tau \left(\frac{1+3B+3B^2}{(1+B)^2} \right) \right)$$

where:

t _{event}	=	duration of event (hour/event)
t [*]	=	time it takes to reach steady-state conditions (hour)
FA	=	fraction absorbed (dimensionless) – chemical specific
K _p	=	permeability coefficient from water through skin (cm/hour)
C	=	concentration of chemical in surface water (mg/L)
τ	=	lag time (hour)
π	=	constant (unitless; equal to 3.1416)
CF	=	conversion factor (1x10 ⁻³ L/cm ³)
B	=	partitioning constant derived by Bunge Model (dimensionless)

Values for the chemical-specific parameters (t^* , K_p , τ , and B) are obtained from the current dermal guidance (USEPA, 2004c, Exhibit B-3) and are presented in Appendix E-1. If published values are not available for a particular compound, they were calculated using equations provided in the USEPA dermal guidance.

The following equation was used to estimate DA_{event} for inorganics:

$$DA_{\text{event}} = K_p \times C \times t_{\text{event}}$$

The recommended default value of 1×10^{-3} was used for inorganic chemicals, unless chemical-specific data were available in RAGS-Part E.

Whole body contact was assumed for dermal contact with groundwater for the residential scenario. A value of $18,000 \text{ cm}^2$ is used for the adult resident for both the CTE and RME scenario (USEPA, 2004c). For the child resident, a skin surface area of $6,600 \text{ cm}^2$ is used for the CTE and RME scenarios. For excavation/construction workers exposed to groundwater, the exposed skin surface area is assumed to be 3300 cm^2 (USEPA, 1997c). This assumes that approximately 18 percent of the total body surface area is available for contact with groundwater. The estimated exposure time (i.e., length of shower or bath) is 15 minutes for the CTE and 20 minutes for the RME. Construction/excavation workers are assumed to be exposed to shallow groundwater in a trench 4 hours/day for the RME and 2 hours/day for the CTE. An event frequency of one per day is assumed for the CTE and RME (residents were assumed to take one shower or bath per day).

Exposure parameters for exposure to groundwater are summarized in Tables 6-14 and 6-15.

Inhalation of Volatiles in Groundwater

Groundwater exposure may also result in chemical intake through inhalation if the water resource is used as a domestic water supply or is exposed during construction activities, and VOCs are present in the groundwater. This exposure route is plausible for residential receptors that may be exposed while showering, bathing, washing dishes, etc., or for construction workers contacting shallow groundwater during excavation activities. Per USEPA Region IV risk assessment protocol, it will be assumed that the chemical intake resulting from a showering exposure is equivalent to the chemical intake from ingestion of two liters of water.

Inhalation of Volatiles via Vapor Intrusion from Groundwater into Indoor Air

Volatilization of chemicals from groundwater into indoor air may occur, thereby exposing individuals inside buildings or dwellings. Therefore, potential risks associated with chemical concentrations in indoor

air as a result of vapor migration from impacted groundwater are evaluated for industrial workers and hypothetical future residents. The Johnson and Ettinger Vapor Intrusion Model (USEPA, 2004b) is used to determine the indoor air concentration of a chemical that is present in groundwater. The model assumes that vapors of volatile chemicals are emitted from groundwater, migrate through surface and subsurface soil, through cracks in the building foundation, and accumulate in air inside buildings. The Johnson and Ettinger model assumes that residential dwellings have been constructed on the site and that the dimensions of these buildings and ventilation rates are typical of residential dwellings in the United States. The results of the vapor intrusion evaluation are presented in the uncertainty section (Section 6.7.3.6) due to the uncertainty associated with the EPCs generated using the Johnson and Ettinger volatilization model. Input values and results of the vapor intrusion model are included in Appendix E-3.

Exposure of Workers to Volatiles in a Construction/Utility Trench

Construction workers may be exposed to COPCs that have volatilized from groundwater when excavation exposes the shallow groundwater table. Construction worker exposure associated with the inhalation route was estimated in the following manner (USEPA, 2009):

$$EC = \frac{(C_{air})(ET)(EF)(ED)}{(AT)}$$

where:

EC	=	exposure concentration (mg/m ³)
C _{air}	=	concentration of chemical in air (mg/m ³)
ET	=	exposure time (hours/day)
EF	=	exposure frequency (days/yr)
ED	=	exposure duration (yr)
AT	=	averaging time (days); for noncarcinogens, AT = ED x 365 days/yr x 24 hours/day; for carcinogens, AT = 70 yr x 365 days/yr x 24 hours/day

The same exposure frequency and exposure time used to estimate intake from dermal contact with groundwater were used to evaluate intake from inhalation of VOCs from groundwater during construction activities.

There are no well-established models available for estimating migration of volatiles from groundwater into a construction/utility trench. To estimate the EPC for air in a construction trench, this HHRA uses the approach suggested by the Virginia Department of Environmental Quality (VDEQ, 2004), which is based

on a combination of a vadose zone model (to estimate volatilization of gases from contaminated groundwater into a trench) and a box model (to estimate dispersion of the contaminants from the air inside the trench into the above-ground atmosphere). The VDEQ methodology is described in the following paragraphs.

The airborne concentration of a contaminant in a trench can be estimated using the following equation:

$$C_{\text{air}} = C_{\text{GW}} \times \text{VF}$$

where:

C_{air} = air concentration of contaminant in the trench $\mu\text{g}/\text{m}^3$

C_{GW} = concentration of contaminant in groundwater $\mu\text{g}/\text{L}$

VF = volatilization factor L/m^3

It is assumed that a construction project could result in an excavation of 15 feet bls or less. If the depth to groundwater at a site is less than 15 feet, the VDEQ model assumes that a worker would encounter groundwater when digging an excavation ditch or a trench. The worker would then have direct exposure to the groundwater. The worker would also be exposed to contaminants in the air inside the trench that would result from volatilization from the groundwater pooling at the bottom of the trench.

The following equation is used to calculate the volatilization factor (VF) for a trench less than 15 feet deep:

$$\text{VF} = (K_i \times A \times F \times 10^{-3} \times 10^4 \times 3,600) / (\text{ACH} \times V)$$

where:

K_i = overall mass transfer coefficient of contaminant (cm/s)

A = area of the trench (m^2)

F = fraction of floor through which contaminant can enter (unitless)

ACH = air changes per hour (h^{-1}) = 360 h^{-1}

V = volume of trench (m^3)

10^{-3} = conversion factor (L/cm^3)

10^4 = conversion factor (cm^2/m^2)

3,600 = conversion factor (seconds/hour)

Studies of urban canyons suggest that if the ratio of trench width, relative to wind direction, relative to trench depth is less than or equal to 1, a circulation cell or cells will be set up within the trench that limits

the degree of gas exchange with the atmosphere and, based upon measured ventilation rates of buildings, the air changes per hour (ACH) is assumed to be 2. Based upon the ratio of trench depth to the average wind speed, if the ratio of trench width to trench depth is greater than 1, the air exchange between the trench and above-ground atmosphere is not restricted, and the ACH is assumed to be 360. The exposure assessment performed for these HHRAs assumes the width-to-trench depth ratio is greater than 1; therefore, the ACH is set at 360.

K_i is calculated using the following equation:

$$K_i = 1 / \{ (1/k_iL) + [(RT) / (H_i k_iG)] \}$$

where:

K_i	=	overall mass transfer coefficient of containment (cm/s)
k_iL	=	liquid-phase mass transfer coefficient of i (cm/s)
R	=	ideal gas constant (atm-m ³ /mole-°K) = 8.2×10^{-5}
T	=	average system absolute temperature (°K) (Default = 298°K)
H_i	=	Henry's Law constant of i (atm-m ³ /mole)
k_iG	=	gas-phase mass transfer coefficient of i (cm/s)

The formulas for calculating k_iL and k_iG are as follows:

$$k_iL = (MWO_2/MW_i)^{0.5} \times (T/298) \times kL_{O_2}$$

where:

k_iL	=	liquid-phase mass transfer coefficient of component i (cm/s)
MWO_2	=	molecular weight of oxygen (g/mole)
MW_i	=	molecular weight of component i (g/mole)
kL_{O_2}	=	liquid-phase mass transfer coefficient of oxygen at 25°C (cm/s) = 0002 cm/s

$$k_iG = (MWH_2O/MW_i)^{0.335} \times (T/298)^{1.005} \times kG_{H_2O}$$

where:

- k_iG = gas-phase mass transfer coefficient of component i (cm/s)
 MW_{H_2O} = molecular weight of water (g/mole)
 k_{G,H_2O} = gas-phase mass transfer coefficient of water vapor at 25°C (cm/s)=
 0.833 cm/s (Superfund Exposure Assessment Manual, USEPA, 1988).

Chemical properties were obtained from the Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (USEPA, 2002b).

6.4.5.3 Exposure to Surface Water

Direct contact with surface water may occur while potential receptors are involved in work or play at Site 1. Since surface water is only present on the site during and immediately after storm events, swimming is not likely to occur on Site.1. Therefore, this scenario conservatively assumes that receptors are exposed by incidental ingestion and dermal contact while wading. Ingestion of surface water is conservatively evaluated but it is not expected to be a significant exposure pathway for the wading scenario.

Incidental Ingestion of Surface Water

Potential receptors may incidentally ingest small amounts of surface water while wading in Canal No. 1. Intakes associated with ingestion of surface water were evaluated using the following equation (USEPA, 1989):

$$\text{Intake}_{wi} = \frac{(C_{wi})(IR_w)(ET)(EF)(ED)}{(BW)(AT)}$$

where:

- Intake_{wi} = intake of chemical "i" from water (mg/kg/day)
 C_{wi} = concentration of chemical "i" in water (mg/L)
 IR_w = ingestion rate for surface water (L/hour)
 ET = exposure time for surface water (hour/day)
 EF = exposure frequency (days/year)
 ED = exposure duration (year)
 BW = body weight (kg)
 AT = averaging time (days);
 for noncarcinogens, $AT = ED \times 365$ days/year;
 for carcinogens, $AT = 70$ years \times 365 days/year

An ingestion rate of 0.01 L/hour is used for adults and adolescents under CTE and RME conditions and 0.05 L/hour for children (USEPA, 2000a). Exposure times, which are based on professional judgment with consideration of anticipated activities, are specified as 1.0 hour/day for the CTE and RME. Because surface water and sediment exposure coincides, the same exposure durations and frequencies previously identified for exposure to sediment are used to evaluate inadvertent surface water ingestion. Exposure factor values for ingestion of surface water are summarized in Tables 6-14 and 6-15.

The same equations used to assess dermal exposure to groundwater are used to evaluate dermal exposure to surface water. The following skin surface areas are used for evaluating dermal exposure to surface water: 3300 cm² is used as the exposed surface area for site maintenance workers, excavation/construction workers, and industrial workers, for the CTE and RME; 3,250 cm² is used for adolescent trespassers and 2800 cm² is used as the exposed skin surface area for child residents. 5700 cm² is used for adult trespassers and adult residents. The same exposure times, frequencies, and durations used to assess ingestion of surface water were used to estimate intakes for dermal exposure.

6.4.5.4 Exposures to Lead

Lead was not selected as a COPC for direct contact scenarios in the environmental media at Site 1 and therefore is not anticipated to pose a threat to human health through direct contact pathways. Lead was only selected as a COPC for the surface soil migration to groundwater pathway, and the migration to groundwater pathway is not evaluated quantitatively in this HHRA. Therefore, the methodology for evaluating exposures to lead is not presented.

6.5 TOXICITY ASSESSMENT

Oral and inhalation RfDs and CSFs used in the HHRA for Site 1 were obtained from the following primary literature sources:

- IRIS (online at <http://cfpub.epa.gov/ncea/iris/index.cfm>).
- USEPA Provisional Peer Reviewed Toxicity Values – The Office of Research and Development/National Center for Environmental Assessment Superfund Health Risk Technical Support Center develops Provisional Peer Reviewed Toxicity Values on a chemical-specific basis when requested by USEPA's Superfund program.
- Other Toxicity Values – These sources include but are not limited to California Environmental Protection Agency (Cal EPA) toxicity values, the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, and the Annual Health Effects Assessment Summary Tables (HEAST) (USEPA, 1997b).

Although RfDs and CSFs can be found in several toxicological sources, USEPA's IRIS on-line database is the preferred source of toxicity values. This database is continuously updated and values presented have been verified by USEPA. The ORNL RSL Table (April 15, 2009) was also used as a source of toxicity criteria when the criteria were not available from the aforementioned references. The RfDs and CSFs for the constituents selected as COPCs for Site 1 are presented in Tables 6-16 through 6-19.

6.5.1 Toxicity Criteria for Dermal Exposure

RfDs and CSFs found in literature are typically expressed as administered doses; therefore, these values are considered inappropriate for estimating the risks associated with dermal routes of exposure. Oral dose-response parameters based on administered doses must be adjusted to absorbed doses before the evaluation of estimated dermal exposure intakes is made.

The adjustment from administered to absorbed dose was made using chemical-specific absorption efficiencies published in available guidance [i.e., USEPA, 2004c (the primary reference), IRIS, ATSDR toxicological profiles, etc.] and the following equations:

$$\begin{aligned} \text{RfD}_{\text{dermal}} &= (\text{RfD}_{\text{oral}})(\text{ABS}_{\text{GI}}) \\ \text{CSF}_{\text{dermal}} &= (\text{CSF}_{\text{oral}}) / (\text{ABS}_{\text{GI}}) \end{aligned}$$

where: ABS_{GI} = absorption efficiency in the gastrointestinal tract.

Absorption efficiencies used in the risk assessments reflect USEPA's current dermal assessment guidance (USEPA, 2004c).

6.5.2 Toxicity Criteria for Carcinogenic Effects of PAHs

Limited toxicity values are available to evaluate the carcinogenic effects from exposure to PAHs. The most extensively studied PAH is benzo(a)pyrene, which is classified by USEPA as a probable human carcinogen. Although CSFs are available for benzo(a)pyrene, insufficient data are available to calculate CSFs for other carcinogenic PAHs. Toxic effects for these chemicals were evaluated using the concept of estimated orders of potential potency, which relate the potency of the other potentially carcinogenic PAHs to the potency of benzo(a)pyrene, as presented in current USEPA guidance (USEPA, 1993e). The equivalent oral and inhalation CSFs for these chemicals were derived by multiplying the CSFs for benzo(a)pyrene by the orders of potential potency.

USEPA's Guidelines for Carcinogen Risk Assessment (USEPA, 2005e) and Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005f) specifies the use of age-dependent adjustment factors (ADAFs) for carcinogens that act via a mutagenic mode of action. Carcinogenic PAHs are included in the group of chemicals that have been determined to act via the mutagenic mode of action. No chemical-specific ADAFs have been derived for carcinogenic PAHs, therefore the following default ADAFs were used: 10 for ages 0 to 2, 3 for ages 2 to 16, and 1 (no adjustment) for ages 16 to 70. The ADAFs were used in evaluating exposures to carcinogenic PAHs for adolescent trespassers and hypothetical residents.

6.5.3 Toxicity Criteria for Chromium

Toxicity criteria are available for different forms of chromium, which is considered to be more toxic in the hexavalent state. Because there is no evidence to support the conclusion that hexavalent chromium is present at Site 1, speciation analyses were not completed for samples collected at Site 1. However, risks associated with this chemical were assessed by conservatively assuming that 100 percent of the chromium detected in an environmental medium is present in the hexavalent state.

6.5.4 Toxicity Criteria for Trichloroethene

Toxicity criteria (i.e., RfDs, CSFs) for trichloroethene are not currently published on the USEPA's IRIS database or in HEAST. As per Navy policy, the Cal EPA values (Cal EPA, 2002) were used to estimate risks for trichloroethene in this risk assessment. The uncertainty associated with the use of the California EPA toxicity values relative to draft USEPA values is discussed in Section 6.7.4.4.

6.6 RISK CHARACTERIZATION

The baseline HHRA evaluates potential health risks associated with human exposure to chemicals present at Site 1. Quantitative risk estimates are based on the conservative assumption that an individual is exposed to multiple COPCs by multiple exposure pathways. In accordance with USEPA guidance, chemical- and pathway-specific risks are summed to provide estimates of total risk for a given receptor. Risk estimates are developed by integrating the chemical intake levels with chemical-specific toxicity factors. Risk assessment calculations are contained in Appendix E-1 and example calculations are provided in Appendix E-2.

Incremental Lifetime Cancer Risk (ILCR) estimates are generated for each COPC using estimated exposure intakes and published CSFs, as follows:

$$\text{ILCR} = \text{Estimated Exposure Intake} \times \text{CSF}$$

An ILCR of 1×10^{-6} indicates that the exposed receptor has a one-in-one-million chance of developing cancer under the defined exposure scenario. Alternatively, such a risk may be interpreted as representing one additional case of cancer in an exposed population of one million persons.

Noncarcinogenic risks are assessed using the concept of HQs and HIs. The HQ for a COPC is the ratio of the estimated intake to the RfD, as follows:

$$\text{HQ} = (\text{Estimated Exposure Intake}) / (\text{RfD})$$

An HI for a given exposure route is generated by summing the individual HQs for all COPCs. The HI is not a mathematical prediction of the severity of toxic effects and is therefore not a true risk. It is simply a numerical indicator of the possibility of the occurrence of noncarcinogenic (threshold) effects.

6.6.1 Comparison of Quantitative Risk Estimates to Benchmarks

To interpret the quantitative risks and to aid risk managers in determining the need for remediation at a site, quantitative risk estimates are compared to typical benchmarks. The USEPA has defined the range of 10^{-4} to 10^{-6} as the ILCR target range for hazardous waste facilities addressed under CERCLA and RCRA. While USEPA guidance will allow higher concentrations reflected in the 1×10^{-4} to 1×10^{-6} site risk range, Mississippi is a state that utilizes a 1×10^{-6} risk level. Therefore, individual or cumulative ILCRs greater than 1×10^{-6} are considered to be "unacceptable" by the MDEQ.

An HI exceeding unity (1) indicates that there may be potential noncarcinogenic health risks associated with exposure. If an HI exceeds unity, target organ effects associated with exposure to COPCs are segregated (and the HI is calculated on a target organ/target effect basis). Only those chemicals that affect the same target organ(s) or exhibit similar critical effect(s) are regarded as truly additive. Consequently, it may be possible for a cumulative HI to exceed 1.0, but no adverse health effects are anticipated if the COPCs do not affect the same target organ or exhibit the same critical effect. Individual target organ HIs for all receptors are presented in the RAGS Part D tables (Table 9s) presented in Appendix E-1.

6.6.2 Risk Assessment Results

The baseline HHRA conducted for Site 1 evaluates the risks potentially incurred by site maintenance workers, industrial workers, construction/excavation workers, adult and adolescent trespassers, and hypothetical future residents. All potential receptors were evaluated for exposure to COPCs in soil, surface water, and sediment. Construction/excavation workers and residents were also evaluated for exposure to groundwater. Both RME and CTE exposure scenarios were evaluated. Tables 6-20 and 6-21 contain a summary of the estimated risks for Site 1 for the RME and CTE, respectively. Calculations of the detailed, chemical-specific risks for Site 1 are included in Appendix E-1. The following sections discuss the results of the risk characterization.

6.6.2.1 Carcinogenic Risks - RME

Quantitative estimates of carcinogenic effects are presented in the form of ILCRs. The target risk benchmark for carcinogenic effects, as defined by the MDEQ, is 1×10^{-6} . Estimated ILCRs for Site 1 are discussed in the following subsections. The carcinogenic risks calculated for the RME case are summarized in Table 6-20.

The ILCR for the construction worker and adult trespasser were less than the MDEQ's risk management benchmark (1×10^{-6}) and less than USEPA target risk range of 10^{-4} to 10^{-6} .

The ILCRs for the site maintenance worker, site industrial worker, and the adolescent trespasser all slightly exceeded the MDEQ risk benchmark of 1×10^{-6} (total ILCRs were 2×10^{-6} , 7×10^{-6} , and 2×10^{-6} , respectively) but were well within the USEPA target range of 10^{-4} to 10^{-6} . Dieldrin in surface soil and Aroclor-1242 in subsurface soil for the industrial worker were the only individual chemicals to have risk estimates exceeding 1×10^{-6} .

The total ILCRs for hypothetical future residents (adult and child ILCRs both = 3×10^{-4}) and lifelong residents (ILCR = 5×10^{-4}) exceed the MDEQ goal for cumulative site risk (1×10^{-6}) and the USEPA's target risk range of 10^{-4} to 10^{-6} when estimated for monitoring well groundwater and soil, surface water, and sediment. Adult and child total ILCRs were each 1×10^{-5} and when estimated for DPT groundwater, soil, surface water, and sediment; the lifelong resident ILCR was 5×10^{-5} for these media. The elevated residential risk is primarily due to exposure to arsenic in groundwater via the ingestion pathway. To a lesser extent, tetrachloroethene, dieldrin, arsenic, and Aroclor-1242 in soils contribute risk to the residential receptors; these chemicals have individual risks that are less than or equal to 10^{-6} .

The chemical-specific risks are presented in the RAGS-Part D tables located in Appendix E-1.

6.6.2.2 Noncarcinogenic Effects - RME

Quantitative estimates of noncarcinogenic (toxic) effects are presented in the form of HQs and HIs. As discussed above, the risk benchmark for HQs and HIs (calculated on a target organ specific basis) is 1 (USEPA, 1989). Estimated HQs and HIs for Site 1 are discussed below.

Cumulative HIs for construction/excavation workers, site maintenance workers, site industrial workers, adolescent trespassers, and adult trespassers under the RME scenario were less than unity (1), indicating that no toxic effects are anticipated for these receptors under the defined exposure conditions.

Cumulative HIs for the future adult and child residents were 20 and 6, respectively. Primary contributors to the residential HIs were arsenic, iron, and thallium in groundwater for both receptors and manganese in groundwater for the child resident only. Risk estimates calculated for ingestion exceeded those calculated for the dermal and inhalation routes of exposure.

The HIs for exposure to soil, surface water, and sediment were less than unity for all receptors.

6.6.3 CTE Evaluation

As discussed in Section 6.4.3, an evaluation of the potential risks associated with the CTE scenario is included to provide a measure of the central or average case exposure. Summaries of the estimated risks for the CTE scenarios are contained in Table 6-21.

6.6.3.1 Carcinogenic Risks - CTE

The ILCRs for construction/excavation workers, site maintenance workers, and both adolescent and adult trespassers were less than the MDEQ goal for cumulative site risk (1×10^{-6}). The site industrial worker had a total ILCR equal to 1×10^{-6} and thus did not exceed the MDEQ target cancer risk benchmark.

All the residential receptors had ILCRs exceeding both the MDEQ goal (1×10^{-6}) and the USEPA target range of 1×10^{-4} to 1×10^{-6} with estimated ILCRs of 2×10^{-5} , 4×10^{-5} , and 6×10^{-5} respectively for the child, adult, and lifelong hypothetical resident receptors when exposed to monitoring well groundwater, soil, sediment, and surface water. Risks were less for the same receptors when estimated for DPT groundwater, soil, sediment, and surface water (2×10^{-6} , 1×10^{-6} , and 3×10^{-6} respectively). The elevated residential risk is primarily due to exposure to ingestion of arsenic in groundwater.

6.6.3.2 Noncarcinogenic Effects - CTE

Target organ-specific HIs for construction/excavation workers, site maintenance workers, site industrial workers, adolescent trespassers, and adult trespassers under the CTE scenario were less than unity (1), indicating that no toxic effects are anticipated for these receptors under the CTE exposure conditions.

The HIs for both the child and adult residents exceeded unity on a target organ-specific basis. Total HIs were 6 and 3 for the child and adult residents, respectively for monitoring well groundwater, soil, sediment, and surface water. The primary chemicals contributing to the elevated residential noncarcinogenic risks were arsenic, iron, and thallium through groundwater ingestion.

6.7 UNCERTAINTY ANALYSIS

The baseline HHRA for Site 1 was performed in accordance with current USEPA guidance. However, there are varying degrees of uncertainty associated with the baseline HHRA. This section presents a brief summary of uncertainties inherent in the risk assessment and includes a discussion of how they may affect the quantitative risk estimates and conclusions of the risk analysis.

6.7.1 General Uncertainty in Risk Assessment

Uncertainty in the selection of COPCs is related to the current status of the predictive databases, the grouping of samples, and the procedures used to include or exclude constituents as COPCs. Uncertainty associated with the exposure assessment includes the values used as input variables for a given intake route or scenario, the assumptions made to determine EPCs, and the predictions regarding future land use and population characteristics. Uncertainty in the toxicity assessment includes the quality of the existing toxicity data needed to support dose-response relationships and the weight-of-evidence used to determine the carcinogenicity of COPCs. Uncertainty in risk characterization includes that associated with exposure to multiple chemicals and the cumulative uncertainty from combining conservative assumptions made in earlier steps of the risk assessment process.

Whereas there are various sources of uncertainty, the direction of uncertainty can be influenced by the assumptions made throughout the risk assessment, including selection of COPCs and selection of values for dose-response relationships. To account for uncertainties in the development of a risk assessment, conservative estimates must be made to make sure that the particular assumptions made are protective of sensitive subpopulations and the maximum exposed individuals. Therefore, throughout the entire risk assessment, assumptions that consider safety factors are made so that the final calculated risks are overestimated, and consequentially, very conservative.

The major sources of uncertainty associated with this risk assessment are discussed below.

6.7.2 Uncertainty in Selection of COPCs

A minor amount of uncertainty is associated with the selection of COPCs that may affect the numerical risk estimates presented in the risk assessment. The most significant issues related to uncertainty in COPC selection are the existing database (i.e., the use of validated or unvalidated sample results), the inclusion of chemicals potentially attributable to background, the screening levels that are used, the exclusion of historical data from the risk assessment, and the absence of screening levels for a few chemicals detected in the site media. A brief discussion of each of these issues is provided in the remainder of this section.

6.7.2.1 Existing Databases

The data used in the risk assessment for Site 1 were obtained from samples collected as part of the field efforts performed by TtNUS in 2008. No historical data were used for risk assessment purposes. All analytical data were validated according to the methodologies specified in the Work Plan (TtNUS, 2009). The qualification of data during the formal data validation process is not expected to compromise the results of the HHRA. Analytical data qualified as estimated were utilized, even though the reported positive concentrations or sample-specific quantitation limits may be somewhat imprecise. The use of estimated data adds to the uncertainty associated with the risk assessment. However, the associated uncertainty is expected to be negligible compared to the other uncertainties inherent in the risk evaluation process (i.e., uncertainties with land uses, exposure scenarios, toxicological criteria, etc.). Analytical data qualified for blank contamination were used in the baseline risk assessment. When determining exposure concentrations via statistical procedures, chemicals not detected were conservatively assumed to be present at concentrations equal to one-half the sample-specific quantitation limits. Analytical results for some chemicals qualified "R," unreliable, were not used in the risk assessment.

6.7.2.2 Exclusion of Historical Data from the Risk Assessment

Data collected from the most recent sampling events by TtNUS in 2008, were used to evaluate potential risks for Site 1. Historical data collected for soil, groundwater, surface water, and sediment investigations were not used in this assessment. This is because the historical data was more than 10 years old and did not meet current standards for methods and reporting limits.. Exclusion of the historical data from the risk assessment may result in uncertainty in the COPC selection and in the exposure concentrations used to quantitate risks. However, since the most recent data were used to assess risks, the uncertainty associated with the omission of historical data should be minimal, and conclusions of the risk assessment were probably not affected by the exclusion of the historical data from the risk assessment.

6.7.2.3 Chemicals Potentially Attributable to Background

No chemicals in soil, surface water, or sediment were eliminated as COPCs on the basis of background. This is an important consideration when interpreting the results of the HHRA for Site 1 because arsenic was identified as a risk driver in soils and sediment. As indicated previously, some of the sample concentrations of arsenic in soil and groundwater are also within naturally occurring levels in Mississippi and in the U.S. The inclusion of some metals present at background concentrations in the quantitative risk evaluation can contribute to the overestimation the risks. Several metals selected as COPCs in soil were within published background ranges in literature (see Sections 6.3.2 and 6.3.3). For example, estimated ILCRs for arsenic in surface and subsurface soil exceeded 1×10^{-6} , the MDEQ target risk threshold, for the hypothetical lifelong resident. However, if the risks due to arsenic are excluded, the ILCRs for these media would still exceed 1×10^{-6} due to the presence of organic COPCs.

Several upgradient wells were used as background locations for the groundwater datasets. However, no groundwater chemicals were eliminated from COPC selection on the basis of background. Therefore, no uncertainty is introduced through eliminating chemicals detected in groundwater by means of a background screen. However, in the case of the monitoring well samples, only one upgradient sample (01GW2301) provided background data. Therefore, the background dataset is very small, and only a maximum concentration comparison between site data and the background data sample could be conducted. The use of a more robust background dataset might have affected the outcome of the background screen. As previously mentioned, per the scientific literature consulted, arsenic, iron, and manganese concentrations detected in the site monitoring wells are within the concentration range typically found in groundwater (Dragun, 1988).

It was also previously noted that tetrachloroethene was detected in the upgradient (background) monitoring well sample (01GW2301) but was not detected in any of the non-background monitoring well samples. The positive detection of tetrachloroethene in the background sample (2.5 ug/L) does exceed the ORNL screening level for tetrachloroethene in tap water of 0.11 ug/L. The estimated ILCR based on this concentration is approximately 2×10^{-5} ($(2.5 \text{ ug/L}) / (0.11 \text{ ug/L}) * 1 \times 10^{-6}$). However, the concentration of tetrachloroethene in the background sample does not exceed the MCL/Mississippi TRG for groundwater of 5 ug/L.

Trichloroethene was detected at Site 1 in the background monitoring well sample at a concentration of 1.3 ug/L, which is less than the ORNL RSL for tap water. Therefore, trichloroethene would not have been selected as a COPC for the direct contact pathway even if the upgradient well sample had been included in the Site 1 data set.

Risks due to background concentrations as discussed above have considerable uncertainty because it is unknown if the contamination represented in the upgradient well is due to another source unrelated to Site 1. Also, tetrachloroethene was not detected in any of the 21 monitoring well samples used to represent Site 1 and trichloroethene was only detected in 1 of the 21 site (non-background) samples.

6.7.2.4 COPC Screening Levels

The use of risk-based screening levels for soil and groundwater based on conservative residential land use scenarios corresponding to an ILCR of 10^{-6} and HI of 0.1 should make certain that the significant contributors to risk from a site are evaluated. The elimination of chemicals that are present at concentrations that correspond to an ILCR less than 10^{-6} and an HI less than 0.1 should not affect the final conclusions of the risk assessment because these chemicals are not expected to cause a potential health concern at the concentrations detected.

6.7.2.5 Absence of COPC Screening Levels

Because of the lack of toxicity criteria, ORNL RSLs and MDEQ Tier 1 TRGs are not available for calcium, magnesium, sodium, and potassium. This may lead to a slight underestimation of potential risks. However, these inorganics are essential nutrients, commonly detected in environmental media, and receptor risks should not be underestimated due to excluding these nutrients from COPC selection.

Risk-based screening levels are also currently not available for several organic constituents detected at Site 1 (i.e., phenanthrene, alpha- and gamma-chlordane, delta-BHC, endosulfan II, endosulfan sulfate, and endrin aldehyde). Therefore, screening levels available for surrogate chemicals were used as screening levels for these constituents. In the COPC selection for Site 1, the screening level for pyrene was used as a surrogate for phenanthrene, chlordane was used as a surrogate for alpha- and gamma-chlordane, alpha-BHC was used as a surrogate for delta-BHC, endosulfan was used as a surrogate for endosulfan II and endosulfan Sulfate, and endrin was used as a surrogate for endrin aldehyde. The use of these surrogates may increase the uncertainty in the risk assessment. The direction of bias cannot be determined.

6.7.3 Uncertainty in the Exposure Assessment

Uncertainty in the exposure assessment arises because of the methods used to calculate EPCs, the determination of land use conditions, the selection of receptors and scenarios, and the selection of exposure parameters. Each of these is discussed below.

6.7.3.1 Uncertainty in the Elimination of Exposure Routes/Pathways

Potential risks were evaluated for all environmental media sampled at Site 1. Surface water and sediment were evaluated for ingestion and dermal contact. Inhalation of volatiles from surface water and sediment was not evaluated because potential risks from inhalation are expected to be minimal for these media. In addition, predictive models are currently not available for these scenarios. The omission of these exposure pathways/routes may result in an underestimation of total risks for the site, but the underestimation is expected to be minimal when compared to risks for other media and exposure routes.

6.7.3.2 Exposure Point Concentrations

Uncertainty is associated with the use of the 95 percent UCL on the mean concentration as the EPC. As a result of using the 95 percent UCL, the estimations of potential risk are most likely to be overestimated because this is a representation of the upper limit that potential receptors would be exposed to over the entire exposure period. In some cases (e.g., surface water and sediment), the maximum concentration was used as the EPC because the dataset contained less than 10 samples. The maximum concentration is also used when the UCL is greater than the maximum concentration. The use of the maximum concentration as the EPC tends to overestimate potential risks because receptors are assumed to be exposed continuously to the maximum concentration for the entire exposure period, which is unlikely. EPCs for groundwater were also maximum concentrations, as no contaminant plume was well defined in the groundwater samples from Site 1. The maximum detected concentration was also used as the EPC for the COPCs selected in subsurface soil, surface water, and sediment because these datasets contained fewer than 10 samples. This is an important consideration for Aroclor-1242 in subsurface soil, which was a risk driver for the industrial worker and the residents (child/adult/lifelong). As a result, the industrial worker and residential risks due to this chemical are likely overestimated.

Uncertainty is also introduced when the nondetects are assigned a value of one-half the quantitation limit when calculating the EPC. This may either overestimate or underestimate the risks to potential receptors.

6.7.3.3 Land Use

Uncertainty and conservatism may be introduced into the risk assessment when estimated risks are not based on current land use patterns. The risks calculated in this HHRA are based on current and projected land use at NCBC. Site 1 is currently used as a training facility, and the site is expected to be used for this purpose in the future. Access to the site is not restricted and adolescents have the potential to play on the site. For this reason, trespassers (adolescent and adult) were evaluated in the risk assessment and were assumed to be exposed to site media for 30 days per year in the RME scenario and 15 days per year in the CTE scenario. However, an additional consideration is that if the landfill area is capped in

the future, the pathway is no longer complete for receptor exposure to chemicals in the soils contained under the cap. Much of the uncertainty in this risk assessment is related to groundwater usage (the elevated risks calculated for Site 1 are mainly due to exposure to groundwater). The risk assessment assumes that groundwater is used as a source of domestic drinking water. However, the groundwater is not currently used for this purpose, and it is unlikely that groundwater at the site would be used as a source of potable water in the future. The land use controls in place at Site 1 are expected to ensure that no wells will be installed on the site for domestic or commercial purposes in the future as well. The hypothetical residential receptors were evaluated mainly for the purpose of decision making because it is unlikely that the future land use of Site 1 will become residential. However, as stated in the work plan, it is possible that areas adjacent to Site 1 could be used as residential areas. The plausible future "off-site" residential scenario was evaluated using the future on-site residential exposure factors. Thus, the residential scenario should overestimate risks to potential future off-site residents.

6.7.3.4 Exposure Parameters

Each exposure factor selected for use in the risk assessment contains some associated uncertainty. Generally, exposure factors are based on surveys of physiological and lifestyle profiles across the United States. The attributes and activities studied in these surveys generally have a broad distribution. To avoid underestimation of exposure, USEPA guidelines (e.g., USEPA, 1991b) for the RME receptor were used, if applicable, which generally specify the use of the 95th percentile for most parameters. Therefore, the selected exposure factors for the RME receptor represent the upper bound of the observed or expected practices which are characteristic of the majority of the population. Because the USEPA does not provide values for exposure factors for some receptors/pathways, professional judgment is used to determine some values. When using professional judgment, an effort was made to be reasonably conservative. However, the use of professional judgment adds uncertainty to the risk assessment.

Generally, uncertainty can be assessed for many assumptions made in determining factors for calculating exposures and intakes. Many of these parameters were determined from the statistical analyses of human population characteristics. Often, the database used to summarize a particular exposure parameter (i.e., body weight) is quite large. Consequently, the values chosen for such variables in the RME scenario have low uncertainty. For many parameters for which limited information exists (e.g., dermal absorption), greater uncertainty exists. For example, current USEPA guidance (USEPA, 2004c) does not provide dermal absorption factors for exposure to most metals (except arsenic and cadmium) and VOCs in soil. Therefore, risks for dermal contact with soil are not evaluated for metals other than arsenic and cadmium. Consequently, risks from exposure to soil may be underestimated by omitting metals from the dermal risk assessment (no VOCs were selected as COPCs in soil).

6.7.3.5 Uncertainty Associated with the Johnson and Ettinger Model

As discussed in Section 6.4.5.2, exposures by hypothetical residents to COPCs that may migrate from groundwater into indoor air were evaluated with USEPA's Johnson and Ettinger volatilization model (USEPA, 2004b). The results of the vapor intrusion evaluation are not included in the quantitative risk assessment presented in Section 6.6.2 because of the uncertainty associated with the air concentrations generated using the Johnson and Ettinger Model. Results of the evaluation and uncertainties associated with the risks are presented in Table 6-22 and discussed in the following paragraphs. The model results are also included as Appendix E-3.

Trichloroethene was the only COPC selected for the vapor intrusion pathway. The estimated ILCR for residential receptors was 1×10^{-7} , which is less than the MDEQ goal for total site risk of 1×10^{-6} . The EPC used in the risk modeling was 0.32 ug/L.

Although they were not evaluated in this HHRA, HIs and ILCRs for industrial workers would be expected to be within acceptable levels because these receptors would be exposed to volatiles in indoor air on a less frequent basis than residential receptors. In addition, industrial facilities are typically larger than residential housing units and have larger air exchange rates, which would result in lower indoor air concentrations.

The results of the vapor intrusion modeling are subject to the following sources of uncertainty:

- Site-specific parameters were used in the model whenever possible. For example, site-specific values were used for depth to the water table and soil type. Model default values for soil bulk density and soil porosity were found to be within the range of values measured at the site and were used in model calculations. Site-specific values for building dimensions, soil-building pressure differential, seam crack width, and air-exchange rates were not available. Therefore, model default values were used for these parameters. Model default values were also used for residential dwelling dimensions based on owner-occupied and rental single-family detached residences in the United States. The use of model default values tends to increase the uncertainty in the calculated risks. The direction of the uncertainty is not known, although the model default values are generally conservative and tend to overestimate air concentrations. The default model air-exchange rate (0.45 per hour) was used to evaluate residential risks. As discussed in the model guidance, this air-exchange rate was based on typical residential building dimensions and ventilation rates.
- The default building parameters for the Johnson and Ettinger Model assume that the dimensions of buildings and ventilation rates are typical of residential dwellings in the United States. These

include an air exchange rate of 0.45 per hour and residential building dimensions of 961 centimeters (cm) long by 961 cm wide by 488 cm high (approximately 16,000 cubic feet).

- The model assumes an infinite source and does not take into account transformation processes such as biodegradation, which increased the conservatism of this assessment.

6.7.3.6 Uncertainty Associated with the VDEQ Model for Exposure to Vapors in a Trench

As discussed in Section 6.4.5.2, exposure of construction workers to vapors in a trench was evaluated by a vadose zone model recommended by the Virginia Department of Environmental Quality (VDEQ) to estimate volatilization of gases from contaminated groundwater into a trench. Site-specific parameters, such as groundwater concentrations were used in the model, if possible. However, it was necessary to use model default values for most of the input parameters. The use of model default values tends to increase the uncertainty in the calculated risks. The direction of the uncertainty was not known. One of most sensitive parameters, in terms of potential risk, is the air-exchange rate (ACH) in the trench which was based on assumed trench dimensions (i.e., the ratio of trench width to depth). The risk assessment assumed that air exchange between the trench and above-ground atmosphere was not restricted (as opposed to a confined space) and may tend to underestimate risks. However, note that the model only gives the user two choices regarding the value of ACH, a very confined space which tends to greatly overestimate air concentrations in the trench or a less restricted space which results in lower air concentrations. The difference in vapor concentrations in a trench based on the two different ACHs is approximately 2 to 3 orders of magnitude. A detailed discussion of determination of the ACH is presented in Section 6.4.5.2.

6.7.3.7 Uncertainty Associated with Contamination Hot Spots

According to the Site 1 work plan, human health risks at Site 1 were expected to be low except for “hot spot” areas of concentrated contamination. Evidence in the surface soil data indicates that a hot spot of contamination may exist for dieldrin at Site 1. Dieldrin was a carcinogenic risk driver in surface soil for the industrial worker and residential (child/adult/lifelong) receptors. Dieldrin was detected in 8 of 20 surface soil samples at Site 1 with a maximum concentration of 460 ug/kg at sample location 01SS025. However, the second greatest concentration of dieldrin in surface soil was 15 ug/kg at sample location 01SS10, which is less than both restricted and unrestricted MDEQ screening criteria (358 ug/kg and 39.9 ug/kg, respectively) as well as the ORNL residential soil RSL (30 ug/kg). Therefore, dieldrin would not have been selected as a COPC if the sample result from location 01SS025 had not been included in the dataset. Dieldrin was not selected as a COPC in subsurface soil. It is likely that the risks due to dieldrin in surface soil are overestimated.

6.7.3.8 Uncertainty Associated with Groundwater Inhalation Exposures

In compliance with Region IV guidance, the groundwater ingestion values were used as the inhalation intake values. The RME exposure parameters used in this HHRA assumed that child and adult residents would ingest 1.5 and 2.0 L of groundwater per day, respectively. Using ingestion exposures as inhalation exposures is extremely conservative because it is unlikely that residents would intake the same chemical concentration from inhalation (during showering/bathing, etc.) as they would through ingestion.

Tetrachloroethene was a primary risk driver in groundwater for both child and adult residents primarily through inhalation. It is likely that residential inhalation of groundwater risks are overestimated as a result of the extremely conservative exposure intake values used.

6.7.4 Uncertainty in the Toxicological Evaluation

Uncertainties associated with the toxicity assessment (determination of RfDs and CSFs and use of available criteria) are presented in this section.

6.7.4.1 Derivation of Toxicity Criteria

Uncertainty associated with the toxicity assessment is associated with hazard assessment and dose-response evaluations for the COPCs. The hazard assessment deals with characterizing the nature and strength of the evidence of causation or the likelihood that a chemical that induces adverse effects in animals will also induce adverse effects in humans. Hazard assessment of carcinogenicity is evaluated as a weight-of-evidence determination, using the USEPA methods. Positive animal cancer test data suggest that humans contain tissue(s) that may manifest a carcinogenic response; however, the animal data cannot necessarily be used to predict the target tissue in humans. In the hazard assessment of noncancer effects, however, positive animal data often suggest the nature of the effects (i.e., the target tissues and type of effects) anticipated in humans.

Uncertainty in hazard assessment arises from the nature and quality of the animal and human data. Uncertainty is reduced when: similar effects are observed across species, strain, sex, and exposure route; the magnitude of the response is clearly dose related; pharmacokinetic data indicate a similar fate in humans and animals; postulated mechanisms of toxicity are similar for humans and animals; and the chemical of concern is structurally similar to other chemicals for which the toxicity is more completely characterized.

Uncertainty in the dose-response evaluation includes the determination of a CSF for the carcinogenic assessment and derivation of an RfD or reference concentration (RfC) for the noncarcinogenic

assessment. Uncertainty is introduced from interspecies (animal to human) extrapolation which, in the absence of quantitative pharmacokinetic or mechanistic data, is usually based on consideration of interspecies differences in basal metabolic rate. Uncertainty also results from intraspecies variation. Most toxicity experiments are performed with animals that are very similar in age and genotype, so intragroup biological variation is minimal, but the human population of concern may reflect a great deal of heterogeneity including unusual sensitivity or tolerance to the COPC. Even toxicity data from human occupational exposures reflect a bias because only those individuals sufficiently healthy to attend work regularly (the "healthy worker effect") and those not unusually sensitive to the chemical are likely to be occupationally exposed. Finally, uncertainty arises from the quality of the key study from which the quantitative estimate is derived and the database. For cancer effects, the uncertainty associated with dose-response factors is mitigated by assuming the 95 percent upper bound for the CSF. Another source of uncertainty in carcinogenic assessment is the method by which data from high doses in animal studies are extrapolated to the dose range expected for environmentally exposed humans. The linearized multistage model, which is used in nearly all quantitative estimations of human risk from animal data, is based on a nonthreshold assumption of carcinogenesis. Evidence suggests, however, that epigenetic carcinogens, as well as many genotoxic carcinogens, have a threshold below which they are noncarcinogenic. Therefore, the use of the linearized multistage model is conservative for chemicals that exhibit a threshold for carcinogenicity.

For noncancer effects, additional uncertainty factors may be applied in the derivation of the RfD or RfC to mitigate poor quality of the key study or gaps in the database. Additional uncertainty for noncancer effects arises from the use of an effect level in the estimation of an RfD or RfC, because this estimation is predicated on the assumption of a threshold below which adverse effects are not expected. Therefore, an uncertainty factor is usually applied to estimate a no-effect level. Additional uncertainty arises in estimation of an RfD or RfC for chronic exposure from subchronic data. Unless empirical data indicate that effects do not worsen with increasing duration of exposure, an additional uncertainty factor is applied to the no-effect level in the subchronic study. Uncertainty in the derivation of RfDs is mitigated by the use of uncertainty and modifying factors that normally range between 3 and 10. The resulting combination of uncertainty and modifying factors may reach 1,000 or more.

The derivation of dermal RfDs and CSFs from oral values may cause uncertainty. This is particularly the case when chemical-specific gastrointestinal absorption rates are not available in the literature or when only qualitative statements regarding absorption are available.

6.7.4.2 Uncertainty Associated with Evaluation of the Dermal Exposure Pathway

According to RAGS-Part E (USEPA, 2004c), risks from dermal absorption from soil are to be quantitatively evaluated for arsenic, cadmium, chlordane, 2,4-dichlorophenoxyacetic acid, DDT, TCDD (and other

dioxins), PAHs, PCBs, pentachlorophenol, and SVOCs because of the limited guidance available to estimate dermal absorption factors for other constituents. Therefore, the dermal route of exposure is evaluated quantitatively for these chemicals only. Risks for dermal exposure to metals (other than arsenic and cadmium) and VOCs identified as COPCs for soil or sediment were not quantified in the risk assessment. Consequently, potential risks may be underestimated by excluding these constituents from the dermal risk assessment calculations. The uncertainty is reduced somewhat by the fact that no VOCs were identified as COPCs for soil or sediment at Site 1.

Dermal risks were calculated using a USEPA model presented in RAGS-Part E (USEPA, 2004c) which, according to the guidance, tends to overestimate intakes and risks for dermal contact for some chemicals (e.g., PAHs, PCBs, and dioxins). Appendices A and B of RAGS-Part E discuss the uncertainties in the permeability coefficients for these chemicals and the limitations of the dermal absorption model when evaluating chemicals.

6.7.4.3 Uncertainty Associated with Evaluation of Arsenic

Arsenic is a primary risk driver for residential exposure to groundwater at Site 1. Arsenic was detected in only 2 of 21 groundwater samples. The only two positive detections for arsenic in the dataset (14.2 µg/L and 19.1 µg/L) exceed the MCL (10 µg/L) but do not exceed the adopted Mississippi groundwater criteria (50 µg/L). Note that the risk estimate calculated assuming exposure to the MCL results in a cancer risk greater than 1×10^{-4} . In addition, the range of arsenic concentrations detected in groundwater samples (3.3 – 11.4 ug/L) is within the range of naturally occurring levels in the United States reported in the literature (less than 1.0 – 30 ug/L) (Dragun, 1988).

There is uncertainty associated the evaluation of arsenic as a carcinogen. Although the more restrictive basis for evaluating risk associated with exposure to arsenic is to assume it is a carcinogen, carcinogenic effects are not the primary health effects expected to be manifested on exposure to arsenic. Scientific information indicates that humans are capable of metabolizing arsenic to expedite its elimination from the body (ATSDR, 1997). Its elimination from the body obviously mitigates the possibility for arsenic to manifest carcinogenic effects. Therefore, evaluating arsenic as a noncarcinogen would be more appropriate. However, arsenic was conservatively evaluated as a carcinogen in this risk assessment. Consequently, risks for this chemical are probably overestimated to some degree.

In addition to the uncertainty associated with the metabolism of arsenic, there is also uncertainty associated with the bioavailability of arsenic. The risks estimates calculated for arsenic as based on the assumption that 100 percent of the arsenic that enters the body is bioavailable. However, the toxicity studies on which RfDs and CSFs for metals are based do not account for the characteristics of a metal in soil or the limitations that these characteristics place on the absorption of the metal. Several recent

studies on the bioavailability of arsenic (Ruby, V. et al., 1999) indicate that the bioavailability of arsenic in various soil types ranges from 8 to 28 percent. Based on these studies, it is possible that the risks calculated for arsenic in soil could be overestimated by as much as one order of magnitude.

6.7.4.4 Use of Iron Toxicity Criteria

A RfD published in the report Provisional Peer Reviewed Toxicity Values for Iron and Compounds (USEPA, 2006) was used to evaluate noncarcinogenic effects from exposure to iron. Iron is an essential element, and individual reactions to iron may be highly variable; therefore, there is some degree of uncertainty associated with the use of the RfD. The iron HQ for the child resident assumed to be exposed to groundwater was 6. As mentioned previously, the maximum concentration of iron in groundwater is within the typical range for groundwater in published scientific literature.

6.7.5 Uncertainty in the Risk Characterization

Uncertainty in risk characterization results primarily from assumptions made regarding additivity of effects from exposure to multiple COPCs from various exposure routes. High uncertainty exists when summing cancer risks for several substances across different exposure pathways. This assumes that each substance has a similar effect and/or mode of action. Often compounds affect different organs, have different mechanisms of action, and differ in their fate in the body, so additivity may not be an appropriate assumption. However, the assumption of additivity is made to provide a conservative estimate of risk.

Finally, the risk characterization does not consider antagonistic or synergistic effects. Little or no information is available to determine the potential for antagonism or synergism for the COPCs. Therefore, the uncertainty regarding antagonistic or synergistic effects is ambiguous because potential human health risks may either be underestimated or overestimated.

6.8 SUMMARY AND CONCLUSIONS

Site 1, the Disaster Recovery Disposal Area, is a former landfill located north of 7th Street and east of Colby Avenue and is currently used as a mock disaster training facility. The landfill was operated from 1942 until 1948. Waste material was disposed of in trenches, burned daily, and then backfilled. During the time this landfill was operated, nearly all of the solid waste and some of the liquid/chemical waste generated at NCBC Gulfport was disposed of at this site. In addition, some waste fuel, oil, solvents, paint, and paint thinners, all of which were reportedly containerized in 55-gallon drums, were transported to the site and buried in trenches (Envirodyne, 1985). Access to the site is not restricted and adolescents can potentially play at the site.

Site maintenance workers, industrial workers, construction/excavation workers, adult trespassers, adolescent trespassers, and hypothetical future residents were evaluated as potential receptors in the site-specific baseline HHRA. All receptors were evaluated for potential exposure to COPCs in surface soil, subsurface soil, surface water, and sediment. Construction/excavation workers and hypothetical future residents were also evaluated for exposure to COPCs in groundwater, and future residents were also evaluated for vapor intrusion into indoor air.

Inhalation of volatile emissions from soil and fugitive dust was evaluated qualitatively via a comparison of site data with USEPA Generic SSLs for transfers from soil to air (inhalation). Exposure was considered to be relatively insignificant because maximum soil concentrations for all detected chemicals were less than the inhalation SSLs and this pathway was not quantitatively evaluated in the HHRA.

The following chemicals were identified as COPCs for quantitative risk evaluation at Site 1:

- Surface Soil – dieldrin, aluminum, antimony, arsenic, cobalt, iron, manganese
- Subsurface soil – Aroclor-1242, aluminum, arsenic
- Groundwater –
 - DPT samples: tetrachloroethene
 - Monitoring well samples: naphthalene, aluminum, arsenic, iron, manganese, thallium
- Surface Water – arsenic, iron
- Sediment – benzo(a)pyrene equivalents, aluminum, arsenic, iron, manganese

Risk Assessment Results – Current Land Use

Under current land use, quantitative estimates of noncarcinogenic and carcinogenic risks (HIs and ILCRs, respectively) were developed for site maintenance workers, industrial workers, and trespassers hypothetically exposed to COPCs in surface soil, subsurface soil, surface water, and sediment. Total ILCRs for adult trespassers were less than or equal to the MDEQ goal for cumulative site risk (1×10^{-6}). Total noncarcinogenic HIs for site maintenance workers, industrial workers, and adolescent and adult trespassers were less than unity indicating that no adverse toxic effects are expected under the conditions established in the exposure assessment.

Cancer risk estimates developed for site maintenance workers, industrial workers, and adolescent trespassers exceeded USEPA and state of Mississippi cancer risk benchmarks. The noncancer benchmark

was not exceeded for these receptors. The ILCRs exceeded 1×10^{-6} and were primarily due to dieldrin and PCBs in soil for the industrial worker and arsenic in soil for the adolescent trespasser.

Risk Assessment Results – Future Land Use

Under future land use, quantitative estimates of noncarcinogenic and carcinogenic risks (HIs and ILCRs, respectively) were developed for site maintenance workers, industrial workers, construction/excavation workers, trespassers, and hypothetical future residents.

Risk assessment results for site maintenance workers, industrial workers, and trespassers are the same as those described above.

Total ILCRs for future construction/excavation workers were less than the MDEQ goal for cumulative site risk (1×10^{-6}), and total HIs for construction/excavation workers were less than unity, indicating that no adverse toxic effects are expected for exposure to soil, groundwater, surface water, and sediment for this receptor under the defined exposure conditions.

Cancer and non-cancer risk estimates developed for the hypothetical future resident exceeded USEPA and state of Mississippi cancer and non-cancer risk benchmarks. The ILCR for hypothetical future residents exceeded 1×10^{-4} and is primarily due to exposure to arsenic (via ingestion) in groundwater. The cumulative noncarcinogenic HI for future residents exceeded the USEPA goal of unity and is mainly the result of exposure to arsenic, iron, and thallium in groundwater as well as manganese in groundwater for the child resident. In addition, maximum detected concentrations of iron, manganese, and thallium exceeded groundwater USEPA MCLs and MDEQ primary TRGs. However, as discussed in Section 6.6.2, there are significant uncertainties associated with the risk estimates developed for COPCs in groundwater. Among these are the facts that the residential groundwater scenario assumes that groundwater on the site is used as a source of domestic drinking water and ingestion intake values are used to estimate inhalation intake. ILCRs and HIs for residential exposure to surface water for both the adult and child resident and sediment for the adult resident were less than or within USEPA and MDEQ risk benchmarks.

In summary, a HHRA was performed to evaluate exposure to COPCs in subsurface and surface soil, groundwater, surface water, and sediment at Site 1, Disaster Recovery Disposal Area at NCBC, Gulfport. Estimated risks for construction/excavation workers and adult trespassers assumed to be exposed to COPCs in site media were less than or equal to USEPA and MDEQ risk management benchmarks. The quantitative risk evaluation indicated that risk estimates for the site maintenance worker and adolescent trespasser were only marginally greater than the MDEQ benchmark. Additionally, although the total ILCR for the site industrial worker exceeds the MDEQ cancer benchmark, the risk estimate is within one order

of magnitude of the MDEQ benchmark and is primarily due to PCBs and dieldrin in soil, which may be attributable to the limited presence of contamination hot spots.

The quantitative risk evaluation also indicated that potential adverse health effects may be associated with the hypothetical future residential use of groundwater. The maximum detected concentration of tetrachloroethene in groundwater exceeded the ORNL RSL for tap water, and the maximum concentration of arsenic in groundwater exceeded both the ORNL tap water RSL and the MDEQ groundwater TRG. However, there is considerable uncertainty in the risk estimates calculated for exposure to COPCs in groundwater, and the numerical risk results are likely overestimated. In addition, the residential groundwater use scenario is evaluated to be conservative and to provide information to risk managers for Site 1. The groundwater underlying and downgradient of Site 1 is not currently used as a source of drinking water and there are no plans to develop this resource in the future. Residential cancer risk estimates slightly exceeded the MDEQ benchmark for soils (for both adult and child residents) due to dieldrin, arsenic, and PCBs. However, arsenic is within published background levels for soil. Sediment also exceeded the MDEQ cancer benchmark for the child resident only due to arsenic. Residential risks estimated for surface water did not exceed USEPA and MDEQ risk management benchmarks.

TABLE 6-1
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁵⁾	ORNL Residential Soil Criteria ⁽⁶⁾	USEPA SSLs Soil to Air ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	78-93-3	2-BUTANONE	1.8 J	4 J	ug/kg	01SS1201	2/21	1.3 - 11	4	NA	8450 N	8450 N	2800000 NS	2400000 sat	No	BSL	
	108-10-1	4-METHYL-2-PENTANONE	0.71 J	1.2 J	ug/kg	01SS01501	4/21	0.54 - 11	1.2	NA	16300000 N	626000 N	530000 NS	2700000 sat	No	BSL	
	127-18-4	TETRACHLOROETHENE	0.22 J	0.28 J	ug/kg	01SS13701	2/21	0.9 - 11	0.28	NA	18200 C	11900 C	570 C	10000 C	No	BSL	
	Semivolatile Organic Compounds																
	205-99-2	BENZO(B)FLUORANTHENE	78 J	78 J	ug/kg	01SS04QT	1/21	34 - 420	78	NA	7840 C	875 C	150 C	NA	No	BSL	
	105-60-2	CAPROLACTAM	140 J	300 J	ug/kg	01SS0901	3/21	72 - 420	300	NA	10200000 N	3910000 N	3100000 N	NA	No	BSL	
	84-74-2	DI-N-BUTYL PHTHALATE	53 J	53 J	ug/kg	01SS05QT	1/21	33 - 410	53	NA	2280000 Csat	2280000 Csat	610000 N	NA	No	BSL	
	84-66-2	DIETHYL PHTHALATE	40 J	60 J	ug/kg	01SS01501	3/21	36 - 420	60	NA	1970000 Csat	1970000 Csat	4900000 N	NA	No	BSL	
	Pesticides/PCBs																
	72-55-9	4,4'-DDE	0.58 J	1.5 J	ug/kg	01SS1001	4/21	0.18 - 0.84	1.5	NA	16800 C	1880 C	1,400 C	NA	No	BSL	
	50-29-3	4,4'-DDT	0.23 J	2 J	ug/kg	01SS1001	7/20	0.18 - 0.84	2	NA	16800 C	1880 C	1,700 C	750000 C	No	BSL	
	309-00-2	ALDRIN	0.16 J	6.3 J	ug/kg	01SS01701	3/21	0.12 - 0.42	6.3	NA	337 C	37.6 C	29 C	3400 C	No	BSL	
	319-84-6	ALPHA-BHC	0.26 J	0.26 J	ug/kg	01SS05QT	1/21	0.12 - 0.41	0.26	NA	908 C	101 C	77 C	750 C	No	BSL	
	5103-71-9	ALPHA-CHLORDANE	0.23 J	4.9 J	ug/kg	01SS02401	5/21	0.12 - 0.42	4.9	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1,600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL	
	11096-82-5	AROCLOR-1260	17 J	17 J	ug/kg	01SS1001	1/21	4.5 - 21	17	NA	10000 C	1000 C	220 C	NA	No	BSL	
	319-85-7	BETA-BHC	0.16 J	0.36 J	ug/kg	01SS0801	4/20	0.12 - 0.41	0.36	NA	3180 C	355 C	270 C	6000 C	No	BSL	
	319-86-8	DELTA-BHC	0.26 J	0.26 J	ug/kg	01SS01401	1/21	0.12 - 0.42	0.26	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	750 C ⁽¹⁰⁾	No	BSL	
	60-57-1	DIELDRIN	0.36 J	460 J	ug/kg	01SS02501	8/20	0.18 - 0.84	460	NA	358 C	39.9 C	30 C	1100 C	Yes	ASL	
	33213-65-9	ENDOSULFAN II	0.24 J	1.6	ug/kg	01SS42001	6/21	0.18 - 0.84	1.6	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37,000 N ⁽¹¹⁾	NA	No	BSL	
	1031-07-8	ENDOSULFAN SULFATE	0.29 J	0.29 J	ug/kg	01SS01401-D	1/21	0.18 - 0.84	0.29	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37,000 N ⁽¹¹⁾	NA	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	0.31 J	2 J	ug/kg	01SS1001	2/21	0.18 - 0.84	2	NA	6130 N ⁽¹²⁾	2350 N ⁽¹²⁾	1,800 N ⁽¹²⁾	NA	No	BSL	
	58-89-9	GAMMA-BHC (LINDANE)	0.23 J	0.23 J	ug/kg	01SS13901-D	1/21	0.12 - 0.42	0.23	NA	4400 C	491 C	520 C	NA	No	BSL	
	5103-74-2	GAMMA-CHLORDANE	0.22 J	3.4 J	ug/kg	01SS02401	4/21	0.12 - 0.42	3.4	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL	
	76-44-8	HEPTACHLOR	0.19 J	0.19 J	ug/kg	01SS0801	1/21	0.12 - 0.42	0.19	NA	195 C	127 C	110 C	4100 C	No	BSL	
	1024-57-3	HEPTACHLOR EPOXIDE	0.25 J	1.7 J	ug/kg	01SS1001	5/20	0.12 - 0.42	1.7	NA	629 C	70.2 C	53 C	4700 C	No	BSL	
	72-43-5	METHOXYCHLOR	0.29 J	140 J	ug/kg	01SS01701	4/21	0.12 - 0.42	140	NA	102000 N	39100 N	31000 N	NA	No	BSL	
	Herbicides																
	93-76-5	2,4,5-T	1.2 J	6 J	ug/kg	01SS0801	3/21	0.92 - 2.1	6	NA	2040000 N	78200 N	61000 N	NA	No	BSL	
	88-85-7	DINOSEB	8.8 J	8.8 J	ug/kg	01SS03QT	1/6	9.3 - 10	8.8	NA	20400 N	7820 N	6100 N	NA	No	BSL	
	Metals																
	7429-90-5	ALUMINUM	1,770	12300	mg/kg	01SS13801	21/21	-	12,300	NA	204000 N	7820 N	7700 N	709000 N	Yes	ASL	
	7440-36-0	ANTIMONY	1.1 J	3.6 J	mg/kg	01SS42001	2/21	1 - 1.3	3.6	NA	8.17 N	3.13 N	3.1 N	NA	Yes	ASL	
	7440-38-2	ARSENIC	0.78	4.8	mg/kg	01SS04QT	19/21	0.61 - 0.78	4.8	NA	3.82 C	0.426 C	0.39 C	769 C	Yes	ASL	
	7440-39-3	BARIUM	2	70	mg/kg	01SS01701	21/21	-	70	NA	1430 N	548 N	1500 N	70900 N	No	BSL	
	7440-43-9	CADMIUM	0.3	0.32	mg/kg	01SS01401	1/21	0.2 - 0.26	0.32	NA	102 N	3.91 N	7 N	1840 C	No	BSL	
	7440-70-2	CALCIUM	233	42400	mg/kg	01SS13701	15/21	205 - 261	42,400	NA	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	2.2	11	mg/kg	01SS42001	21/21	-	11	NA	381 C ⁽¹³⁾	227 C ⁽¹³⁾	23 N ⁽¹³⁾⁽¹⁴⁾	276 C ⁽¹³⁾	No	BSL	
	7440-48-4	COBALT	6.8	6.8	mg/kg	01SS01701	1/21	1 - 1.3	6.8	NA	1230 N	469 N	2.3 N	1180 C	Yes	ASL	
	7440-50-8	COPPER	1.4	210	mg/kg	01SS01501	19/21	1 - 1.3	210	NA	817 N	313 N	310 N	NA	No	BSL	
	7439-89-6	IRON	546	9050	mg/kg	01SS01701	21/21	-	9,050	NA	61300 N	2350 N	5500 N	NA	Yes	ASL	
	7439-92-1	LEAD	3.2	70.6 J	mg/kg	01SS42001	21/21	-	70.6	NA	1700 C	400	400 N	NA	No	BSL	
	7439-95-4	MAGNESIUM	233	3390	mg/kg	01SS04QT	11/21	205 - 261	3,390	NA	NA	NA	NA	NA	No	NUT	
	7439-96-5	MANGANESE	1	358	mg/kg	01SS01701	21/21	-	358	NA	408 N	156 N	180 N	7090 N	Yes	ASL	
	7439-97-6	MERCURY	0.016	0.059	mg/kg	01SS01QT-D	16/21	0.013 - 0.016	0.059	NA	6.13 N	1 N	2.3 N ⁽¹⁵⁾	NA	No	BSL	
	7440-02-0	NICKEL	1.3	5.7	mg/kg	01SS13801	19/21	1 - 1.3	5.7	NA	408 N	156 N	150 N	NA	No	BSL	
	7782-49-2	SELENIUM	0.69	1.3	mg/kg	01SS06QT	4/21	0.61 - 0.78	1.3	NA	102 N	39.1 N	39 N	NA	No	BSL	
	7440-23-5	SODIUM	266	329	mg/kg	01SS13701	3/21	205 - 261	329	NA	NA	NA	NA	NA	No	NUT	
	7440-62-2	VANADIUM	2.7	16	mg/kg	01SS01701	21/21	-	16	NA	143 N	54.8 N	39 N	NA	No	BSL	
	7440-66-6	ZINC	1.7	89	mg/kg	01SS13701	21/21	-	89	NA	6130 N	2350 N	2300 N	NA	No	BSL	

**TABLE 6-1
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2**

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - USEPA Soil Screening Levels (SSLs). EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 9 - Values are for chlordane.
- 10 - Values are for alpha-BHC.
- 11 - Values are for endosulfan.
- 12 - Values are for endrin.
- 13 - Values are for hexavalent chromium.
- 14 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- 15 - Values are for mercury, inorganic salts.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- mg/kg = milligrams per kilogram
- µg/kg - micrograms per kilogram
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Rationale Codes:

- For selection as a COPC:
ASL = Above Screening Level
- For elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01SS01QT	01SS05QT	01SS1101	01SS01701	01SS13901-AVG
01SS01QT-AVG	01SS06QT	01SS1201	01SS02401	01SS13901-D
01SS01QT-D	01SS0701	01SS01401	01SS02501	01SS42001
01SS02QT	01SS0801	01SS01401-AVG	01SS13701	
01SS03QT	01SS0901	01SS01401-D	01SS13801	
01SS04QT	01SS1001	01SS01501	01SS13901	

**TABLE 6-2
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2**

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	78-93-3	2-BUTANONE	1.8 J	4 J	ug/kg	01SS1201	2/21	1.3 - 11	4	NA	1500	No	BSL
	108-10-1	4-METHYL-2-PENTANONE	0.71 J	1.2 J	ug/kg	01SS01501	4/21	0.54 - 11	1.2	NA	440	No	BSL
	127-18-4	TETRACHLOROETHENE	0.22 J	0.28 J	ug/kg	01SS13701	2/21	0.9 - 11	0.28	NA	0.052	Yes	ASL
	Semivolatile Organic Compounds												
	205-99-2	BENZO(B)FLUORANTHENE	78 J	78 J	ug/kg	01SS04QT	1/21	34 - 420	78	NA	47	Yes	ASL
	105-60-2	CAPROLACTAM	140 J	300 J	ug/kg	01SS0901	3/21	72 - 420	300	NA	5700	No	BSL
	84-74-2	DI-N-BUTYL PHTHALATE	53 J	53 J	ug/kg	01SS05QT	1/21	33 - 410	53	NA	11000	No	BSL
	84-66-2	DIETHYL PHTHALATE	40 J	60 J	ug/kg	01SS01501	3/21	36 - 420	60	NA	13000	No	BSL
	Pesticides/PCBs												
	72-55-9	4,4'-DDE	0.58 J	1.5 J	ug/kg	01SS1001	4/21	0.18 - 0.84	1.5	NA	60	No	BSL
	50-29-3	4,4'-DDT	0.23 J	2 J	ug/kg	01SS1001	7/20	0.18 - 0.84	2	NA	87	No	BSL
	309-00-2	ALDRIN	0.16 J	6.3 J	ug/kg	01SS01701	3/21	0.12 - 0.42	6.3	NA	0.84	Yes	ASL
	319-84-6	ALPHA-BHC	0.26 J	0.26 J	ug/kg	01SS05QT	1/21	0.12 - 0.41	0.26	NA	0.074	Yes	ASL
	5103-71-9	ALPHA-CHLORDANE	0.23 J	4.9 J	ug/kg	01SS02401	5/21	0.12 - 0.42	4.9	NA	33 ⁽⁷⁾	No	BSL
	11096-82-5	AROCLOR-1260	17 J	17 J	ug/kg	01SS1001	1/21	4.5 - 21	17	NA	14	Yes	ASL
	319-85-7	BETA-BHC	0.16 J	0.36 J	ug/kg	01SS0801	4/20	0.12 - 0.41	0.36	NA	0.26	Yes	ASL
	319-86-8	DELTA-BHC	0.26 J	0.26 J	ug/kg	01SS01401	1/21	0.12 - 0.42	0.26	NA	0.074⁽⁸⁾	Yes	ASL
	60-57-1	DIELDRIN	0.36 J	460 J	ug/kg	01SS02501	8/20	0.18 - 0.84	460	NA	0.09	Yes	ASL
	33213-65-9	ENDOSULFAN II	0.24 J	1.6	ug/kg	01SS42001	6/21	0.18 - 0.84	1.6	NA	9700 ⁽⁹⁾	No	BSL
	1031-07-8	ENDOSULFAN SULFATE	0.29 J	0.29 J	ug/kg	01SS01401-D	1/21	0.18 - 0.84	0.29	NA	9700 ⁽⁹⁾	No	BSL
	7421-93-4	ENDRIN ALDEHYDE	0.31 J	2 J	ug/kg	01SS1001	2/21	0.18 - 0.84	2	NA	230 ⁽¹⁰⁾	No	BSL
	58-89-9	GAMMA-BHC (LINDANE)	0.23 J	0.23 J	ug/kg	01SS13901-D	1/21	0.12 - 0.42	0.23	NA	0.43	No	BSL
	5103-74-2	GAMMA-CHLORDANE	0.22 J	3.4 J	ug/kg	01SS02401	4/21	0.12 - 0.42	3.4	NA	33 ⁽⁷⁾	No	BSL
	76-44-8	HEPTACHLOR	0.19 J	0.19 J	ug/kg	01SS0801	1/21	0.12 - 0.42	0.19	NA	1.6	No	BSL
	1024-57-3	HEPTACHLOR EPOXIDE	0.25 J	1.7 J	ug/kg	01SS1001	5/20	0.12 - 0.42	1.7	NA	0.079	Yes	ASL
	72-43-5	METHOXYCHLOR	0.29 J	140 J	ug/kg	01SS01701	4/21	0.12 - 0.42	140	NA	16000	No	BSL
	Herbicides												
	93-76-5	2,4,5-T	1.2 J	6 J	ug/kg	01SS0801	3/21	0.92 - 2.1	6	NA	110	No	BSL
	88-85-7	DINOSEB	8.8 J	8.8 J	ug/kg	01SS03QT	1/6	9.3 - 10	8.8	NA	270	No	BSL
	Metals												
	7429-90-5	ALUMINUM	1,770	12300	mg/kg	01SS13801	21/21	-	12,300	NA	55000	No	BSL
	7440-36-0	ANTIMONY	1.1 J	3.6 J	mg/kg	01SS42001	2/21	1 - 1.3	3.6	NA	0.66	Yes	ASL
	7440-38-2	ARSENIC	0.78	4.8	mg/kg	01SS04QT	19/21	0.61 - 0.78	4.8	NA	0.0013	Yes	ASL
	7440-39-3	BARIUM	2	70	mg/kg	01SS01701	21/21	-	70	NA	300	No	BSL
	7440-43-9	CADMIUM	0.3	0.32	mg/kg	01SS01401	1/21	0.2 - 0.26	0.32	NA	1.4	No	BSL
	7440-70-2	CALCIUM	233	42400	mg/kg	01SS13701	15/21	205 - 261	42,400	NA	NA	No	NUT
	7440-47-3	CHROMIUM	2.2	11	mg/kg	01SS42001	21/21	-	11	NA	2.1⁽¹¹⁾	Yes	ASL
	7440-48-4	COBALT	6.8	6.8	mg/kg	01SS01701	1/21	1 - 1.3	6.8	NA	0.49	Yes	ASL
	7440-50-8	COPPER	1.4	210	mg/kg	01SS01501	19/21	1 - 1.3	210	NA	51	Yes	ASL
	7439-89-6	IRON	546	9050	mg/kg	01SS01701	21/21	-	9,050	NA	640	Yes	ASL
	7439-92-1	LEAD	3.2	70.6 J	mg/kg	01SS42001	21/21	-	70.6	NA	14	Yes	ASL
	7439-95-4	MAGNESIUM	233	3390	mg/kg	01SS04QT	11/21	205 - 261	3,390	NA	NA	No	NUT
	7439-96-5	MANGANESE	1	358	mg/kg	01SS01701	21/21	-	358	NA	57	Yes	ASL
	7439-97-6	MERCURY	0.016	0.059	mg/kg	01SS01QT-D	16/21	0.013 - 0.016	0.059	NA	0.57 ⁽¹²⁾	No	BSL
	7440-02-0	NICKEL	1.3	5.7	mg/kg	01SS13801	19/21	1 - 1.3	5.7	NA	48	No	BSL
	7782-49-2	SELENIUM	0.69	1.3	mg/kg	01SS06QT	4/21	0.61 - 0.78	1.3	NA	0.95	Yes	ASL

**TABLE 6-2
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2**

Scenario Timeframe: Current/Future Medium: Surface Soil Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	7440-23-5	SODIUM	266	329	mg/kg	01SS13701	3/21	205 - 261	329	NA	NA	No	NUT
	7440-62-2	VANADIUM	2.7	16	mg/kg	01SS01701	21/21	-	16	NA	180	No	BSL
	7440-66-6	ZINC	1.7	89	mg/kg	01SS13701	21/21	-	89	NA	680	No	BSL

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Oak Ridge National Laboratory Regional Screening Levels for Chemical Contaminants at Superfund Sites, Risk-based soil screening level for migration to groundwater, April, 2009.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 7 - Values are for chlordane.
- 8 - Values are for alpha-BHC.
- 9 - Values are for endosulfan.
- 10 - Values are for endrin.
- 11 - Values are for hexavalent chromium.
- 12 - Values are for mercury, inorganic salts.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- mg/kg = milligrams per kilogram
- µg/kg - micrograms per kilogram
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Rationale Codes:

- For selection as a COPC:
ASL = Above Screening Level
- For elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

Associated Samples:

01SS01QT	01SS05QT	01SS1101	01SS01701	01SS13901-AVG
01SS01QT-AVG	01SS06QT	01SS1201	01SS02401	01SS13901-D
01SS01QT-D	01SS0701	01SS01401	01SS02501	01SS42001
01SS02QT	01SS0801	01SS01401-AVG	01SS13701	
01SS03QT	01SS0901	01SS01401-D	01SS13801	
01SS04QT	01SS1001	01SS01501	01SS13901	

TABLE 6-3
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SUBSURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁵⁾	ORNL Residential Soil Criteria ⁽⁶⁾	USEPA SSLs Soil to Air ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	78-93-3	2-BUTANONE	3 J	3.6 J	ug/kg	01SB0702-07	2/13	10 - 15	3.6	NA	8450 N	8450 N	2800000 NS	24000000 sat	No	BSL	
	108-10-1	4-METHYL-2-PENTANONE	1.7 J	1.7 J	ug/kg	01SBDIT02	1/13	10 - 15	1.7	NA	16300000 N	626000 N	530000 NS	2700000 sat	No	BSL	
	75-15-0	CARBON DISULFIDE	2.8 J	2.8 J	ug/kg	01SB0702-07	1/13	10 - 15	2.8	NA	797 N	797 N	67000 NS	720000 sat	No	BSL	
	74-87-3	CHLOROMETHANE	0.62 J	0.62 J	ug/kg	01SB1002-07	1/13	10 - 15	0.62	NA	440000 C	49100 C	12000 N	2100 C	No	BSL	
	Pesticides/PCBs																
	72-55-9	4,4'-DDE	0.35 J	0.35 J	ug/kg	01SBDIT01	1/3	0.83 - 0.95	0.35	NA	16800 C	1880 C	1400 C	NA	No	BSL	
	50-29-3	4,4'-DDT	0.73 J	1.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	1.4	NA	16800 C	1880 C	1700 C	750000 C	No	BSL	
	319-84-6	ALPHA-BHC	4.2 J	4.2 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	4.2	NA	908 C	101 C	77 C	750 C	No	BSL	
	5103-71-9	ALPHA-CHLORDANE	1.6	1.6	ug/kg	01SBDIT01	1/2	0.42 - 0.42	1.6	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL	
	53469-21-9	AROCLOR-1242	2400 J	2400 J	ug/kg	01SBDIT02	1/7	18 - 24	2,400	NA	10000 C	1000 C	220 C	NA	Yes	ASL	
	319-85-7	BETA-BHC	0.32 J	63 J	ug/kg	01SBDIT02	2/2	-	63	NA	3180 C	355 C	270 C	6000 C	No	BSL	
	319-86-8	DELTA-BHC	34.0 J	34 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	34	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	75000 C ⁽¹⁰⁾	No	BSL	
	60-57-1	DIELDRIN	0.43 J	0.43 J	ug/kg	01SBDIT01	1/2	0.95 - 0.95	0.43	NA	358 C	39.9 C	30 C	1100 C	No	BSL	
	33213-65-9	ENDOSULFAN II	0.51 J	4.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	4.4	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL	
	1031-07-8	ENDOSULFAN SULFATE	0.46 J	1.5 J	ug/kg	01SBDIT02	2/3	0.73 - 0.73	1.5	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL	
	72-20-8	ENDRIN	7.6 J	7.6 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	7.6	NA	6130 N	2350 N	1800 N	NA	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	12.0 J	12 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	12	NA	6130 N ⁽¹²⁾	2350 N ⁽¹²⁾	1800 N ⁽¹²⁾	NA	No	BSL	
	5103-74-2	GAMMA-CHLORDANE	0.65 J	0.65 J	ug/kg	01SBDIT01	1/1	-	0.65	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL	
	1024-57-3	HEPTACHLOR EPOXIDE	0.33 J	6.2 J	ug/kg	01SBDIT02	2/3	0.47 - 0.47	6.2	NA	629 C	70.2 C	53 C	4700 C	No	BSL	
	Metals																
	7429-90-5	ALUMINUM	2910	9700	mg/kg	01SBDIT03	3/3	-	9,700	NA	204000 N	7820 N	7700 N	709000 N	Yes	ASL	
	7440-38-2	ARSENIC	1.3	2	mg/kg	01SBDIT01	2/3	0.75 - 0.75	2	NA	3.82 C	0.426 C	0.39 C	769 C	Yes	ASL	
	7440-39-3	BARIUM	7.8	15.6	mg/kg	01SBDIT03	3/3	-	15.6	NA	1430 N	548 N	1500 N	70900 N	No	BSL	
	7440-70-2	CALCIUM	511	582	mg/kg	01SBDIT01	2/3	283 - 283	582	NA	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	3	9.8	mg/kg	01SBDIT03	3/3	-	9.8	NA	381 C ⁽¹³⁾	227 C ⁽¹³⁾	23 N ⁽¹³⁾⁽¹⁴⁾	276 C ⁽¹³⁾	No	BSL	
	7440-50-8	COPPER	2.2	2.2	mg/kg	01SBDIT01, 01SBDIT03	2/3	1.2 - 1.2	2.2	NA	817 N	313 N	310 N	NA	No	BSL	
	7439-89-6	IRON	908	2060	mg/kg	01SBDIT01	3/3	-	2,060	NA	61300 N	2350 N	5500 N	NA	No	BSL	
	7439-92-1	LEAD	2.5 J	7.5 J	mg/kg	01SBDIT01	3/3	-	7.5	NA	1700 C	400	400 N	NA	No	BSL	
	7439-96-5	MANGANESE	3.7	8	mg/kg	01SBDIT01	3/3	-	8	NA	408 N	156 N	180 N	7090 N	No	BSL	
	7439-97-6	MERCURY	0.019	0.073	mg/kg	01SBDIT03	2/3	0.017 - 0.017	0.073	NA	6.13 N	1 N	2.3 N ⁽¹⁵⁾	NA	No	BSL	
	7440-02-0	NICKEL	3.9	3.9	mg/kg	01SBDIT03	1/3	1.1 - 1.2	3.9	NA	408 N	156 N	150 N	NA	No	BSL	
	7440-62-2	VANADIUM	2.9	5.4	mg/kg	01SBDIT01	3/3	-	5.4	NA	143 N	54.8 N	39 N	NA	No	BSL	
7440-66-6	ZINC	4.2	22.6	mg/kg	01SBDIT01	3/3	-	22.6	NA	6130 N	2350 N	2300 N	NA	No	BSL		

TABLE 6-3
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SUBSURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

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Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - USEPA Soil Screening Levels (SSLs). EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 9 - Values are for chlordane.
- 10 - Values are for alpha-BHC.
- 11 - Values are for endosulfan.
- 12 - Values are for endrin.
- 13 - Values are for hexavalent chromium.
- 14 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- 15 - Values are for mercury, inorganic salts.

Definitions:

C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
mg/kg = milligrams per kilogram
µg/kg - micrograms per kilogram
N = Noncarcinogen
NA = Not Applicable/Not Available
S = Concentration may exceed Csat
sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:
ASL = Above Screening Level
For elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01SBDIT01	01SB0120-22.5	01SB1002-07
01SBDIT02	01SB0203-08	01SB1002-07-AVG
01SBDIT03	01SB0321-26	01SB1002-07-D
01SBDIT0402	01SB0402-07	
01SBDIT0445	01SB0502-07	
01SBDIT0502	01SB0602-07	
01SBDIT0502-AVG	01SB0702-07	
01SBDIT0502-D	01SB0802-07	
01SBDIT0602	01SB0902-07	

**TABLE 6-4
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SUBSURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Scenario Timeframe: Current/Future Medium: Subsurface Soil Exposure Medium: Subsurface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	78-93-3	2-BUTANONE	3 J	3.6 J	ug/kg	01SB0702-07	2/13	10 - 15	3.6	NA	1500	No	BSL
	108-10-1	4-METHYL-2-PENTANONE	1.7 J	1.7 J	ug/kg	01SBDIT02	1/13	10 - 15	1.7	NA	440	No	BSL
	75-15-0	CARBON DISULFIDE	2.8 J	2.8 J	ug/kg	01SB0702-07	1/13	10 - 15	2.8	NA	270	No	BSL
	74-87-3	CHLOROMETHANE	0.62 J	0.62 J	ug/kg	01SB1002-07	1/13	10 - 15	0.62	NA	49	No	BSL
	Pesticides/PCBs												
	72-55-9	4,4'-DDE	0.35 J	0.35 J	ug/kg	01SBDIT01	1/3	0.83 - 0.95	0.35	NA	60	No	BSL
	50-29-3	4,4'-DDT	0.73 J	1.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	1.4	NA	87	No	BSL
	319-84-6	ALPHA-BHC	4.2 J	4.2 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	4.2	NA	0.074	Yes	ASL
	5103-71-9	ALPHA-CHLORDANE	1.6	1.6	ug/kg	01SBDIT01	1/2	0.42 - 0.42	1.6	NA	33 ⁽⁷⁾	No	BSL
	53469-21-9	AROCLOR-1242	2400 J	2400 J	ug/kg	01SBDIT02	1/7	18 - 24	2,400	NA	3	Yes	ASL
	319-85-7	BETA-BHC	0.32 J	63 J	ug/kg	01SBDIT02	2/2	-	63	NA	0.26	Yes	ASL
	319-86-8	DELTA-BHC	34.0 J	34 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	34	NA	0.074⁽⁸⁾	Yes	ASL
	60-57-1	DIELDRIN	0.43 J	0.43 J	ug/kg	01SBDIT01	1/2	0.95 - 0.95	0.43	NA	0.09	Yes	ASL
	33213-65-9	ENDOSULFAN II	0.51 J	4.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	4.4	NA	9700 ⁽⁹⁾	No	BSL
	1031-07-8	ENDOSULFAN SULFATE	0.46 J	1.5 J	ug/kg	01SBDIT02	2/3	0.73 - 0.73	1.5	NA	9700 ⁽⁹⁾	No	BSL
	72-20-8	ENDRIN	7.6 J	7.6 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	7.6	NA	230	No	BSL
	7421-93-4	ENDRIN ALDEHYDE	12.0 J	12 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	12	NA	230 ⁽¹⁰⁾	No	BSL
	5103-74-2	GAMMA-CHLORDANE	0.65 J	0.65 J	ug/kg	01SBDIT01	1/1	-	0.65	NA	33 ⁽⁷⁾	No	BSL
	1024-57-3	HEPTACHLOR EPOXIDE	0.33 J	6.2 J	ug/kg	01SBDIT02	2/3	0.47 - 0.47	6.2	NA	0.079	Yes	ASL
	Metals												
	7429-90-5	ALUMINUM	2910	9700	mg/kg	01SBDIT03	3/3	-	9,700	NA	55000	No	BSL
	7440-38-2	ARSENIC	1.3	2	mg/kg	01SBDIT01	2/3	0.75 - 0.75	2	NA	0.0013	Yes	ASL
	7440-39-3	BARIUM	7.8	15.6	mg/kg	01SBDIT03	3/3	-	15.6	NA	300	No	BSL
	7440-70-2	CALCIUM	511	582	mg/kg	01SBDIT01	2/3	283 - 283	582	NA	NA	No	NUT
	7440-47-3	CHROMIUM	3	9.8	mg/kg	01SBDIT03	3/3	-	9.8	NA	2.1⁽¹¹⁾	Yes	ASL
	7440-50-8	COPPER	2.2	2.2	mg/kg	01SBDIT01, 01SBDIT03	2/3	1.2 - 1.2	2.2	NA	51	No	BSL
	7439-89-6	IRON	908	2060	mg/kg	01SBDIT01	3/3	-	2,060	NA	640	Yes	ASL
	7439-92-1	LEAD	2.5 J	7.5 J	mg/kg	01SBDIT01	3/3	-	7.5	NA	14	No	BSL
	7439-96-5	MANGANESE	3.7	8	mg/kg	01SBDIT01	3/3	-	8	NA	57	No	BSL
	7439-97-6	MERCURY	0.019	0.073	mg/kg	01SBDIT03	2/3	0.017 - 0.017	0.073	NA	0.57 ⁽¹²⁾	No	BSL
	7440-02-0	NICKEL	3.9	3.9	mg/kg	01SBDIT03	1/3	1.1 - 1.2	3.9	NA	48	No	BSL
	7440-62-2	VANADIUM	2.9	5.4	mg/kg	01SBDIT01	3/3	-	5.4	NA	180	No	BSL
7440-66-6	ZINC	4.2	22.6	mg/kg	01SBDIT01	3/3	-	22.6	NA	680	No	BSL	

TABLE 6-4
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SUBSURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

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Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Oak Ridge National Laboratory Regional Screening Levels for Chemical Contaminants at Superfund Sites, Risk-based soil screening level for migration to groundwater, April 2009.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 7 - Values are for chlordane.
- 8 - Values are for alpha-BHC.
- 9 - Values are for endosulfan.
- 10 - Values are for endrin.
- 11 - Values are for hexavalent chromium.
- 12 - Values are for mercury, inorganic salts.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01SBDIT01	01SB0120-22.5	01SB1002-07
01SBDIT02	01SB0203-08	01SB1002-07-AVG
01SBDIT03	01SB0321-26	01SB1002-07-D
01SBDIT0402	01SB0402-07	
01SBDIT0445	01SB0502-07	
01SBDIT0502	01SB0602-07	
01SBDIT0502-AVG	01SB0702-07	
01SBDIT0502-D	01SB0802-07	
01SBDIT0602	01SB0902-07	

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- mg/kg = milligrams per kilogram
- µg/kg - micrograms per kilogram
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed C_{sat}
- sat = soil saturation concentration

Rationale Codes:

- For selection as a COPC:
 - ASL = Above Screening Level
- For elimination as a COPC:
 - BSL = Below COPC Screening Level
 - NUT = Essential nutrient
 - NTX = No toxicity criteria

**TABLE 6-5
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - DPT GROUNDWATER SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Scenario Timeframe: Current/Future
Medium: Groundwater - DPT Samples
Exposure Medium: Groundwater - DPT Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	Potential ARAR/TBC ⁽⁷⁾	Potential ARAR/TBC Source ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	78-93-3	2-BUTANONE	1.6 J	2.4 J	ug/L	01QT1501	3/25	5 - 5	2.4	NA	191 N	710 N	NA	NA	No	BSL	
	67-64-1	ACETONE	3.2 J	4.8 J	ug/L	01TW1001-D	8/25	5 - 5	4.8	NA	60.8 N	2200 N	NA	NA	No	BSL	
	75-15-0	CARBON DISULFIDE	0.16 J	0.25 J	ug/L	01QT1601	3/25	1 - 1	0.25	0.66	104 N	100 N	NA	NA	No	BSL	
	74-87-3	CHLOROMETHANE	0.36 J	0.36 J	ug/L	01TW1001-D	1/25	1 - 1	0.36	NA	1.43 C	19 N	NA	NA	No	BSL	
	156-59-2	CIS-1,2-DICHLOROETHENE	0.22 J	0.22 J	ug/L	01TW0301	1/25	1 - 1	0.22	0.2	70 MCL	37 N	70	MCL	No	BSL	
	127-18-4	TETRACHLOROETHENE	0.26 J	0.54 J	ug/L	01QT0401	3/25	1 - 1	0.54	0.35	5 MCL	0.11 C	5	MCL	Yes	ASL	
	79-01-6	TRICHLOROETHENE	0.32 J	0.32 J	ug/L	01TW0301	1/25	1 - 1	0.32	0.51	5 MCL	1.7 C	5	MCL	No	BSL	

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Samples 01TW0101, 01QT1101, 01QT1101-AVG, 01QT1101-D, 01QT1201, and 01QT1301 were used as the background dataset.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - 2006 Edition of the Drinking Water Standards and Health Advisories (USEPA, August 2006). SMCLs are presented for reference purposes only.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01TW0201	01QT0301
01TW0301	01QT0401
01TW0401	01QT0501
01TW0501	01QT0601
01TW0601	01QT0701
01TW0701	01QT0801
01TW0801	01QT0901
01TW0901	01QT1001
01TW1001	01QT1501
01TW1001-AVG	01QT1601
01TW1001-D	01QT1701
01QT1401	01QT1801
01QT0101	01QT1901

Definitions:

ARAR/TBC = Applicable or Relevant and Appropriate Requirements To Be Considered
 C = Carcinogen
 COPC = Chemical Of Potential Concern
 DPT = Direct Push Technology
 J = Estimated value
 MCL = Maximum Contaminant Level
 ug/L = micrograms per liter
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration
 SMCL = Secondary Maximum Contaminant Level

Rationale Codes:

For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

TABLE 6-6
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - GROUNDWATER - MONITORING WELL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Medium: Groundwater - Monitoring Well Samples
Exposure Medium: Groundwater - Monitoring Well Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	Potential ARAR/TBC ⁽⁷⁾	Potential ARAR/TBC Source ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	67-64-1	ACETONE	1.6 J	2.8 J	ug/L	01GW1901	2/21	1.7 - 5	2.8	NA	60.8 N	2200 N	NA	NA	No	BSL	
	75-15-0	CARBON DISULFIDE	1.8	1.8	ug/L	01GW0901	1/21	0.15 - 1	1.8	NA	104 N	100 N	NA	NA	No	BSL	
	79-01-6	TRICHLOROETHENE	0.3 J	0.3 J	ug/L	01GW2001	1/21	0.23 - 1	0.3	1.3	5 MCL	1.7 C	5	MCL	No	BSL	
	Semivolatile Organics																
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1.7 J	2 J	ug/L	01GW2501, 01GW2601	5/21	1.4 - 3.3	2	NA	6 MCL	4.8 C	6	MCL	No	BSL	
	91-20-3	NAPHTHALENE	6.7 J	6.7 J	ug/L	01GW2601	1/21	0.42 - 10	6.7	NA	0.62 N	0.14 C	NA	NA	Yes	ASL	
	Pesticides/PCBs																
	50-29-3	4,4'-DDT	0.0068 J	0.0068 J	ug/L	01GW2401	1/21	0.0046 - 0.02	0.0068	NA	0.197 C	0.2 C	NA	NA	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	0.0088 J	0.0088 J	ug/L	01GW1301	1/21	0.0046 - 0.02	0.0088	NA	2 MCL ⁽⁹⁾	1.1 N ⁽⁹⁾	2	MCL	No	BSL	
	Herbicides (ug/L)																
	93-72-1	2,4,5-TP (SILVEX)	0.049 J	0.17 J	ug/L	01GW1601-D, 01GW2001	3/18	0.023 - 0.05	0.17	NA	50 MCL	29 N	50	MCL	No	BSL	
	Inorganics																
	7429-90-5	ALUMINUM	73.5	6320	ug/L	01GW1101	21/21	-	6320	81.9	3650 N	3700 N	50 - 200	SMCL	Yes	ASL	
	7440-38-2	ARSENIC	14.2	19.1	ug/L	01GW1401	2/21	3 - 3	19.1	NA	50 MCL	0.045 C	10	MCL	Yes	ASL	
	7440-39-3	BARIUM	15.1	418	ug/L	01GW0601	21/21	-	418	38.8	2000 MCL	730 N	2000	MCL	No	BSL	
	7440-70-2	CALCIUM	3940	86800	ug/L	01GW2701	21/21	-	86800	14100	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	2.1	8.1	ug/L	01GW1101	3/21	2 - 2	8.1	2.3	100 MCL ⁽¹⁰⁾	11 N ⁽¹⁰⁾	100	MCL	No	BSL	
	7439-89-6	IRON	147	44000	ug/L	01GW1501	21/21	-	44000	1170	1100 N	2600 N	300	SMCL	Yes	ASL	
	7439-92-1	LEAD	1.5	1.9	ug/L	01GW2001	3/21	1.5 - 1.7	1.9	NA	15 MCL	15	15	MCL ⁽¹¹⁾	No	BSL	
	7439-95-4	MAGNESIUM	1000	9990	ug/L	01GW0601	17/21	1000 - 1000	9990	2190	NA	NA	NA	NA	No	NUT	
	7439-96-5	MANGANESE	4.4	548	ug/L	01GW1501	21/21	-	548	40.9	73 N	88 N	50	SMCL	Yes	ASL	
	7440-09-7	POTASSIUM	1470	4600	ug/L	01GW0601	5/21	1000 - 1000	4600	NA	NA	NA	NA	NA	No	NUT	
	7440-23-5	SODIUM	2770	19500	ug/L	01GW0601, 01GW0901	21/21	-	19500	7200	NA	NA	NA	NA	No	NUT	
	7440-28-0	THALLIUM	4.1	4.1	ug/L	01GW1601	1/21	3 - 3	4.1	NA	2 MCL	0.24 N	2	MCL	Yes	ASL	
	7440-62-2	VANADIUM	10.2	10.2	ug/L	01GW1101	1/21	5 - 5	10.2	NA	25.6 N	18 N	NA	NA	No	BSL	
	7440-66-6	ZINC	5.7	24.3	ug/L	01GW0701	3/21	5 - 5	24.3	NA	1100 N	1100 N	5000	SMCL	No	BSL	
	Miscellaneous Parameters																
	57-12-5	CYANIDE	2.1 J	22.2 J	ug/L	01GW1901	13/21	5 - 5	22.2	NA	200 MCL	73 N	200	MCL	No	BSL	

**TABLE 6-6
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - GROUNDWATER - MONITORING WELL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2**

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Sample 01GW2301 was used as the background dataset.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - 2006 Edition of the Drinking Water Standards and Health Advisories (USEPA, August 2006). SMCLs are presented for reference purposes only.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 9 - Values are for endrin.
- 10 - Values are for hexavalent chromium.
- 11 - The MCL for this parameter is actually a treatment technique. The SDWA action level (at the tap) has been presented.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01GW0601	01GW1201	01GW1801	01GW2701
01GW0701	01GW1301	01GW1901	
01GW0701-AVG	01GW1401	01GW2001	
01GW0701-D	01GW1501	01GW2101	
01GW0801	01GW1601	01GW2201	
01GW0901	01GW1601-AVG	01GW2401	
01GW1001	01GW1601-D	01GW2501	
01GW1101	01GW1701	01GW2601	

Definitions:

- ARAR/TBC = Applicable or Relevant and Appropriate Requirements To Be Considered
- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- MCL = Maximum Contaminant Level
- µg/L = micrograms per liter
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration
- SMCL = Secondary Maximum Contaminant Level

Rationale Codes:

- For selection as a COPC:
 - ASL = Above Screening Level
- For elimination as a COPC:
 - BSL = Below COPC Screening Level
 - NUT = Essential nutrient
 - NTX = No toxicity criteria

**TABLE 6-7
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - VAPOR INTRUSION - DPT GROUNDWATER SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Scenario Timeframe: Current/Future Medium: Groundwater - DPT Samples Exposure Medium: Groundwater - DPT Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	USEPA Groundwater Volatilization Criteria ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	78-93-3	2-BUTANONE	1.6 J	2.4 J	ug/L	01QT1501	3/25	5 - 5	2.4	NA	440000 N	No	BSL
	67-64-1	ACETONE	3.2 J	4.8 J	ug/L	01TW1001-D	8/25	5 - 5	4.8	NA	220000 N	No	BSL
	75-15-0	CARBON DISULFIDE	0.16 J	0.25 J	ug/L	01QT1601	3/25	1 - 1	0.25	0.66	560 N	No	BSL
	74-87-3	CHLOROMETHANE	0.36 J	0.36 J	ug/L	01TW1001-D	1/25	1 - 1	0.36	NA	6.7 C	No	BSL
	156-59-2	CIS-1,2-DICHLOROETHENE	0.22 J	0.22 J	ug/L	01TW0301	1/25	1 - 1	0.22	0.2	210 N	No	BSL
	127-18-4	TETRACHLOROETHENE	0.26 J	0.54 J	ug/L	01QT0401	3/25	1 - 1	0.54	0.35	1.1 C	No	BSL
79-01-6	TRICHLOROETHENE	0.32 J	0.32 J	ug/L	01TW0301	1/25	1 - 1	0.32	0.51	0.053 C	Yes	ASL	

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Samples 01TW0101, 01QT1101, 01QT1101-AVG, 01QT1101-D, 01QT1201, and 01QT1301 were used as the background dataset.
- 5 - Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. November 2002. EPA530-F-02-052. Values are from Table 2c (values for tetrachloroethene and trichloroethene are from Table 2a) and correspond to a target cancer risk level of 1E-6 or HI =1 and an attenuation factor of 0.001.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01TW0201	01QT0301
01TW0301	01QT0401
01TW0401	01QT0501
01TW0501	01QT0601
01TW0601	01QT0701
01TW0701	01QT0801
01TW0801	01QT0901
01TW0901	01QT1001
01TW1001	01QT1501
01TW1001-AVG	01QT1601
01TW1001-D	01QT1701
01QT1401	01QT1801
01QT0101	01QT1901
01QT0201	

Definitions:

C = Carcinogen
COPC = Chemical Of Potential Concern
DPT = Direct Push Technology
J = Estimated value
MCL = Maximum Contaminant Level
µg/L = micrograms per liter
N = Noncarcinogen
NA = Not Applicable/Not Available
S = Concentration may exceed Csat
sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:
ASL = Above Screening Level
For elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

**TABLE 6-8
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - VAPOR INTRUSION - MONITORING WELL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2**

Scenario Timeframe: Current/Future
Medium: Groundwater - Monitoring Well Samples
Exposure Medium: Groundwater - Monitoring Well Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	USEPA Groundwater Volatilization Criteria ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	67-64-1	ACETONE	1.6 J	2.8 J	ug/L	01GW1901	2/21	1.7 - 5	2.8	NA	220000 N	No	BSL
	75-15-0	CARBON DISULFIDE	1.8	1.8	ug/L	01GW0901	1/21	0.15 - 1	1.8	NA	560 N	No	BSL
	91-01-6	TRICHLOROETHENE	0.3 J	0.3 J	ug/L	01GW2001	1/21	0.23 - 1	0.3	1.3	0.053 C	Yes	ASL
	Semivolatile Organics												
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1.7 J	2 J	ug/L	01GW2501, 01GW2601	5/21	1.4 - 3.3	2	NA	NA	No	NTX
	91-20-3	NAPHTHALENE	6.7 J	6.7 J	ug/L	01GW2601	1/21	0.42 - 10	6.7	NA	150 N	No	BSL
	Pesticides/PCBs												
	50-29-3	4,4'-DDT	0.0068 J	0.0068 J	ug/L	01GW2401	1/21	0.0046 - 0.02	0.0068	NA	NA	No	NTX
	7421-93-4	ENDRIN ALDEHYDE	0.0088 J	0.0088 J	ug/L	01GW1301	1/21	0.0046 - 0.02	0.0088	NA	NA	No	NTX
	Herbicides (ug/L)												
	93-72-1	2,4,5-TP (SILVEX)	0.049 J	0.17 J	ug/L	01GW1601-D, 01GW2001	3/18	0.023 - 0.05	0.17	NA	NA	No	NTX
	Inorganics												
	7429-90-5	ALUMINUM	73.5	6320	ug/L	01GW1101	21/21	-	6320	81.9	NA	No	NTX
	7440-38-2	ARSENIC	14.2	19.1	ug/L	01GW1401	2/21	3 - 3	19.1	NA	NA	No	NTX
	7440-39-3	BARIUM	15.1	418	ug/L	01GW0601	21/21	-	418	38.8	NA	No	NTX
	7440-70-2	CALCIUM	3940	86800	ug/L	01GW2701	21/21	-	86800	14100	NA	No	NTX
	7440-47-3	CHROMIUM	2.1	8.1	ug/L	01GW1101	3/21	2 - 2	8.1	2.3	NA	No	NTX
	7439-89-6	IRON	147	44000	ug/L	01GW1501	21/21	-	44000	1170	NA	No	NTX
	7439-92-1	LEAD	1.5	1.9	ug/L	01GW2001	3/21	1.5 - 1.7	1.9	NA	NA	No	NTX
	7439-95-4	MAGNESIUM	1000	9990	ug/L	01GW0601	17/21	1000 - 1000	9990	2190	NA	No	NTX
	7439-96-5	MANGANESE	4.4	548	ug/L	01GW1501	21/21	-	548	40.9	NA	No	NTX
	7440-09-7	POTASSIUM	1470	4600	ug/L	01GW0601	5/21	1000 - 1000	4600	NA	NA	No	NTX
	7440-23-5	SODIUM	2770	19500	ug/L	01GW0601, 01GW0901	21/21	-	19500	7200	NA	No	NTX
	7440-28-0	THALLIUM	4.1	4.1	ug/L	01GW1601	1/21	3 - 3	4.1	NA	NA	No	NTX
	7440-62-2	VANADIUM	10.2	10.2	ug/L	01GW1101	1/21	5 - 5	10.2	NA	NA	No	NTX
	7440-66-6	ZINC	5.7	24.3	ug/L	01GW0701	3/21	5 - 5	24.3	NA	NA	No	NTX
	Miscellaneous Parameters												
	57-12-5	CYANIDE	2.1 J	22.2 J	ug/L	01GW1901	13/21	5 - 5	22.2	NA	NA	No	NTX

TABLE 6-8
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - VAPOR INTRUSION - MONITORING WELL SAMPLES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Sample 01GW2301 was used as the background dataset.
- 5 - Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. November 2002. EPA530-F-02-052.
Values are from Table 2c (the value for trichloroethene is from Table 2a) and correspond to a target cancer risk level of 1E-6 or HI =1 and an attenuation factor of 0.001.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01GW0601	01GW1301	01GW2001
01GW0701	01GW1401	01GW2101
01GW0701-AVG	01GW1501	01GW2201
01GW0701-D	01GW1601	01GW2401
01GW0801	01GW1601-AVG	01GW2501
01GW0901	01GW1601-D	01GW2601
01GW1001	01GW1701	01GW2701
01GW1101	01GW1801	
01GW1201	01GW1901	

Definitions:

C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
MCL = Maximum Contaminant Level
µg/L = micrograms per liter
N = Noncarcinogen
NA = Not Applicable/Not Available
S = Concentration may exceed Csat
sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:
ASL = Above Screening Level
For elimination as a COPC:

BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

**TABLE 6-9
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE WATER
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁷⁾	
Site 1	Volatile Organic Compounds														
	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	6.6	6.6	ug/L	01SW0401	1/5	1 - 1	6.6	NA	5940 N	5900 N	No	BSL	
	67-64-1	ACETONE	3.4 J	5.1	ug/L	01SW0201	5/5	-	5.1	NA	60.8 N	2200 N	No	BSL	
	75-15-0	CARBON DISULFIDE	0.18 J	0.2 J	ug/L	01SW0301-D	2/5	1 - 1	0.2	NA	104 N	100 N	No	BSL	
	108-88-3	TOLUENE	0.22 J	0.22 J	ug/L	01SW0401	1/5	1 - 1	0.22	NA	1000 MCL	230 N	No	BSL	
	Semivolatile Organic Compounds														
	105-60-2	CAPROLACTAM	0.91 J	2.1 J	ug/L	01SW0401	5/5	-	2.1	NA	1830 N	1800 N	No	BSL	
	Pesticides/PCBs														
	5103-71-9	ALPHA-CHLORDANE	0.004 J	0.004 J	ug/L	01SW0401	1/5	0.0092 - 0.0098	0.004	NA	2 MCL	0.19 C ⁽⁷⁾	No	BSL	
	Herbicides														
	93-72-1	2,4,5-TP (SILVEX)	0.044 J	0.067 J	ug/L	01SW0101	4/5	0.069 - 0.069	0.067	NA	50 MCL	29 N	No	BSL	
	Metals														
	7429-90-5	ALUMINUM	430	1690	ug/L	01SW0401	5/5	-	1690	NA	3650 N	3700 N	No	BSL	
	7440-38-2	ARSENIC	3.4	3.4	ug/L	01SW0101	1/5	3 - 3	3.4	NA	50 MCL	0.045 C	Yes	ASL	
	7440-39-3	BARIUM	27.4	30.1	ug/L	01SW0501	5/5	27.8 - 27.8	30.1	NA	2000 MCL	730 N	No	BSL	
	7440-70-2	CALCIUM	13200	24800	ug/L	01SW0401	5/5	-	24800	NA	NA	NA	No	NUT	
	7439-89-6	IRON	1720	2410	ug/L	01SW0101	5/5	-	2410	NA	1100 N	2600 N	Yes	ASL	
	7439-92-1	LEAD	1.6	2	ug/L	01SW0301-D	2/5	1.5 - 1.5	2	NA	15 MCL	NA	No	BSL	
	7439-95-4	MAGNESIUM	1160	1560	ug/L	01SW0401	5/5	-	1560	NA	NA	NA	No	NUT	
	7439-96-5	MANGANESE	26.3	53.1	ug/L	01SW0101	5/5	-	53.1	NA	73 N	88 N	No	BSL	
7440-09-7	POTASSIUM	1080	1080	ug/L	01SW0401	1/5	1000 - 1000	1080	NA	NA	NA	No	NUT		
7440-23-5	SODIUM	5220	5940	ug/L	01SW0101	5/5	-	5940	NA	NA	NA	No	NUT		
7440-66-6	ZINC	5.4	10.4	ug/L	01SW0501	5/5	-	10.4	NA	1100 N	1100 N	No	BSL		

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background sediment data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April, 2009).
- 7 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- MCL = Maximum Contaminant Level
- ug/L = micrograms per liter
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Associated Samples:

- 01SW0101
- 01SW0201
- 01SW0301
- 01SW0301-AVG
- 01SW0301-D
- 01SW0401
- 01SW0501

Rationale Codes:

- For selection as a COPC:
 - ASL = Above Screening Level
- For elimination as a COPC:
 - BSL = Below COPC Screening Level
 - NUT = Essential nutrient
 - NTX = No toxicity criteria

TABLE 6-10
OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SEDIMENT
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁵⁾	ORNL Residential Soil Criteria ⁽⁶⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁷⁾	
Site 1	Volatile Organic Compounds															
	78-93-3	2-BUTANONE	6 J	80 J	ug/kg	01SD0101	4/5	12 - 12	80	NA	8450 N	84500 N	2800000 NS	No	BSL	
	67-64-1	ACETONE	28 J	220 J	ug/kg	01SD0101	2/5	12 - 12	220	NA	10400000 N	782000 N	6100000 N	No	BSL	
	108-88-3	TOLUENE	33 J	33 J	ug/kg	01SD0101	1/5	12 - 12	33	NA	3800 N	3800 N	500000 NS	No	BSL	
	Semivolatile Organic Compounds															
	106-44-5	4-METHYLPHENOL	420 J	420 J	ug/kg	01SD0101	1/5	400 - 470	420	NA	1020000 N	39100 N	31000 N	No	BSL	
	50-32-8	BENZO(A)PYRENE	190 J	190 J	ug/kg	01SD0101	1/5	400 - 470	190	NA	784 C	87.5 C	15 C	Yes	ASL	
	205-99-2	BENZO(B)FLUORANTHENE	330 J	330 J	ug/kg	01SD0101	1/5	400 - 470	330	NA	7840 C	875 C	150 C	Yes	ASL	
	207-08-9	BENZO(K)FLUORANTHENE	220 J	220 J	ug/kg	01SD0101	1/5	400 - 470	220	NA	78400 C	8750 C	1500 C	No	BSL	
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	74 J	450 J	ug/kg	01SD0101	5/5	-	450	NA	409000 C	45600 C	35000 C	No	BSL	
	218-01-9	CHRYSENE	400 J	400 J	ug/kg	01SD0101	1/5	400 - 470	400	NA	784000 C	87500 C	15000 C	No	BSL	
	206-44-0	FLUORANTHENE	1,300 J	1300 J	ug/kg	01SD0101	1/5	400 - 470	1,300	NA	8170000 N	313000 N	230000 N	No	BSL	
	85-01-8	PHENANTHRENE	360 J	360 J	ug/kg	01SD0101	1/5	400 - 470	360	NA	6130000 N	235000 N	170000 N ⁽⁶⁾	No	BSL	
	129-00-0	PYRENE	930 J	930 J	ug/kg	01SD0101	1/5	400 - 470	930	NA	6130000 N	235000 N	170000 N	No	BSL	
	-	BENZO(A)PYRENE EQUIVALENTS	200	240	ug/kg	01SD0201	5/5	-	240	NA	784 C	87.5 C	15 C	Yes	ASL	
	Pesticides/PCBs															
	72-55-9	4,4'-DDE	0 J	0.91	ug/kg	01SD0301-D	3/5	0.81 - 3.5	0.91	NA	16800 C	1880 C	1400 C	No	BSL	
	309-00-2	ALDRIN	0 J	0.45 J	ug/kg	01SD0301-D	1/5	0.4 - 1.7	0.45	NA	337 C	37.6 C	29 C	No	BSL	
	319-84-6	ALPHA-BHC	0 J	0.17 J	ug/kg	01SD0501	1/5	0.4 - 1.7	0.17	NA	908 C	101 C	77 C	No	BSL	
	5103-71-9	ALPHA-CHLORDANE	1	6 J	ug/kg	01SD0101	4/5	0.4 - 0.41	6	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	No	BSL	
	319-86-8	DELTA-BHC	2 J	2.1 J	ug/kg	01SD0101	1/5	0.4 - 0.48	2.1	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	No	BSL	
	60-57-1	DIELDRIN	1 J	1.8	ug/kg	01SD0301	3/5	0.43 - 3.5	1.8	NA	358 C	39.9 C	30 C	No	BSL	
	5103-74-2	GAMMA-CHLORDANE	1 J	3.5 J	ug/kg	01SD0101	4/5	0.4 - 0.41	3.5	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	No	BSL	
	1024-57-3	HEPTACHLOR EPOXIDE	0 J	0.46 J	ug/kg	01SD0501	1/5	0.3 - 1.7	0.46	NA	629 C	70.2 C	53 C	No	BSL	
	Metals															
	7429-90-5	ALUMINUM	1,000	17200 J	mg/kg	01SD0101	5/5	-	17,200	NA	204000 N	7820 N	7700 N	Yes	ASL	
	7440-38-2	ARSENIC	1	19.8 J	mg/kg	01SD0101	4/5	0.74 - 0.74	19.8	NA	3.82 C	0.426 C	0.39 C	Yes	ASL	
	7440-39-3	BARIUM	5	61.2 J	mg/kg	01SD0101	5/5	-	61.2	NA	1430 N	548 N	1500 N	No	BSL	
	7440-41-7	BERYLLIUM	1 J	1.1 J	mg/kg	01SD0101	1/5	0.24 - 0.29	1.1	NA	102 N	15.6 N	16 N	No	BSL	
	7440-70-2	CALCIUM	336	5050 J	mg/kg	01SD0101	3/5	245 - 259	5,050	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	1	17.6 J	mg/kg	01SD0101	5/5	-	17.6	NA	381 C ⁽¹¹⁾	227 C ⁽¹¹⁾	23 N ⁽¹¹⁾⁽¹²⁾	No	BSL	
	7440-50-8	COPPER	12 J	11.7 J	mg/kg	01SD0101	1/5	1.2 - 1.5	11.7	NA	817 N	313 N	310 N	No	BSL	
	7439-89-6	IRON	650	28100 J	mg/kg	01SD0101	5/5	-	28,100	NA	61300 N	2350 N	5500 N	Yes	ASL	
	7439-92-1	LEAD	2	32.1 J	mg/kg	01SD0101	5/5	-	32.1	NA	1700 C	400 C	400 N	No	BSL	
	7439-96-5	MANGANESE	2	295 J	mg/kg	01SD0101	5/5	-	295	NA	408 N	156 N	180 N	Yes	ASL	
	7440-02-0	NICKEL	6 J	6.4 J	mg/kg	01SD0101	1/5	1.2 - 1.5	6.4	NA	408 N	156 N	150 N	No	BSL	
	7440-62-2	VANADIUM	1	32.2 J	mg/kg	01SD0101	5/5	-	32.2	NA	143 N	54.8 N	39 N	No	BSL	
	7440-66-6	ZINC	4	132 J	mg/kg	01SD0101	5/5	-	132	NA	6130 N	2350 N	2300 N	No	BSL	
	Miscellaneous Parameters															
	-	TOTAL ORGANIC CARBON	1,480	66300 J	mg/kg	01SD0101	5/5	-	66,300	NA	NA	NA	NA	NA	No	NTX

Footnotes:

- Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
 - Values presented are sample-specific quantitation limits.
 - The maximum detected concentration is used for screening purposes.
 - No site-specific background sediment data were available for NCBC Gulfport.
 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April, 2009).
 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
 - Values are for pyrene.
 - Values are for chlordanes.
 - Values are for alpha-BHC.
 - Values are for hexavalent chromium.
 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- mg/kg = milligrams per kilogram
- ug/kg = micrograms per kilogram
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Rationale Codes:

- For selection as a COPC:
ASL = Above Screening Level
- For elimination as a COPC:
BSL = Below COPC Screening Level
NUT = Essential nutrient
NTX = No toxicity criteria

Associated Samples:

- 01SD0101
- 01SD0201
- 01SD0301
- 01SD0301-AVG
- 01SD0301-D
- 01SD0401
- 01SD0501

TABLE 6-11
CHEMICALS RETAINED AS COPCs
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Chemical	Surface Soil			Subsurface Soil			Groundwater		Surface Water	Sediment
	Direct Contact	Soil to Air	Soil to Groundwater	Direct Contact	Soil to Air	Soil to Groundwater	Direct Contact	Vapor Intrusion		
Volatile Organic Compounds										
Tetrachloroethene			X				X ⁽¹⁾			
Trichloroethene								X ⁽²⁾		
Semivolatile Organic Compounds										
Benzo(a)pyrene										X
Benzo(b)fluoranthene			X							X
Naphthalene							X			
Benzo(a)pyrene Equivalents										X
Pesticides/PCBs										
Aldrin			X							
alpha-BHC			X			X				
Aroclor-1242				X		X				
Aroclor-1260			X							
beta-BHC			X			X				
delta-BHC			X			X				
Dieldrin	X		X			X				
Heptachlor epoxide			X			X				
Inorganics										
Aluminum	X			X			X			X
Antimony	X		X							
Arsenic	X		X	X		X	X		X	X
Chromium			X			X				
Cobalt	X		X							
Copper			X							
Iron	X		X			X	X		X	X
Lead			X							
Manganese	X		X				X			X
Selenium			X							
Thallium							X			

X - Indicates chemical was retained as a COPC.

1 - Tetrachloroethene was selected as a COPC in direct push technology (DPT) groundwater samples only.

2 - Trichloroethene was selected as a COPC in both DPT and monitoring well groundwater samples.

TABLE 6-12
EXPOSURE ROUTES FOR QUANTITATIVE EVALUATION
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Receptors	Exposure Routes
Construction/Excavation Workers (Future)	<ul style="list-style-type: none"> • Soil dermal contact (surface/subsurface) • Soil incidental ingestion (surface/subsurface) • Inhalation of air/dust/emissions • Ground water dermal contact (during excavation) • Inhalation of volatiles in groundwater(in a trench during excavation) • Surface water incidental ingestion • Surface water dermal contact • Sediment incidental ingestion • Sediment dermal contact
Site Maintenance Workers (Current/Future)	<ul style="list-style-type: none"> • Soil incidental ingestion (surface/subsurface) • Soil dermal contact (surface/subsurface) • Inhalation of air/dust/emissions • Surface water incidental ingestion • Surface water dermal contact • Sediment incidental ingestion • Sediment dermal contact
Site Industrial Workers (Current/Future)	<ul style="list-style-type: none"> • Soil incidental ingestion (surface/subsurface) • Soil dermal contact (surface/subsurface) • Inhalation of air/dust/emissions • Surface water incidental ingestion • Surface water dermal contact • Sediment incidental ingestion • Sediment dermal contact
Trespassers (Adolescent and Adult) (Current/Future)	<ul style="list-style-type: none"> • Soil incidental ingestion (surface/subsurface) • Soil dermal contact (subsurface) • Inhalation of air/dust/emissions • Surface water incidental ingestion • Surface water dermal contact • Sediment incidental ingestion • Sediment dermal contact
Residents (Children/Adult) (Future)	<ul style="list-style-type: none"> • Soil incidental ingestion (surface/subsurface) • Soil dermal contact (surface/subsurface) • Inhalation of air/dust/emissions • Direct ingestion of groundwater • Ground water dermal contact (showering/bathing) • Inhalation of volatiles in groundwater (showering/bathing and via vapor intrusion) • Surface water incidental ingestion • Surface water dermal contact • Sediment incidental ingestion • Sediment dermal contact

**TABLE 6-13
EXPOSURE POINT CONCENTRATIONS
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical	Surface Soil (mg/kg)	Subsurface Soil (mg/kg)	Groundwater (ug/L)	Surface Water (ug/L)	Sediment (mg/kg)
Volatile Organic Compounds					
TETRACHLOROETHENE	NA	NA	0.54 ⁽¹⁾⁽²⁾	NA	NA
TRICHLOROETHENE	NA	NA	0.32 ⁽³⁾	NA	NA
Semivolatile Organic Compounds					
NAPHTHALENE	NA	NA	6.7 ⁽¹⁾	NA	NA
BENZO(A)PYRENE EQUIVALENTS	NA	NA	NA	NA	0.2 ⁽¹⁾
Pesticides/PCBs					
AROCLOR-1242	NA	2.4 ⁽¹⁾	NA	NA	NA
DIELDRIN	0.3	NA	NA	NA	NA
Inorganics					
ALUMINUM	7780	9700 ⁽¹⁾	6320 ⁽¹⁾	NA	17200 ⁽¹⁾
ANTIMONY	1	NA	NA	NA	NA
ARSENIC	2.2	2 ⁽¹⁾	19.1 ⁽¹⁾	3.4 ⁽¹⁾	19.8 ⁽¹⁾
COBALT	2.2	NA	NA	NA	NA
IRON	4330	NA	44000 ⁽¹⁾	2410 ⁽¹⁾	28100 ⁽¹⁾
MANGANESE	55.4	NA	548 ⁽¹⁾	NA	295 ⁽¹⁾
THALLIUM	NA	NA	4.1 ⁽¹⁾	NA	NA

Notes:

The exposure point concentrations (EPCs) were calculated according to USEPA's ProUCL guidance. See the RAGS PART D Table 3s in Appendix D for details concerning the EPCs.

NA - Not applicable. Not a COPC for this media.

1 - Maximum Detected Concentration

2 - Tetrachloroethene was selected as a COPC in direct push technology (DPT) groundwater samples only.

3 - Trichloroethene was selected as a COPC in both DPT and monitoring well samples for the vapor intrusion pathway. The maximum concentration of the two groundwater data sets was used as the EPC.

µg/L = micrograms per liter

mg/kg = milligrams per kilogram

TABLE 6-14
SUMMARY OF EXPOSURE FACTORS - REASONABLE MAXIMUM EXPOSURE
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Exposure Route	Construction/ Excavation Worker	Site Maintenance Worker	Site Industrial Worker	Adolescent Trespasser	Adult Trespasser	Future Child Resident	Future Adult Resident
ASSUMPTIONS FOR EXPOSURE TO SOIL AND SEDIMENT							
Exposure Concentration - C_{soil}, C_{sed} (mg/kg)	Maximum or 95% UCL ⁽¹⁾						
Ingestion Rate (IR) (mg/day)	330 ⁽²⁾	100 ⁽¹⁾	50 ⁽¹⁾	100 ⁽¹⁾	50 ⁽¹⁾	200 ⁽¹⁾	100 ⁽¹⁾
Fraction Ingested (FI) (unitless)	1.0 ⁽³⁾						
Skin Surface Area (SA) (cm ² /day)	3,300 ⁽⁴⁾	3,300 ⁽⁴⁾	3,300 ⁽⁴⁾	3,250 ⁽⁵⁾	5,700 ⁽⁴⁾	2,800 ⁽⁴⁾	5,700 ⁽⁴⁾
Soil-to-Skin Adherence Factor (AF) (mg/cm ²)	0.3 ⁽⁴⁾	0.2 ⁽⁴⁾	0.2 ⁽⁴⁾	0.4 ⁽⁴⁾	0.07 ⁽⁴⁾	0.2 ⁽⁴⁾	0.07 ⁽⁴⁾
Absorption Factor (ABS) (unitless)	chemical-specific ⁽⁴⁾						
Conversion Factor (CF) (kg/mg)	1E-06						
Exposure Frequency (EF) - Soil (days/year)	250 ⁽⁶⁾	24 ⁽⁷⁾	250 ⁽¹⁾	30 ⁽⁸⁾	30 ⁽⁸⁾	350 ⁽¹⁾	350 ⁽¹⁾
Exposure Frequency (EF) - Sediment (days/year)	30 ⁽⁶⁾	24 ⁽⁷⁾	24 ⁽⁷⁾	30 ⁽⁸⁾	30 ⁽⁸⁾	30 ⁽⁸⁾	30 ⁽⁸⁾
Exposure Duration (ED) (years)	1 ⁽⁶⁾	25 ⁽¹⁾	25 ⁽¹⁾	11 ⁽⁹⁾	19 ⁽⁹⁾	6 ⁽¹⁾	24 ⁽¹⁾
Body Weight (BW) (kg)	70 ⁽²⁾	70 ⁽²⁾	70 ⁽²⁾	45 ⁽¹⁰⁾	70 ⁽²⁾	15 ⁽¹⁾	70 ⁽²⁾
Noncarcinogenic Averaging Time (AT _n) (days)	365 ⁽³⁾	9,125 ⁽³⁾	9,125 ⁽³⁾	4,015 ⁽³⁾	6,935 ⁽³⁾	2,190 ⁽³⁾	8,760 ⁽³⁾
Carcinogenic Averaging Time (AT _c) (days)	25,550 ⁽³⁾						
ASSUMPTIONS FOR EXPOSURE TO SURFACE WATER							
Exposure Concentration - C_{sw}	Maximum ⁽¹¹⁾						
Ingestion Rate (IR) (L/hour)	0.01 ⁽¹⁰⁾	0.05 ⁽¹⁰⁾	0.01 ⁽¹⁰⁾				
SA (cm ² /day)	3,300 ⁽⁴⁾	3,300 ⁽⁴⁾	3,300 ⁽⁴⁾	3,250 ⁽⁵⁾	5,700 ⁽⁴⁾	2,800 ⁽⁴⁾	5,700 ⁽⁴⁾
EV (events/day)	1 ⁽⁶⁾	1 ⁽⁷⁾	1 ⁽⁶⁾				
ET (hours/day) and t_{event} (hours/event)	1 ⁽⁶⁾	1 ⁽⁷⁾	1 ⁽⁶⁾				
EF (days/year)	30 ⁽⁶⁾	24 ⁽⁷⁾	30 ⁽⁶⁾	30 ⁽⁸⁾	30 ⁽⁸⁾	30 ⁽⁸⁾	30 ⁽⁸⁾
K_p (cm/hour)	chemical-specific ⁽⁴⁾						
t^* (hour/event), τ (hour), and B (unitless)	chemical-specific ⁽⁴⁾						
Exposure Duration (ED) (years)	1 ⁽⁶⁾	25 ⁽¹⁾	25 ⁽¹⁾	11 ⁽⁹⁾	19 ⁽⁹⁾	6 ⁽¹⁾	24 ⁽¹⁾
BW (kg)	70 ⁽²⁾	70 ⁽²⁾	70 ⁽²⁾	45 ⁽¹⁰⁾	70 ⁽²⁾	15 ⁽¹⁾	70 ⁽²⁾
AT _n (days)	365 ⁽³⁾	9,125 ⁽³⁾	9,125 ⁽³⁾	4,015 ⁽³⁾	6,935 ⁽³⁾	2,190 ⁽³⁾	8,760 ⁽³⁾
AT _c (days)	25,550 ⁽³⁾						

TABLE 6-14
SUMMARY OF EXPOSURE FACTORS - REASONABLE MAXIMUM EXPOSURE
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Exposure Route	Construction/ Excavation Worker	Site Maintenance Worker	Site Industrial Worker	Adolescent Trespasser	Adult Trespasser	Future Child Resident	Future Adult Resident
ASSUMPTIONS FOR EXPOSURE TO GROUNDWATER							
Exposure Concentration - C_{gw}	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾	Maximum ⁽¹⁰⁾
Ingestion Rate (IR) (L/day)	NA	NA	NA	NA	NA	1.5 ⁽¹²⁾	2 ⁽¹⁾
Skin Surface Area (SA) (cm ² /day)	3,300 ⁽⁴⁾	NA	NA	NA	NA	6,600 ⁽⁴⁾	18,000 ⁽⁴⁾
Exposure Time (ET) (hour/event)	4 ⁽⁶⁾	NA	NA	NA	NA	0.33 ⁽⁶⁾	0.33 ⁽⁶⁾
Event Frequency (EV) (events/day)	1 ⁽⁶⁾	NA	NA	NA	NA	1 ⁽⁶⁾	1 ⁽⁶⁾
Permeability Coefficient from Water through Skin (K_p) (cm/hour)	chemical-specific ⁽⁴⁾	NA	NA	NA	NA	chemical-specific ⁽⁴⁾	chemical-specific ⁽⁴⁾
Bunge Dermal Model variables - t^* (hour/event), T (hour), and B (unitless)	chemical-specific ⁽⁴⁾	NA	NA	NA	NA	chemical-specific ⁽⁴⁾	chemical-specific ⁽⁴⁾
Conversion Factor (CF) (L/cm ³)	1E-03	NA	NA	NA	NA	1E-03	1E-03
Exposure Frequency (EF) (days/year)	30 ⁽⁶⁾	NA	NA	NA	NA	350 ⁽¹⁾	350 ⁽¹⁾
Exposure Duration (ED) (years)	1 ⁽⁶⁾	NA	NA	NA	NA	6 ⁽¹⁾	24 ⁽¹⁾
Body Weight (BW) (kg)	70 ⁽²⁾	NA	NA	NA	NA	15 ⁽¹⁾	70 ⁽²⁾
Noncarcinogenic Averaging Time (AT_n) (days)	365 ⁽³⁾	NA	NA	NA	NA	2,190 ⁽³⁾	8,760 ⁽³⁾
Carcinogenic Averaging Time (AT_c) (days)	25,550 ⁽³⁾	NA	NA	NA	NA	25,550 ⁽³⁾	25,550 ⁽³⁾
ASSUMPTIONS FOR EXPOSURE VIA INHALATION OF VOCS FROM GROUNDWATER							
Exposure Time (hours/day)	4 ⁽⁶⁾	NA	NA	NA	NA	NA	NA

Footnotes:

- 1 - USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10.
- 2 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- 3 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-89/002.
- 4 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.
- 5 - Assumed 25 percent of total body surface area is exposed.
- 6 - Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Exposure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.
- 7 - Assumes receptor is exposed to surface water and sediment 2 days per month.
- 8 - Assumes wading 2 to 3 days per week during summer months.
- 9 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 10 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000. See text.
- 11 - Less than ten samples were collected; therefore, the maximum detected concentration was used as the exposure point concentration.
- 12 - USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

TABLE 6-15
SUMMARY OF EXPOSURE FACTORS - CENTRAL TENDENCY EXPOSURE
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

ASSUMPTIONS FOR EXPOSURE TO GROUNDWATER							
Exposure Concentration - C_{gw}	Average ⁽⁹⁾	Average ⁽⁹⁾	Average ⁽⁹⁾	Average ⁽⁹⁾	Average ⁽⁹⁾	Average ⁽⁹⁾	Average ⁽⁹⁾
Ingestion Rate (IR) (L/day)	NA	NA	NA	NA	NA	0.66 ⁽¹¹⁾	1.4 ⁽¹¹⁾
Skin Surface Area (SA) (cm ² /day)	3,300 ⁽⁴⁾	NA	NA	NA	NA	6,600 ⁽⁴⁾	18,000 ⁽⁴⁾
Exposure Time (ET) (hour/event)	2 ⁽⁶⁾	NA	NA	NA	NA	0.25 ⁽⁶⁾	0.25 ⁽⁶⁾
Event Frequency (EV) (events/day)	1 ⁽⁶⁾	NA	NA	NA	NA	1 ⁽⁶⁾	1 ⁽⁶⁾
Permeability Coefficient from Water through Skin (K_p)(cm/hour)	chemical-specific ⁽⁴⁾	NA	NA	NA	NA	chemical-specific ⁽⁴⁾	chemical-specific ⁽⁴⁾
Bunge Dermal Model variables - t* (hour/event), T (hour), and B (unitless)	chemical-specific ⁽⁴⁾	NA	NA	NA	NA	chemical-specific ⁽⁴⁾	chemical-specific ⁽⁴⁾
Conversion Factor (CF) (L/cm ³)	1E-03	1E-03	NA	NA	NA	1E-03	1E-03
Exposure Frequency (EF) (days/year)	15 ⁽⁶⁾	NA	NA	NA	NA	234 ⁽¹⁾	234 ⁽¹⁾
Exposure Duration (ED) (years)	1 ⁽⁶⁾	NA	NA	NA	NA	2 ⁽¹⁾	7 ⁽¹⁾
Body Weight (BW) (kg)	70 ⁽¹¹⁾	NA	NA	NA	NA	15 ⁽¹⁾	70 ⁽¹⁾
Noncarcinogenic Averaging Time (AT_n) (days)	365 ⁽³⁾	NA	NA	NA	NA	730 ⁽³⁾	2,555 ⁽³⁾
Carcinogenic Averaging Time (AT_c) (days)	25,550 ⁽³⁾	NA	NA	NA	NA	25,550 ⁽³⁾	25,550 ⁽³⁾
ASSUMPTIONS FOR EXPOSURE VIA INHALATION OF VOCs FROM GROUNDWATER							
Exposure Time (hours/day)	2 ⁽⁶⁾	NA	NA	NA	NA	NA	NA

Footnotes:

- 1 - USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10.
- 2 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- 3 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-89/002.
- 4 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.
- 5 - Assumed 25 percent of total body surface area is exposed.
- 6 Professional Judgment. Assumes one half the RME exposure.
- 7 - Assumes receptor is exposed to surface water and sediment one day per month.
- 8 Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 9 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000.
- 10 - Less than ten samples were collected therefore the maximum detected concentration was used as the exposure point concentration.
- 11 - USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

**TABLE 6-16
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal ⁽¹⁾	Absorbed RfD for Dermal ⁽²⁾		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds										
TETRACHLOROETHENE	Chronic	1.0E-02	mg/kg/day	1	1.0E-02	mg/kg/day	Liver	1000/1	IRIS	4/30/2009
TRICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds										
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	Chronic	2.0E-02	mg/kg/day	1	2.0E-02	mg/kg/day	Body Weight	3000/1	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs										
AROCOR-1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	Chronic	5.0E-05	mg/kg/day	1	5.0E-05	mg/kg/day	Liver	100/1	IRIS	4/30/2009
Inorganics										
ALUMINUM	Chronic	1.0E+00	mg/kg/day	1	1.0E+00	mg/kg/day	CNS	100	PPRTV	10/23/2006
ANTIMONY	Chronic	4.0E-04	mg/kg/day	0.15	6.0E-05	mg/kg/day	Blood	1000/1	IRIS	4/30/2009
ARSENIC	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	Skin, CVS	3/1	IRIS	4/30/2009
COBALT	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	NA	NA	ORNL	04/2009
IRON	Chronic	7.0E-01	mg/kg/day	1	7.0E-01	mg/kg/day	GS	1.5	PPRTV	9/11/2006
MANGANESE (soil) ⁽³⁾	Chronic	7.0E-02	mg/kg/day	0.04	2.8E-03	mg/kg/day	CNS	1/1	IRIS	4/30/2009
MANGANESE (water) ⁽³⁾	Chronic	2.4E-02	mg/kg/day	0.04	9.6E-04	mg/kg/day	CNS	1/3	IRIS	4/30/2009
THALLIUM	Chronic	6.5E-05	mg/kg/day	1	6.5E-05	mg/kg/day	Hair Loss, Liver	3000/1	ORNL	04/2009

Notes:

- 1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
- 2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
- 3 - Adjusted IRIS value in accordance with USEPA Region I Risk Update Number 4, November 1996.

Definitions:

- CNS = Central Nervous System
 CVS = Cardiovascular system
 GS = Gastrointestinal
- IRIS = Integrated Risk Information System
 NA = Not Available.
 ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.
 PPRTV = Provisional Peer Reviewed Toxicity Values

**TABLE 6-17
NON-CANCER TOXICITY DATA -- INHALATION
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD ⁽¹⁾		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds									
TETRACHLOROETHENE	Chronic	2.7E-01	mg/m ³	7.7E-02	(mg/kg/day)	Liver	NA	ORNL	04/2009
TRICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds									
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	Chronic	3.0E-03	mg/m ³	8.6E-04	(mg/kg/day)	Respiratory	3000/1	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs									
AROCLOR-1242	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics									
ALUMINUM	Chronic	5.0E-03	mg/m ³	1.4E-03	(mg/kg/day)	CNS	300	PPRTV	10/23/2006
ANTIMONY	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	Chronic	3.00E-05	mg/m ³	8.6E-06	(mg/kg/day)	NA	NA	ORNL	04/2009
COBALT	Chronic	6.0E-06	mg/m ³	1.7E-06	(mg/kg/day)	Respiratory	NA	ORNL	04/2009
IRON	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	Chronic	5.0E-05	mg/m ³	1.4E-05	(mg/kg/day)	CNS	1000/1	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1 - Extrapolated RfD = RfC *20m³/day / 70 kg

Definitions:

CNS = Central Nervous System

IRIS = Integrated Risk Information System

NA = Not Applicable

ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.

PPRTV = Provisional Peer Reviewed Toxicity Values

**TABLE 6-18
CANCER TOXICITY DATA -- ORAL/DERMAL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal ⁽¹⁾	Absorbed Cancer Slope Factor for Dermal ⁽²⁾		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units		Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds								
TETRACHLOROETHENE	5.4E-01	(mg/kg/day) ⁻¹	1	5.4E-01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
TRICHLOROETHENE	1.3E-02	(mg/kg/day) ⁻¹	1	1.3E-02	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Semivolatile Organic Compounds								
BENZO(A)PYRENE ⁽³⁾	7.3E+00	(mg/kg/day) ⁻¹	1	7.3E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
BENZO(B)FLUORANTHENE ⁽³⁾	7.3E-01	(mg/kg/day) ⁻¹	1	7.3E-01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(1)	7/1993
NAPHTHALENE	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS ⁽³⁾	7.3E+00	(mg/kg/day) ⁻¹	1	7.3E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Pesticides/PCBs								
AROCOR-1242	2.0E+00	(mg/kg/day) ⁻¹	1	2.0E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(2)	9/1996
DIELDRIN	1.6E+01	(mg/kg/day) ⁻¹	1	1.6E+01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Inorganics								
ALUMINUM	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	1.5E+00	(mg/kg/day) ⁻¹	1	1.5E+00	(mg/kg/day) ⁻¹	A / Known/likely human carcinogen	IRIS	4/30/2009
COBALT	NA	NA	NA	NA	NA	NA	NA	NA
IRON	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009

Notes:

- 1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
- 2 - Adjusted cancer slope factor for dermal =
Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
- 3 - The carcinogenic PAHs are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

IRIS = Integrated Risk Information System.
 NA = Not Available.
 ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April, 2009.
 PPRTV = Provisional Peer Reviewed Toxicity Values
 USEPA(1) = USEPA, Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons, July 1993, EPA/600/R-93/089.
 USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**TABLE 6-19
CANCER TOXICITY DATA -- INHALATION
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor ⁽¹⁾		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds							
TETRACHLOROETHENE	5.9E-06	(ug/m ³) ⁻¹	2.1E-02	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
TRICHLOROETHENE	2.0E-06	(ug/m ³) ⁻¹	7.0E-03	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Semivolatile Organic Compounds							
BENZO(A)PYRENE ⁽²⁾	1.1E-03	(ug/m ³) ⁻¹	3.9E+00	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
BENZO(B)FLUORANTHENE ⁽²⁾	1.1E-04	(ug/m ³) ⁻¹	3.9E-01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
NAPHTHALENE	3.4E-05	(ug/m ³) ⁻¹	1.2E-01	(mg/kg/day) ⁻¹	C/ Possible Human Carcinogen	ORNL	04/2009
BENZO(A)PYRENE EQUIVALENTS ⁽²⁾	1.1E-03	(ug/m ³) ⁻¹	3.9E+00	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Pesticides/PCBs							
AROCLOR-1242	5.7E-04	(ug/m ³) ⁻¹	2.0E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(2)	9/1996
DIELDRIN	4.6E-03	(ug/m ³) ⁻¹	1.6E+01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Inorganics							
ALUMINUM	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	NA
ARSENIC	4.3E-03	(ug/m ³) ⁻¹	1.5E+01	(mg/kg/day) ⁻¹	A / Known human carcinogen	IRIS	4/30/2009
COBALT	9.0E-03	(ug/m ³) ⁻¹	3.2E+01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
IRON	NA	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / 20m³/day.

2 - The carcinogenic PAHs are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

3 - Values are for chlordane.

4 - Values are for alpha-BHC.

Definitions:

IRIS = Integrated Risk Information System.

NA = Not Available.

ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.

USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

TABLE 6-20
SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 4

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Construction Workers	Surface Soil	Incidental Ingestion	4E-07	--	--	--	1E-01	--	
		Dermal Contact	8E-08	--	--	--	8E-03	--	
		Total	5E-07	--	--	--	1E-01	--	
	Subsurface Soil	Incidental Ingestion	4E-07	--	--	--	5E-02	--	
		Dermal Contact	1E-07	--	--	--	2E-03	--	
		Total	5E-07	--	--	--	5E-02	--	
	Groundwater - MW	Incidental Ingestion	0E+00	--	--	--	0E+00	--	
		Dermal Contact	6E-09	--	--	--	1E-02	--	
		Inhalation	1E-09	--	--	--	9E-04	--	
		Total	8E-09	--	--	--	1E-02	--	
	Groundwater - DPT	Incidental Ingestion	0E+00	--	--	--	0E+00	--	
		Dermal Contact	3E-09	--	--	--	4E-05	--	
		Inhalation	2E-11	--	--	--	8E-07	--	
		Total	3E-09	--	--	--	4E-05	--	
	Surface Water	Incidental Ingestion	9E-10	--	--	--	2E-04	--	
		Dermal Contact	3E-10	--	--	--	6E-05	--	
		Total	1E-09	--	--	--	2E-04	--	
	Sediment	Incidental Ingestion	2E-07	--	--	--	5E-02	--	
		Dermal Contact	2E-08	--	--	--	2E-03	--	
		Total	2E-07	--	--	--	5E-02	--	
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment			7E-07				2E-01	
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			7E-07				1E-01		
Total Surface Soil, DPT Groundwater, Surface Water, and Sediment			6E-07				2E-01		
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment			7E-07				1E-01		
Site Maintenance Worker	Surface Soil	Incidental Ingestion	3E-07	--	--	--	4E-03	--	
		Dermal Contact	1E-07	--	--	--	5E-04	--	
		Total	4E-07	--	--	--	4E-03	--	
	Subsurface Soil	Incidental Ingestion	3E-07	--	--	--	2E-03	--	
		Dermal Contact	2E-07	--	--	--	1E-04	--	
		Total	4E-07	--	--	--	2E-03	--	
	Surface Water	Incidental Ingestion	2E-08	--	--	--	1E-04	--	
		Dermal Contact	6E-09	--	--	--	5E-05	--	
		Total	2E-08	--	--	--	2E-04	--	
	Sediment	Incidental Ingestion	1E-06	--	--	--	1E-02	--	
		Dermal Contact	2E-07	--	--	--	1E-03	--	
		Total	1E-06	--	--	--	1E-02	--	
	Total Surface Soil, Surface Water, and Sediment			2E-06				2E-02	
	Total Subsurface Soil, Surface Water, and Sediment			2E-06				2E-02	
	Site Industrial Worker	Surface Soil	Incidental Ingestion	1E-06	--	--	--	2E-02	--
Dermal Contact			1E-06	--	--	--	5E-03	--	
Total			3E-06	--	--	Dieldrin	2E-02	--	
Subsurface Soil		Incidental Ingestion	1E-06	--	--	--	8E-03	--	
		Dermal Contact	2E-06	--	--	Aroclor-1242	1E-03	--	
		Total	3E-06	--	--	Aroclor-1242	9E-03	--	
Surface Water		Incidental Ingestion	2E-08	--	--	--	2E-04	--	
		Dermal Contact	7E-09	--	--	--	6E-05	--	
		Total	3E-08	--	--	--	2E-04	--	
Sediment		Incidental Ingestion	5E-07	--	--	--	6E-03	--	
		Dermal Contact	2E-07	--	--	--	1E-03	--	
		Total	8E-07	--	--	--	7E-03	--	
Total Surface Soil, Surface Water, and Sediment			4E-06				3E-02		
Total Subsurface Soil, Surface Water, and Sediment			4E-06				2E-02		

TABLE 6-20
SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 4

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Adolescent Trespasser	Surface Soil	Incidental Ingestion	2E-07	--	--	--	7E-03	--	
		Dermal Contact	2E-07	--	--	--	2E-03	--	
		Total	4E-07	--	--	--	9E-03	--	
	Subsurface Soil	Incidental Ingestion	2E-07	--	--	--	3E-03	--	
		Dermal Contact	3E-07	--	--	--	5E-04	--	
		Total	5E-07	--	--	--	3E-03	--	
	Surface Water	Incidental Ingestion	1E-08	--	--	--	3E-04	--	
		Dermal Contact	5E-09	--	--	--	9E-05	--	
		Total	2E-08	--	--	--	4E-04	--	
	Sediment	Incidental Ingestion	1E-06	--	--	--	2E-02	--	
		Dermal Contact	5E-07	--	--	--	5E-03	--	
		Total	2E-06	--	--	Arsenic	3E-02	--	
	Total Surface Soil, Surface Water, and Sediment			2E-06				4E-02	
Total Subsurface Soil, Surface Water, and Sediment			2E-06				3E-02		
Adult Trespasser	Surface Soil	Incidental Ingestion	1E-07	--	--	--	2E-03	--	
		Dermal Contact	1E-07	--	--	--	6E-04	--	
		Total	2E-07	--	--	--	3E-03	--	
	Subsurface Soil	Incidental Ingestion	1E-07	--	--	--	1E-03	--	
		Dermal Contact	2E-07	--	--	--	1E-04	--	
		Total	3E-07	--	--	--	1E-03	--	
	Surface Water	Incidental Ingestion	2E-08	--	--	--	2E-04	--	
		Dermal Contact	9E-09	--	--	--	1E-04	--	
		Total	3E-08	--	--	--	3E-04	--	
	Sediment	Incidental Ingestion	5E-07	--	--	--	7E-03	--	
		Dermal Contact	2E-07	--	--	--	9E-04	--	
		Total	7E-07	--	--	--	8E-03	--	
	Total Surface Soil, Surface Water, and Sediment			1E-06				1E-02	
	Total Subsurface Soil, Surface Water, and Sediment			1E-06				1E-02	

TABLE 6-20
SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 3 OF 4

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Future Child Resident	Surface Soil	Incidental Ingestion	9E-06	--	--	Dieldrin, Arsenic	5E-01	--	
		Dermal Contact	2E-06	--	--	Dieldrin	3E-02	--	
		Total	1E-05	--	--	Dieldrin, Arsenic	5E-01	--	
	Subsurface Soil	Incidental Ingestion	9E-06	--	--	Aroclor-1242, Arsenic	2E-01	--	
		Dermal Contact	2E-06	--	--	Aroclor-1242	7E-03	--	
		Total	1E-05	--	--	Aroclor-1242, Arsenic	2E-01	--	
	Groundwater - MW	Incidental Ingestion	2E-04	Arsenic	--	--	2E+01	Arsenic, Iron, Manganese, Thallium	
		Dermal Contact	3E-07	--	--	--	1E-01	--	
		Inhalation	0E+00	--	--	--	3E-02	--	
		Total	2E-04	Arsenic	--	--	2E+01	Arsenic, Iron, Manganese, Thallium	
	Groundwater - DPT	Incidental Ingestion	2E-06	--	--	Tetrachloroethene	5E-03	--	
		Dermal Contact	5E-07	--	--	--	1E-03	--	
		Inhalation	2E-06	--	--	Tetrachloroethene	5E-03	--	
		Total	5E-06	--	--	Tetrachloroethene	1E-02	--	
	Surface Water	Incidental Ingestion	1E-07	--	--	--	4E-03	--	
		Dermal Contact	7E-09	--	--	--	2E-04	--	
		Total	1E-07	--	--	--	4E-03	--	
	Sediment	Incidental Ingestion	4E-06	--	--	Arsenic	1E-01	--	
		Dermal Contact	5E-07	--	--	--	6E-03	--	
		Total	4E-06	--	--	Arsenic	1E-01	--	
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment							3E-04	2E+01
	Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment							3E-04	2E+01
	Total Surface Soil, DPT Groundwater, Surface Water, and Sediment							2E-05	7E-01
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment							2E-05	4E-01	
Future Adult Resident	Surface Soil	Incidental Ingestion	4E-06	--	--	Dieldrin, Arsenic	5E-02	--	
		Dermal Contact	1E-06	--	--	--	4E-03	--	
		Total	5E-06	--	--	Dieldrin, Arsenic	6E-02	--	
	Subsurface Soil	Incidental Ingestion	4E-06	--	--	Aroclor-1242	2E-02	--	
		Dermal Contact	1E-06	--	--	--	1E-03	--	
		Total	5E-06	--	--	Aroclor-1242, Arsenic	2E-02	--	
	Groundwater - MW	Incidental Ingestion	3E-04	Arsenic	--	--	6E+00	Arsenic, Iron, Thallium	
		Dermal Contact	8E-07	--	--	--	7E-02	--	
		Inhalation	0E+00	--	--	--	9E-03	--	
		Total	3E-04	Arsenic	--	--	6E+00	Arsenic, Iron, Thallium	
	Groundwater - DPT	Incidental Ingestion	3E-06	--	--	Tetrachloroethene	1E-03	--	
		Dermal Contact	1E-06	--	--	--	7E-04	--	
		Inhalation	3E-06	--	--	Tetrachloroethene	1E-03	--	
		Total	7E-06	--	--	Tetrachloroethene	4E-03	--	
	Surface Water	Ingestion	2E-08	--	--	--	2E-04	--	
		Dermal Contact	1E-08	--	--	--	1E-04	--	
		Total	3E-08	--	--	--	3E-04	--	
	Sediment	Incidental Ingestion	1E-06	--	--	--	1E-02	--	
		Dermal Contact	2E-07	--	--	--	9E-04	--	
		Total	2E-06	--	--	--	2E-02	--	
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment							3E-04	6E+00
	Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment							3E-04	6E+00
	Total Surface Soil, DPT Groundwater, Surface Water, and Sediment							1E-05	8E-02
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment							1E-05	4E-02	

TABLE 6-20
SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURES
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 4 OF 4

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Hypothetical Lifelong Residents (Child and Adult)	Surface Soil	Incidental Ingestion	1E-05	--	--	Dieldrin, Arsenic	NA	--	
		Dermal Contact	3E-06	--	--	Dieldrin	NA	--	
		Total	2E-05	--	--	Dieldrin, Arsenic	NA	--	
	Subsurface Soil	Incidental Ingestion	1E-05	--	--	Aroclor-1242, Arsenic	NA	--	
		Dermal Contact	4E-06	--	--	Aroclor-1242	NA	--	
		Total	2E-05	--	--	Aroclor-1242, Arsenic	NA	--	
	Groundwater - MW	Incidental Ingestion	5E-04	Arsenic	--	--	--	NA	--
		Dermal Contact	1E-06	--	--	--	--	NA	--
		Inhalation	0E+00	--	--	--	--	NA	--
		Total	5E-04	Arsenic	--	--	--	NA	--
	Groundwater - DPT	Incidental Ingestion	5E-06	--	--	Tetrachloroethene	NA	--	
		Dermal Contact	2E-06	--	--	--	NA	--	
		Inhalation	5E-06	--	--	Tetrachloroethene	NA	--	
		Total	1E-05	--	--	Tetrachloroethene	NA	--	
	Surface Water	Incidental Ingestion	1E-07	--	--	--	NA	--	
		Dermal Contact	2E-08	--	--	--	NA	--	
		Total	2E-07	--	--	--	NA	--	
	Sediment	Incidental Ingestion	5E-06	--	--	Arsenic	NA	--	
		Dermal Contact	7E-07	--	--	--	NA	--	
		Total	6E-06	--	--	Arsenic	NA	--	
Total Surface Soil, MW Groundwater, Surface Water, and Sediment			5E-04				NA		
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			5E-04				NA		

TABLE 6-21
SUMMARY OF CANCER RISKS AND HAZARD INDICES
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SITE 1
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Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Construction Workers	Surface Soil	Incidental Ingestion	9E-08	--	--	--	3E-02	--	
		Dermal Contact	1E-08	--	--	--	1E-03	--	
		Total	1E-07	--	--	--	3E-02	--	
	Subsurface Soil	Incidental Ingestion	9E-08	--	--	--	1E-02	--	
		Dermal Contact	2E-08	--	--	--	3E-04	--	
		Total	1E-07	--	--	--	1E-02	--	
	Groundwater - MW	Incidental Ingestion	0E+00	--	--	--	0E+00	--	
		Dermal Contact	2E-09	--	--	--	3E-03	--	
		Inhalation	3E-10	--	--	--	2E-04	--	
		Total	2E-09	--	--	--	3E-03	--	
	Groundwater - DPT	Incidental Ingestion	0E+00	--	--	--	0E+00	--	
		Dermal Contact	1E-09	--	--	--	1E-05	--	
		Inhalation	4E-12	--	--	--	2E-07	--	
		Total	1E-09	--	--	--	1E-05	--	
	Surface Water	Incidental Ingestion	4E-10	--	--	--	9E-05	--	
		Dermal Contact	1E-10	--	--	--	3E-05	--	
		Total	6E-10	--	--	--	1E-04	--	
	Sediment	Incidental Ingestion	4E-08	--	--	--	1E-02	--	
		Dermal Contact	3E-09	--	--	--	4E-04	--	
		Total	5E-08	--	--	--	1E-02	--	
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment			2E-07				5E-02	
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			2E-07				3E-02		
Total Surface Soil, DPT Groundwater, Surface Water, and Sediment			2E-07				4E-02		
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment			2E-07				3E-02		
Site Maintenance Worker	Surface Soil	Incidental Ingestion	2E-08	--	--	--	9E-04	--	
		Dermal Contact	2E-09	--	--	--	3E-05	--	
		Total	3E-08	--	--	--	9E-04	--	
	Subsurface Soil	Incidental Ingestion	2E-08	--	--	--	4E-04	--	
		Dermal Contact	3E-09	--	--	--	6E-06	--	
		Total	3E-08	--	--	--	4E-04	--	
	Surface Water	Incidental Ingestion	3E-09	--	--	--	7E-05	--	
		Dermal Contact	1E-09	--	--	--	2E-05	--	
		Total	4E-09	--	--	--	9E-05	--	
	Sediment	Incidental Ingestion	9E-08	--	--	--	3E-03	--	
		Dermal Contact	4E-09	--	--	--	6E-05	--	
		Total	1E-07	--	--	--	3E-03	--	
	Total Surface Soil, Surface Water, and Sediment			1E-07				4E-03	
	Total Subsurface Soil, Surface Water, and Sediment			1E-07				4E-03	
	Site Industrial Worker	Surface Soil	Incidental Ingestion	4E-07	--	--	--	2E-02	--
Dermal Contact			4E-08	--	--	--	5E-04	--	
Total			5E-07	--	--	--	2E-02	--	
Subsurface Soil		Incidental Ingestion	4E-07	--	--	--	7E-03	--	
		Dermal Contact	6E-08	--	--	--	1E-04	--	
		Total	5E-07	--	--	--	7E-03	--	
Surface Water		Incidental Ingestion	3E-09	--	--	--	7E-05	--	
		Dermal Contact	1E-09	--	--	--	2E-05	--	
		Total	4E-09	--	--	--	9E-05	--	
Sediment		Incidental Ingestion	9E-08	--	--	--	3E-03	--	
		Dermal Contact	4E-09	--	--	--	6E-05	--	
		Total	1E-07	--	--	--	3E-03	--	
Total Surface Soil, Surface Water, and Sediment			6E-07				2E-02		
Total Subsurface Soil, Surface Water, and Sediment			6E-07				1E-02		

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TABLE 6-21
SUMMARY OF CANCER RISKS AND HAZARD INDICES
CENTRAL TENDENCY EXPOSURES
SITE 1
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Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1	
Adolescent Trespasser	Surface Soil	Incidental Ingestion	6E-08	--	--	--	2E-03	--	
		Dermal Contact	1E-08	--	--	--	1E-04	--	
		Total	7E-08	--	--	--	2E-03	--	
	Subsurface Soil	Incidental Ingestion	6E-08	--	--	--	7E-04	--	
		Dermal Contact	1E-08	--	--	--	2E-05	--	
		Total	7E-08	--	--	--	8E-04	--	
	Surface Water	Incidental Ingestion	7E-09	--	--	--	1E-04	--	
		Dermal Contact	2E-09	--	--	--	4E-05	--	
		Total	1E-08	--	--	--	2E-04	--	
	Sediment	Incidental Ingestion	4E-07	--	--	--	1E-02	--	
		Dermal Contact	2E-07	--	--	--	2E-03	--	
		Total	6E-07	--	--	--	1E-02	--	
	Total Surface Soil, Surface Water, and Sediment			7E-07				2E-02	
	Total Subsurface Soil, Surface Water, and Sediment			7E-07				1E-02	
Adult Trespasser	Surface Soil	Incidental Ingestion	6E-08	--	--	--	1E-03	--	
		Dermal Contact	5E-09	--	--	--	3E-05	--	
		Total	7E-08	--	--	--	1E-03	--	
	Subsurface Soil	Incidental Ingestion	6E-08	--	--	--	5E-04	--	
		Dermal Contact	7E-09	--	--	--	7E-06	--	
		Total	7E-08	--	--	--	5E-04	--	
	Surface Water	Incidental Ingestion	8E-09	--	--	--	9E-05	--	
		Dermal Contact	5E-09	--	--	--	5E-05	--	
		Total	1E-08	--	--	--	1E-04	--	
	Sediment	Incidental Ingestion	2E-07	--	--	--	4E-03	--	
		Dermal Contact	1E-08	--	--	--	7E-05	--	
		Total	3E-07	--	--	--	4E-03	--	
	Total Surface Soil, Surface Water, and Sediment			3E-07				5E-03	
	Total Subsurface Soil, Surface Water, and Sediment			3E-07				4E-03	

TABLE 6-21
SUMMARY OF CANCER RISKS AND HAZARD INDICES
CENTRAL TENDENCY EXPOSURES
SITE 1
NCBC GULFPORT
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Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1
Future Child Resident	Surface Soil	Incidental Ingestion	1E-06	--	--	--	2E-01	--
		Dermal Contact	8E-08	--	--	--	4E-03	--
		Total	1E-06	--	--	--	2E-01	--
	Subsurface Soil	Incidental Ingestion	1E-06	--	--	--	7E-02	--
		Dermal Contact	1E-07	--	--	--	1E-03	--
		Total	1E-06	--	--	--	7E-02	--
	Groundwater - MW	Incidental Ingestion	2E-05	--	Arsenic	--	6E+00	Arsenic, Iron, Thallium
		Dermal Contact	6E-08	--	--	--	6E-02	--
		Inhalation	0E+00	--	--	--	9E-03	--
		Total	2E-05	--	Arsenic	--	6E+00	Arsenic, Iron, Thallium
	Groundwater - DPT	Incidental Ingestion	2E-07	--	--	--	2E-03	--
		Dermal Contact	1E-07	--	--	--	7E-04	--
		Inhalation	2E-07	--	--	--	2E-03	--
		Total	6E-07	--	--	--	4E-03	--
	Surface Water	Incidental Ingestion	2E-08	--	--	--	2E-03	--
		Dermal Contact	1E-09	--	--	--	1E-04	--
		Total	2E-08	--	--	--	2E-03	--
	Sediment	Incidental Ingestion	2E-07	--	--	--	3E-02	--
		Dermal Contact	9E-09	--	--	--	6E-04	--
		Total	2E-08	--	--	--	4E-02	--
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment			2E-05				6E+00
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			2E-05				6E+00	
Total Surface Soil, DPT Groundwater, Surface Water, and Sediment			2E-06				2E-01	
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment			2E-06				1E-01	
Future Adult Resident	Surface Soil	Incidental Ingestion	4E-07	--	--	--	2E-02	--
		Dermal Contact	3E-08	--	--	--	4E-04	--
		Total	4E-07	--	--	--	2E-02	--
	Subsurface Soil	Incidental Ingestion	4E-07	--	--	--	7E-03	--
		Dermal Contact	4E-08	--	--	--	1E-04	--
		Total	4E-07	--	--	--	8E-03	--
	Groundwater - MW	Incidental Ingestion	4E-05	--	Arsenic	--	3E+00	--
		Dermal Contact	1E-07	--	--	--	3E-02	--
		Inhalation	0E+00	--	--	--	4E-03	--
		Total	4E-05	--	Arsenic	--	3E+00	--
	Groundwater - DPT	Incidental Ingestion	4E-07	--	--	--	7E-04	--
		Dermal Contact	2E-07	--	--	--	4E-04	--
		Inhalation	4E-07	--	--	--	7E-04	--
		Total	1E-06	--	--	--	2E-03	--
	Surface Water	Ingestion	3E-09	--	--	--	9E-05	--
		Dermal Contact	2E-09	--	--	--	5E-05	--
		Total	5E-09	--	--	--	1E-04	--
	Sediment	Incidental Ingestion	9E-08	--	--	--	4E-03	--
		Dermal Contact	4E-09	--	--	--	7E-05	--
		Total	1E-07	--	--	--	4E-03	--
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment			4E-05				3E+00
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			4E-05				3E+00	
Total Surface Soil, DPT Groundwater, Surface Water, and Sediment			1E-06				2E-02	
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment			1E-06				1E-02	

TABLE 6-21
SUMMARY OF CANCER RISKS AND HAZARD INDICES
CENTRAL TENDENCY EXPOSURES
SITE 1
NCBC GULFPORT
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Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risks > 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁵ and ≤ 10 ⁻⁴	Chemicals with Cancer Risks > 10 ⁻⁶ and ≤ 10 ⁻⁵	Hazard Index	Chemicals Contributing to an Target Organ HI > 1
Hypothetical Lifelong Residents (Child and Adult)	Surface Soil	Incidental Ingestion	1E-06	--	--	--	NA	--
		Dermal Contact	1E-07	--	--	--	NA	--
		Total	1E-06	--	--	--	NA	--
	Subsurface Soil	Incidental Ingestion	1E-06	--	--	--	NA	--
		Dermal Contact	1E-07	--	--	--	NA	--
		Total	1E-06	--	--	--	NA	--
	Groundwater - MW	Incidental Ingestion	6E-05	--	Arsenic	--	NA	--
		Dermal Contact	2E-07	--	--	--	NA	--
		Inhalation	0E+00	--	--	--	NA	--
		Total	6E-05	--	Arsenic	--	NA	--
	Groundwater - DPT	Incidental Ingestion	6E-07	--	--	--	NA	--
		Dermal Contact	3E-07	--	--	--	NA	--
		Inhalation	6E-07	--	--	--	NA	--
		Total	2E-06	--	--	--	NA	--
	Surface Water	Incidental Ingestion	2E-08	--	--	--	NA	--
		Dermal Contact	3E-09	--	--	--	NA	--
		Total	3E-08	--	--	--	NA	--
	Sediment	Incidental Ingestion	3E-07	--	--	--	NA	--
		Dermal Contact	1E-08	--	--	--	NA	--
		Total	1E-07	--	--	--	NA	--
	Total Surface Soil, MW Groundwater, Surface Water, and Sediment			6E-05				NA
Total Subsurface Soil, MW Groundwater, Surface Water, and Sediment			6E-05				NA	
Total Surface Soil, DPT Groundwater, Surface Water, and Sediment			3E-06				NA	
Total Subsurface Soil, DPT Groundwater, Surface Water, and Sediment			3E-06				NA	

TABLE 6-22
SUMMARY OF CANCER RISKS AND HAZARD INDICES
VAPOR INTRUSION MODELING
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Chemical	Cancer Risk	Hazard Index
Trichloroethene	1E-07	NA
Total	1E-07	NA

NA - No toxicity criteria available.

7.0 ECOLOGICAL RISK ASSESSMENT

This ecological risk assessment was conducted to evaluate potential site-related risks to ecological receptors at Site 1, the Disaster Recovery Disposal Area. The ecological risk assessment consisted of Steps 1 through 3A of USEPA's 8-step ecological risk assessment process, and was conducted in accordance with USEPA and Navy guidance (USEPA, 1997a; 2000b; 2001b; DON, 1999). Steps 1 through 3A consist of the following:

- Step 1 Screening-Level Problem Formulation and Ecological Effects Evaluation
- Step 2 Screening-Level Exposure Estimate and Risk Calculation
- Step 3A Refinement of Preliminary Chemicals of Potential Concern

Section 7.1.1 describes the environmental setting at Site 1. The fate and transport characteristics of chemicals detected in soil, sediment, and surface water are provided in Section 7.1.2. The ecotoxicity of site contaminants and potential ecological receptors are described in Section 7.1.3. Section 7.1.4 describes complete exposure pathways, and Section 7.1.5 provides assessment and measurement endpoints. Sections 7.2, 7.3, and 7.4 describe the ecological effects evaluation, exposure estimates, and risk calculation, respectively. Section 7.5 describes the refinement of preliminary COPCs. Uncertainties inherent in the ecological risk assessment are discussed in Section 7.6. The summary and conclusions of the ecological risk assessment are provided in Section 7.7. Additional information regarding the food chain modeling can be found in Appendix F.

7.1 SCREENING-LEVEL PROBLEM FORMULATION

7.1.1 Environmental Setting

Site 1 is a former landfill facility encompassing approximately 9 acres, although the areal extent of the waste disposal is likely much smaller. The site is located north of 7th Street and east of Colby Avenue (Figure 2-2). The site is bordered on the north by facilities of the Pine Bayou Golf Course. The site topography is relatively flat, with elevations of approximately 20 to 24 feet above mean sea level. This area has most recently been used as a mock disaster recovery training village and as a training facility. The landfill was operated from 1942 until 1948, during which time it received nearly all of the solid and chemical waste generated at NCBC Gulfport. In addition to the solid waste, waste fuel, oil, solvents, paint, and paint thinners, reportedly in 55-gallon drums, were transported to the site and buried in trenches (Envirodyne, 1985).

In 1984, during water line repairs in the southwestern portion of Site 1, four or five rusted 55-gallon drums were excavated. The drums were highly deteriorated, and the drum contents were described as tar-like in consistency with a strong odor similar to burnt plastic. The drums were transported to the concrete foundation of former Building 271 (later designated Site 9) for storage pending analytical results of the drum contents. The sample of drum contents was analyzed for hazardous waste characterization for metals and volatiles and for flammability, reactivity, and corrosiveness. The material sampled from the drums contained xylene, toluene, 1,2-dichloroethane, and low levels of arsenic and lead.

Materials at Site 1 were disposed in trench and fill operations, often accompanied by incineration prior to covering the trenches with soil. As a trench and fill operation, wastes were often placed at or near the groundwater with no lining. The waste disposal area at Site 1 was covered with soil when disposal activities ceased in 1948. Additional fill has been added over the years as parking lots and roads have been constructed over the surface. The uppermost 2 feet in most areas is fill material used in the construction of the golf course over the landfill. Buildings at Site 1 are intermittently occupied, and it is unknown if any of the buildings were constructed on top of the disposal trenches.

Shallow groundwater flow at the site is to the northwest and northeast. Deep groundwater flow in and around Site 1 is to the northwest. There are no reports of the disposal of ordnance, radiological material, or biological/chemical warfare agents at Site 1.

Most precipitation presumably infiltrates into the sandy soils at the site with any surface water runoff conveyed to ditches along the eastern and western boundaries of the site. The ditch on the east boundary of the site typically contains water; and drains to the 28th Street area. The ditch on the west boundary of the site is very shallow, contains less water than the eastern ditch, is concrete-lined with numerous cracks in the concrete, and drains to Canal No. 1 on the northern side of 8th Street. Both ditches drain northward. Surface water in both ditches is typically stagnant or slow flowing. The drainage ditch on the western side of the site receives the majority of surface water runoff from the disposal area. Small fish, tadpoles, and a limited amount of aquatic vegetation have been observed in the western ditch. Being larger and normally containing water, the eastern ditch contains more aquatic life and plants. The ditches at Site 1 are usually wet because of their low-lying nature and the shallow regional water table. It does not appear that groundwater is discharging into the ditches. The drainage ditches at Site 1 are part of the network of interconnected ditches and canals that convey storm water on the base. The ditches are generally straight and uniform in width, lacking the morphological properties of natural streams. Some aquatic plants grow in stable sand and gravel banks near and below water levels. Wading birds, fish, and benthic organisms have been observed in the ditches.

Ground cover at the site is predominantly maintained grass, with a mixture of planted pines, hardwoods, roads, and several small buildings. A portion of the golf course occupies the northern one-third of Site 1. Large trees are scattered over the southern portion of the site. Some wildlife species (e.g., small birds, squirrels) undoubtedly forage at Site 1, especially in the southern portion of the site, but wildlife use of the northern portion of the site is temporary and minimal due to the lack of suitable cover on the golf course. Snakes, turtles, frogs, and Canada geese have been observed at or near the site. Various bird species may forage at the southern portion of the site and to a limited extent on the golf course fairway and rough areas, consuming invertebrates in the soil and grass as well as seeds blown in from nearby wooded areas. The grass height at the golf course and southern portions of the site is too low to provide cover for small mammals such as shrews and mice. With the exception of invertebrates and birds, probably few receptors forage at the site during daylight hours. The site is undoubtedly traversed by some wildlife species, especially at night. The more wooded areas in the southern portion of the site provide favorable conditions for a more diverse assemblage of plants and animals. Wildlife species expected to occur in these areas, especially at night, include mammals such as the Eastern cottontail (*Sylvilagus floridanus*), opossum (*Didelphis virginiana*), and raccoon (*Procyon lotor*).

7.1.2 Contaminant Fate and Transport

A portion of the area encompassing Site 1 was used as a landfill from 1942 until 1948 during which time it received nearly all of the solid and chemical waste generated at NCBC Gulfport. In addition to the solid waste, waste fuel, oil, solvents, paint, and paint thinners were transported to the site and buried in trenches (Envirodyne, 1985).

Metals, VOCs, SVOCs, pesticides, herbicides, and PCBs have been detected in surface soil samples collected at the site. Metals, VOCs, SVOCs, pesticides, and herbicides have been detected in nearby surface water and sediment samples. A discussion of the fate and transport of these contaminants was presented in Section 5. The discussion below is limited to a brief review of the fate and transport of contaminants at Site 1 as related to migration pathways and ecological exposure.

The former landfill and the original contaminant sources are covered by fill dirt and a surface layer of maintained grass. As mentioned earlier, the topography is relatively flat. Because of these conditions, stormwater erosion, wind erosion, and overland transport of site-related contaminants in surface soil are not considered primary contaminant transport mechanisms at Site 1. However, if surface soil is disturbed through activities such as excavation, soils could serve as a source for airborne transport of contaminants; soil contaminants could then be transported to downwind locations. Excavation of soil could also result in the volatilization of some contaminants. If disturbed, soils might also be transported by stormwater erosion to surface water and sediment.

Infiltrating precipitation has resulted in the contamination of groundwater at the site. Although no groundwater seepage points have been observed in the ditches along the eastern and western edges of the site, the primary contaminant migration pathway (as related to ecological receptors) at Site 1 is probably infiltration of soil contaminants into groundwater and subsequent potential seepage into the ditches.

7.1.2.1 VOCs

VOCs are poorly adsorbed to soil and sediment particles. Also, because they are very volatile, they typically are detected in surface water, surface soil, and sediment only at low concentrations. VOCs in soil will dissolve in rain water to varying degrees and can be transported overland with runoff or into groundwater. Photolysis and hydrolysis are not significant mechanisms for VOC degradation. Aerobic biodegradation in soil and groundwater is significant, however, and anaerobic degradation can also occur in these media.

7.1.2.2 SVOCs

Most SVOCs detected in Site 1 surface soil and sediment were PAH and phthalate compounds. PAHs are ubiquitous in the modern environment and are common constituents of coal tar, soot, vehicle exhaust, cigarette smoke, certain petroleum products, road tar, mineral oils, creosote, and many cooked foods. PAHs can also be released to the environment through natural sources such as forest fires. The fate and transport characteristics of PAHs are dependent on their molecular weights. Low molecular weight PAHs are more soluble and volatile, and therefore more mobile. They can volatilize and photolyze from soil and surface water, and they can also be biodegraded. High molecular weight PAHs tend to be immobile and insoluble, binding strongly to organic matter (reducing the potential for leaching to groundwater), and they are resistant to volatilization, photolysis, and biodegradation (Eisler, 2000). Upper trophic level organisms are exposed to PAHs primarily through their diet, but most wildlife can metabolize and excrete PAHs. Food-chain transfer and biomagnification of PAHs are expected to be minimal. PAHs can be absorbed by plants but are expected to be translocated, metabolized, and potentially photodegraded. Accumulation within plants is likely to occur only in heavily polluted locations where uptake exceeds metabolism and degradation (Edwards, 1983).

Three phthalates were detected at Site 1. Plastic wastes are the major source of phthalates in the environment, and phthalates are relatively persistent in the environment. Some microorganisms have been shown to excrete products that increase the solubility of phthalates and enhance their biodegradation (Gibbons and Alexander, 1989). Diethyl phthalate tends to undergo aerobic biodegradation in soil and surface water, while anaerobic biodegradation would be very slow or not occur at all. Diethyl phthalate has accumulated and persisted in the sediments of Chesapeake Bay for over a

century (Spectrum, 2003). Phthalates are not expected to significantly volatilize. Phthalates have been found in groundwater at high concentrations at sites with highly permeable soils, which demonstrates that at high concentrations, they can leach into groundwater. Biomagnification of phthalates does not occur.

7.1.2.3 Pesticides

Organochlorine pesticides were detected in surface soil and sediment at Site 1. Organochlorine pesticides are highly persistent in the environment, and tend to tightly sorb to organic matter and be immobile in most soils. Degradation of chlorinated pesticides in soil would eventually occur through volatilization, photolysis, and aerobic and anaerobic degradation. Due to the lipophilicity of organochlorine pesticides, they can bioaccumulate in animals. These compounds generally bioconcentrate in lower trophic level organisms and can be transferred and magnified in higher trophic level organisms.

7.1.2.4 Herbicides

The chlorophenoxy herbicide 2,4,5-T was detected in surface soil and surface water while dinoseb was detected in surface soil. 2,4,5-T was once widely used in agriculture, along highways, and on lawns, but its use in the United States has been cancelled since 1985. Dioxins and furans were byproducts formed during the production of 2,4,5-T and early batches were relatively highly contaminated with TCDD. Eventually, USEPA regulated the TCDD content in 2,4,5-T at 0.1 ppm or less (Amdur et al, 1991). The mobility of 2,4,5-T varies from highly mobile in sandy soil to slightly mobile in mucky sediment (due to adsorption to humic acids and other organic matter). Photochemical decomposition, volatilization and biodegradation appear to be the dominant removal mechanisms in water. Bioconcentration and biomagnification are not significant (HSDB, 2009). Release of dinoseb to soil is expected to result in biodegradation, and dinoseb will only weakly adsorb to soils and should, therefore, leach to groundwater. However, it may bind more strongly to clay soils, especially at acidic pH. Photolytic degradation of dinoseb from soil surface may occur. Dinoseb may photodegrade in surface water with a half-life of 14 to 18 days. Hydrolysis in water is not significant. It is unlikely to undergo significant biodegradation in most natural waters. Volatilization from water is expected to be slow and bioconcentration is expected to be insignificant (HSDB, 2009).

7.1.2.5 PCBs

The PCB Aroclor-1260 was detected in one surface soil sample at Site 1. PCBs include a variety of mixtures of individual biphenyl isomers, each consisting of two joined benzene rings and up to 10 chlorine atoms. PCBs adsorb strongly to soil particles with adsorption generally increasing with the degree of chlorination. PCBs released into water adsorb to sediments and other organic matter. Factors that

determine the biodegradability of PCBs include the amount of chlorination, concentration, microbial population type, available nutrients, and the temperature (ATSDR, 1989). PCBs can significantly bioconcentrate in animals.

7.1.2.6 Inorganics

Metals were detected in surface soil, surface water, and sediment at Site 1. Many metals occur naturally in soil, sediment, and surface water due primarily to chemical weathering of rocks. They are toxic to aquatic and terrestrial receptors above certain concentrations, with some metals being more toxic at lower concentrations than others. In addition, different chemical forms of metals are more toxic than others. For example, hexavalent chromium is typically more toxic than trivalent chromium, and methyl mercury is more toxic than inorganic mercury. Some metals have the potential to accumulate in biota.

7.1.3 Ecotoxicity and Potential Receptors

VOCs readily volatilize, are poorly adsorbed to soil and sediment particles, and are typically detected in surface soil and sediment only at low concentrations. VOCs do not generally bioaccumulate in ecological receptors, and their toxicity to ecological receptors is relatively low.

Few generalizations can be made about the ecotoxicity of PAHs because of the extreme variability in toxicity and physiochemical properties of PAHs. Adverse impacts to plants from PAHs, however, are rare (Eisler, 2000). In most animal species, PAHs are metabolized by a mixed-function oxidase enzyme system into intermediates that may be toxic, mutagenic, or carcinogenic to the host. Some invertebrate species cannot efficiently metabolize PAHs (Eisler, 2000), and PAHs can be chronically toxic to invertebrates, but overall, very little is known about the toxicological mechanisms of PAHs in invertebrates (Erstfield and Snow-Ashbrook, 1999). PAHs can bind to cellular macromolecules and thereby disrupt their function in higher level organisms such as mammals and birds. Biological macromolecules include polymers of carbohydrates (e.g., starch), amino acids (proteins), and nucleotides (e.g., DNA). The cellular functions of these polymers include structure, energy storage, energy transfer, material transport, and the storage and transmittal of genetic information. PAHs show little tendency to biomagnify in the food web (Eisler, 2000). Microbial metabolism is the major process for degradation of PAHs in soil (ATSDR, 1997). PAHs show little tendency to biomagnify in the food web. USEPA Region 4 considers the potential toxicity of PAHs via the terrestrial food web to be generally negligible unless PAHs are present at extremely high concentrations (i.e., percent levels: 10,000 mg/kg) in soil.

Chronic oral exposure to phthalates can result in liver toxicity in mammals. Ingested phthalates metabolize to monoesters in the gut and are subsequently absorbed. Following absorption, phthalates distribute primarily to the liver and kidneys and may, in some species, concentrate in the testes (Rhodes

et al., 1986). Liver carcinogenesis has been observed (ATSDR, 1997). Many receptors are able to metabolize and excrete phthalate esters, so their ability to bioaccumulate varies among species.

Organochlorine pesticides are reproductive and nervous system toxins. Although these compounds were used as insecticides, they are toxic to other animals as well. The target organ for acute exposures is the nervous system, while chronic exposures can affect the liver and endocrine systems of higher animals. Organochlorine pesticides are lipophilic and can be stored in the fat tissue of organisms such as birds and mammals. In birds of prey they can cause reproductive failure through eggshell thinning and disruption of egg-laying and nesting cycles (Amdur et al., 1991). These pesticides were developed to control insects on crops, and as a result, they are practically non-toxic to plants.

The herbicide 2,4,5-T exerts its herbicidal action by acting as a growth hormone in plants (Amdur, 1991). Laboratory studies indicate that 2,4,5-T is only slightly toxic to most animals, and is not carcinogenic or teratogenic. Laboratory no-adverse-effect levels (NOAELs) for aquatic species are typically greater than 1,000 µg/L, classifying 2,4,5-T as practically non-toxic. 2,4,5-T is practically non-toxic to mallards, and is slightly toxic to pheasants (HSDB, 2009).

PCBs are highly lipophilic, and can bioaccumulate in animals. PCBs can accumulate in offspring through placental transfer in mammals and accumulation in bird eggs, and can accumulate in upper trophic level animals such as piscivorous birds and mammals that feed on contaminated prey items (Eisler, 2000). In animals, the primary effect associated with PCB exposure is the induction of liver enzyme systems. These enzymes are associated with detoxification mechanisms and with the metabolism of hormones. Adverse reproductive effects observed with PCB exposure are associated with induction of the enzyme systems. The toxicity of PCBs to mammals and birds varies, depending on the particular PCB and the animal species. PCBs are not water soluble and accumulate to a much greater degree in animals than in plants. Nevertheless, plant-related effects of PCB exposure can include slower growth, reduced chlorophyll content, and diminished photosynthesis (USEPA, 1999).

It is difficult to make generalizations about the toxic actions of metals because of diverse affinities for organic molecules in biologic structures, a wide array of biological effects, and a multiplicity of target organs and systems (Amdur et al., 1991). At the molecular level, metals can manifest toxicity in many ways, including selectively accumulating in target organs (such as the kidneys), substituting for “essential” metals, and mimicking essential substrates (Clarkson, 1983). The reactions of metals at the molecular level typically affect enzyme systems, leading to disruption of cellular transport, cellular respiration, cell division, and other physiological processes. Metal toxicity to aquatic organisms is manifested through a broad spectrum of effects that may range from a reduction in growth rate to death.

7.1.4 Complete Exposure Pathways

As mentioned earlier, the former landfill is covered by fill dirt, landscaping, roadways, and houses. Therefore, exposure to landfill-related contaminants by terrestrial ecological receptors is probably minimal. However, the possibility that soil has been disturbed during excavation, such as laying pipes or other activities, cannot be ruled out. As a conservative measure, therefore, it will be assumed that the soil cover is not of uniform thickness, and the soil exposure pathway will be assumed to be complete. To the extent that this is true, soil invertebrates could be exposed to soil contaminants at Site 1 through ingestion and dermal contact, and the root zone of some plants (especially trees) might extend into contaminated soil.

The ground cover at Site 1 appears to be managed and regularly maintained. The grass height at both the golf course on the northern third of the site and the areas south of it appear similar to that of a recently mowed lawn. In the absence of other cover, the grass height is too low to provide cover for small mammals such as shrews and mice. Although various bird species may forage in the more wooded sections of the site, birds would not be significantly exposed to site-related contaminants, since site contaminants are buried underneath fill material. The waste disposal area at Site 1 was covered with soil when disposal activities ceased in 1948. Additional fill has been added over the years as parking lots and roads have been constructed over the surface. Even if small areas of site-related surface soil contamination are present, such areas would comprise only a miniscule amount of foraging habitat for wide-ranging receptors such as birds. With this in mind, the exposure pathway for terrestrial receptors such as birds, mammals, and reptiles is incomplete or negligible and insignificant.

Aquatic organisms such as fish and benthic organisms (i.e., invertebrate organisms that live on or in sediment) could be exposed to sediment and surface water contaminants through ingestion and direct contact. Higher trophic level animals such as birds and mammals that forage in the ditches at Site 1 can be exposed to site-related contamination through ingestion of contaminated food items and water. These animals may also incidentally ingest contaminants in sediment while preening feathers or feeding on items to which sediment has adhered. Absorption of contaminants from the gastrointestinal tract is the primary pathway of intake for upper trophic level receptors.

In summary, complete exposure pathways and routes of entry into biota at Site 1 consist of:

- Direct contact with soil, sediment, and surface water
- Ingestion of soil, sediment, and surface water
- Ingestion of contaminated food items by upper trophic level animals foraging in the ditches along the eastern and western edges of the site.

7.1.5 Preliminary Assessment and Measurement Endpoints

An assessment endpoint is “an explicit expression of the environmental value that is to be protected,” while a measurement endpoint is “a measurable ecological characteristic that is related to the valued characteristic chosen as the assessment endpoint” (USEPA, 1997). Measurement endpoints represent the assessment endpoints chosen for a site, and are measures of biological effects (USEPA, 1997a).

USEPA Region 4 has specified that assessment endpoints for the screening-level assessment should be broad and generic. For the Site 1 screening level assessment, the preliminary assessment endpoint is the protection of terrestrial, benthic, and aquatic biota from adverse effects of chemicals on their growth, survival, and reproduction. The preliminary measurement endpoints are chemical concentrations in surface soil, sediment, and surface water that are associated with no adverse effects on growth, survival, and reproduction of terrestrial and benthic organisms. The measurement endpoints are represented by USEPA Region 4 ESVs for surface soil, surface water, and sediment.

The soil, surface water, and sediment ESVs are based on conservative endpoints and sensitive ecological effects data, and thus, the screening values represent chemical concentrations associated with a low probability of unacceptable risks to ecological receptors. For this reason, USEPA Region 4 considers their screening values to be protective of invertebrates and plants as well as upper level receptors such as birds and mammals. In the screening level ecological risk assessment, therefore, a distinction is not made between measurement endpoints associated with direct toxicity to invertebrates and plants versus measurement endpoints associated with food chain effects.

7.2 SCREENING-LEVEL ECOLOGICAL EFFECTS EVALUATION

Soil screening values used in the screening level ecological risk assessment were USEPA Ecological Soil Screening Levels (Eco-SSLs) and ESVs established by USEPA Region 4 (USEPA, 2001). The lowest Eco-SSL among plant, invertebrate, mammal, and avian values was used as the screening value. Eco-SSLs were preferentially used as soil screening values, but Eco-SSLs are currently available for only a few chemicals. USEPA Region 4 ESVs (USEPA, 2001b) were used as soil screening values for chemicals that do not have an Eco-SSL. The term “soil ESV” is generally used for brevity in this Section to refer to either the Eco-SSL or the Region 4 soil ESV.

ESVs for surface water and sediment used in the screening level ecological risk assessment were those established by USEPA Region 4 (USEPA, 2001b).

If the maximum detected concentration of a chemical in surface soil, sediment, or surface water was equal to or less than the ESV, the chemical was eliminated from further consideration for that medium. If

the maximum concentration exceeded the ESV, or if a screening value was not available, the chemical was then considered to be an ecological COPC and was retained for further evaluation.

7.3 SCREENING-LEVEL EXPOSURE ESTIMATE

Exposure point chemical concentrations for surface soil were obtained from 21 samples collected in August and September 2008 (Figure 2-3). Surface soil samples were collected from a depth of 0 to 1 foot, and the term “surface soil” is used in this risk assessment to refer to samples collected from this depth, since USEPA Region 4 considers 0 to 1 foot depth to be representative of surface soil. The surface soil sample locations were based on previous investigations and are believed to represent the area encompassed by the former landfill.

Exposure point chemical concentrations for sediment and surface water were obtained from five sediment samples and five surface water samples collected in March 2008 (Figure 2-7). Three surface water/sediment samples were collected from the ditch bordering the western side of Site 1, and two surface water/sediment samples were collected from the ditch bordering the eastern side of the site.

7.4 SCREENING-LEVEL RISK CALCULATION

The screening level risk calculation step compared maximum concentrations of chemicals in surface soil, sediment, and surface water to ESVs. The ratio of the maximum concentration to the ESV is called the screening HQ. Analytes with maximum concentrations less than or equal to ESVs ($HQ \leq 1$) were dropped from further consideration, while those that exceeded ESVs ($HQ > 1$), or did not have ESVs, were retained as ecological COPCs. An HQ value greater than 1 indicates that ecological receptors are potentially at risk, and further evaluation or additional data may be necessary to confirm with greater certainty whether ecological receptors are actually at risk, especially since most toxicity benchmarks are developed using conservative exposure assumptions. Chemicals that were retained as COPCs were evaluated in Step 3A so that risk managers can determine if further investigation is warranted.

Calcium, magnesium, potassium, and sodium were not considered to be COPCs because they are essential nutrients that can be tolerated by living systems even at relatively high concentrations. There have been no activities at NCBC Gulfport that have resulted in known releases of high levels of these four chemicals at Site 1.

In surface soil, four pesticides and nine inorganics were retained as COPCs because their maximum concentrations exceeded ESVs, while ESVs were not available for two VOCs, one SVOC, seven pesticides, and two herbicides (Table 7-1).

In surface water, three inorganics were retained as COPCs because their maximum concentrations exceeded ESVs, while ESVs were not available for three VOCs, one SVOC, one herbicide, and two inorganics (Table 7-2).

In sediment, six SVOCs, two pesticides, and three inorganics were retained as COPCs because their maximum concentrations exceeded ESVs, while ESVs were not available for three VOCs, four SVOCs, four pesticides, and six inorganics (Table 7-3).

The full surface soil, sediment, and surface water datasets are presented in Appendix D.

7.5 REFINEMENT OF PRELIMINARY CHEMICALS OF POTENTIAL CONCERN

At this point, the first two steps of the ecological risk assessment have been completed. The ecological risk assessment process includes a series of scientific/management decision points (SMDPs) (USEPA, 1997a). The first SMDP occurs at the end of Step 2 (Screening Level Exposure Estimate and Risk Calculation), and requires the risk managers to evaluate and approve or redirect the work up to that point and determine whether the risk assessment will continue into Step 3. However, USEPA Region 4 recognizes that most ecological risk assessments will proceed into Step 3, and facilities are encouraged to submit the results of Steps 1-3 as a single deliverable document (USEPA, 2000b). With this in mind, and since the screening level ecological risk assessment indicates a potential for adverse effects, a more thorough assessment is warranted. Therefore, the risk assessment process for Site 1 will proceed into Step 3 (Baseline Risk Assessment Problem Formulation).

7.5.1 General Approach

The baseline ecological risk assessment begins with a more balanced evaluation of the conservativeness inherent in the first two steps of the risk assessment process (USEPA, 1997a; DON, 1999). The initial phase of Step 3 is typically known as Step 3A, and consists of a refinement of the conservative exposure assumptions in order to more realistically estimate potential risks to plants, invertebrates, and wildlife receptors. Examples of factors typically considered during Step 3A include toxicological evaluation of COPCs, spatial distribution of contaminants, frequency of detection, background concentrations, and habitat quality. Furthermore, the preliminary assessment and measurement endpoints are refined, the site conceptual model is developed, and initial food chain modeling is conducted (at sites where applicable) to evaluate risks to upper level receptors (USEPA, 2000b). The objective of the Step 3 refinement is to better define those chemicals that contribute to potentially unacceptable levels of ecological risk, and to identify and eliminate from further consideration those chemicals that were initially selected as COPCs because of the use of very conservative assumptions.

7.5.2 Assessment and Measurement Endpoints

Based on the habitats present and on the migration pathways and routes of exposure of chemicals at Site 1, the site-specific assessment endpoints are the protection of the following groups of receptors from adverse effects of site-related contaminants on growth, survival, and reproduction:

- Soil invertebrates
- Terrestrial plants
- Benthic invertebrates
- Aquatic organisms
- Piscivorous birds
- Piscivorous mammals

The assessment endpoints listed above were selected for evaluation in Step 3A of the baseline ecological risk assessment for the reasons described below.

7.5.2.1 Soil Invertebrates

Earthworms, insect larvae, and other soil invertebrates at Site 1 aid in the formation of soil and the redistribution and decomposition of organic matter in soil. They can also accumulate bioaccumulative contaminants that can then be transferred to higher trophic-level organisms that consume soil invertebrates.

7.5.2.2 Terrestrial Vegetation

Terrestrial vegetation at Site 1 consists largely of mowed grass in the northern one-third of the site, with more trees, shrubs, vines, and herbs present in the southern portion of the site. These plants serve as a food source and provide shade and cover for various organisms, and they help to prevent soil erosion, among other important functions. They also can accumulate certain contaminants that can then be transferred to the higher trophic-level organisms that consume plants. The existing soil cover over the former landfill probably minimizes the exposure pathway to terrestrial vegetation, but as a conservative measure, potential risk to terrestrial vegetation was evaluated.

7.5.2.3 Benthic Invertebrates

A variety of benthic invertebrates such as crayfish and immature forms of numerous insect species may occur in the ditches bordering Site 1. Benthic invertebrates may be exposed to site-related contaminants through groundwater discharge into the ditches and to a minor extent (as previously discussed) from

storm water runoff. Benthic invertebrates can accumulate contaminants that can then be transferred to higher trophic level organisms when consumed. These invertebrates serve as prey items for reptiles and amphibians, for mammal species such as the opossum, raccoon, and mink, and for numerous bird species.

7.5.2.4 Aquatic Organisms

Fish and other aquatic organisms such as daphnids, midges, and mosquito larvae are present in the ditches bordering Site 1. They are directly exposed to contaminants in surface water. Aquatic organisms serve as a food source for higher trophic level organisms such as birds and mammals. Like benthic invertebrates, aquatic biota can accumulate contaminants that can then be transferred to higher trophic level organisms when consumed.

7.5.2.5 Piscivorous Birds and Mammals

The term “piscivorous” is used here in a broad sense to describe birds and mammals that prey upon not only fish, but on a variety of aquatic and sediment dwelling organisms (e.g., crayfish, frogs). Piscivorous birds and mammals can be exposed to and accumulate site-related contaminants that have accumulated in prey items obtained from the site. This would be especially applicable for contaminants such as organochlorine pesticides, and certain metals. Piscivorous birds that forage in water bodies near Site 1 include wading birds such as herons and egrets. Probably few if any piscivorous mammal species forage in the ditches adjacent to Site 1, due to the open habitat and lack of trees and shrubs along the shorelines, but the occasional presence of mammals such as the river otter and mink cannot be ruled out. Raccoons undoubtedly forage in the ditches. The raccoon is often thought of as piscivorous, and it does consume aquatic organisms, but the majority of its diet typically consists of non-aquatic animal and plant tissues (USEPA, 1993a).

7.5.2.6 Other Potential Endpoints

As indicated in USEPA guidance (USEPA, 1997a), it is not practical to directly evaluate risks to all of the individual components of the ecosystem. Instead, assessment endpoints focus the risk assessment on particular components of the ecosystem that will tend to yield the highest risks; this should provide protection for endpoints that have lower risks.

As mentioned earlier, the former landfill is covered by fill dirt within an intensively managed landscape. With this in mind, the surface soil exposure pathway for terrestrial receptors such as birds, mammals, and reptiles is incomplete or negligible and insignificant. In addition, threshold oral toxicity values for reptiles and amphibians are not available for most chemicals. With the above factors in mind, amphibians,

reptiles, herbivores, and omnivores were not selected as assessment endpoints. Instead, potential risk from bioaccumulation and biomagnification of contaminants was assessed for piscivorous birds and mammals.

7.5.2.7 Measurement Endpoints

Measurement endpoints for soil invertebrates, benthic invertebrates, and aquatic organisms in Step 3A of the baseline ecological risk assessment are similar to those in the screening level assessment: chemical concentrations in surface soil, sediment, and surface water that are associated with adverse effects on growth, survival, and reproduction of soil invertebrates and benthic and aquatic organisms. The measurement endpoints are represented by ESVs for surface soil, sediment, and surface water. Other guidelines were also used in some instances.

Adverse impacts on survival, growth, and reproduction of piscivorous birds and mammals were evaluated by comparing estimated ingested doses of contaminants in surface water, sediment, and food items to threshold oral toxicity values.

7.5.3 Conceptual Exposure Model

The site conceptual exposure model is designed to diagram the potentially exposed receptor populations and applicable exposure pathways based on the physical nature of the site and the potential contaminant source areas. The contaminant transport pathways for Site 1 are shown schematically on Figure 7-1. These pathways describe the movement from sources of contamination to potential ecological receptors; the linkage of these items is the conceptual site model.

Overland runoff and erosion appear to be negligible at the relatively flat and vegetation-covered site, and are not included on Figure 7-1. The aquatic and benthic organisms referred to on Figure 7-1 are those in the ditches bordering the east and west sides of the site. Combustion was undoubtedly a major contaminant release mechanism during the period of active landfill and burning operations. However, combustion is not a current contaminant release mechanism at Site 1 since burning activities have ceased and the landfill is covered with soil. The soil cover also precludes the volatilization pathway.

7.5.5 Step 3A Risk Characterization and Discussion

Several chemicals that were detected in surface soil, sediment, and surface water were initially retained as ecological COPCs because their chemical concentrations exceeded ESVs or because ESVs were not available. The remainder of this section discusses soil COPCs as related to terrestrial invertebrates and

plants (Section 7.5.4.1), surface water and sediment COPCs as related to aquatic and benthic receptors (Section 7.5.4.2), and COPCs that pose risk to piscivorous wildlife via the food chain (Section 7.5.4.3).

7.5.4.1 Potential Risk to Terrestrial Invertebrates and Plants

7.5.4.1.1 Volatile Organic Compounds

2-butanone (methyl ethyl ketone) and 4-methyl-2-pentanone (methyl isobutyl ketone) were retained as COPCs in surface soil due to an absence of ESVs (Table 7-1). 2-butanone was detected in only two of 21 samples. Both positive detections were “J flagged”. This signifies that the analyte was positively identified but its concentration could not be precisely quantified since it was less than the contract-required quantitation limit but greater than the instrument detection limit. The majority of the detection limits were higher than the reported detected concentrations so there is uncertainty associated with these results. 2-butanone is a common laboratory contaminant. The concentrations of 2-butanone in surface soil at Site 1 probably do not pose risks to soil invertebrates and plants.

4-methyl-2-pentanone was detected in four of 21 samples. All positive detections were “J flagged”. The majority of the detection limits were higher than the reported detected concentrations so there is uncertainty associated with these results. 4-methyl-2-pentanone is used as a solvent and an extracting agent and occurs naturally in oranges and grapes. It may volatilize from dry soil surfaces based upon its vapor pressure, and biodegradation is an important environmental fate process (HSDB, 2009). Although the lack of toxicity data precludes a thorough evaluation of risks, detected concentrations of 4-methyl-2-pentanone at Site 1 are not anticipated to be associated with significant potential risk to soil invertebrates and plants.

7.5.4.1.2 Semivolatile Organic Compounds

Caprolactam is used in the manufacture of synthetic fibers and as a solvent for polymers, especially for nylon materials, plastics, paints, coatings, and floor polishes (HSDB, 2009). ESVs and surface soil toxicity data were not available, and a literature review compiled by the United Nations Environment Programme (UNEP, 2001) stated that no caprolactam toxicity data are available on terrestrial organisms. In summary, the lack of toxicity data precludes an evaluation of potential impacts to surface soil organisms. Caprolactam was detected in only three surface soil samples but was also detected in surface water samples. Caprolactam is expected to have high mobility due to its Koc of 57 (HSDB, 2009). This is consistent with the presence of caprolactam in surface water indicating potential migration into this media from soil.

7.5.4.1.3 Pesticides

Concentrations of dieldrin exceeded the ESV in three samples (Table 7-4). The maximum concentration (460 µg/kg) was much higher than the concentrations in the other samples that exceeded the ESV (15 µg/kg and 9.5 µg/kg). The ESV is the Eco-SSL for risk to mammals based on potential adverse impacts to the shrew from ingestion of earthworms rather than risks to plants or soil invertebrates. Data were insufficient to derive an Eco-SSL for plants and soil invertebrates.

The concentration of gamma-BHC (also known as lindane) exceeded the ESV in one sample, and the detection limits in non-detect samples also exceeded the ESV (Table 7-4). The Region 4 ESV is a “target” value established by the Dutch to represent the concentration required for the full functionality of human, animal, and plant life. Dutch target values are based on standards for drinking water and surface waters (MHSPE, 1994). The applicability of the 0.05 µg/kg ESV is unclear, so the potential risk posed by lindane at Site 1, is uncertain. However, since lindane was detected at only one location and its detected concentration was relatively low (0.23 µg/kg), potential impacts appear localized and minimal.

Aldrin and endrin aldehyde each exceeded their respective ESV in one sample (Table 7-4). Aldrin had a maximum HQ of 2.5 while endrin aldehyde had a maximum HQ of 2.0. In the absence of an ESV for endrin aldehyde, the ESV for endrin was used so there is some uncertainty in conclusions regarding potential risk from endrin aldehyde. The average concentrations of aldrin and endrin aldehyde were less than the respective ESVs. Both detections were “J flagged”. Potential risks from aldrin and endrin aldehyde are considered low and isolated to the single locations where they were detected.

ESVs were not available for alpha- and gamma-chlordane, endosulfan II, endosulfan sulfate, heptachlor, heptachlor epoxide, or methoxychlor. The average concentrations of these seven compounds were less than 1 µg/kg except for methoxychlor (Table 7-4). A background dataset has not been generated for NCBC Gulfport, so a comparison of concentrations at Site 1 to background values cannot be performed.

In summary, the pesticides detected at Site 1 are organochlorine insecticides that are no longer used but are known to be extremely persistent in soil. Concentrations in some samples might pose risks to soil invertebrates, after all, these insecticides were manufactured to control invertebrates. Potential risks (if any) might be due to historical use of these insecticides rather than landfill operations, but a background dataset has not been generated for NCBC Gulfport.

The USEPA Region 4 ESV for “total organochlorinated pesticides” is 100 µg/kg. Concentrations of total organochlorinated pesticides in only two Site 1 surface soil samples are above this value. Sample 01SS017 collected near a roadway had a methoxychlor concentration of 140 µg/kg, while sample 01SS025 collected near a house had a dieldrin concentration of 460 µg/kg. All other concentrations (both

individual and total) were much lower. Dieldrin was historically used for termite control through direct injection into soils as well as by treatment of timber and building materials and methoxychlor was widely sprayed for mosquito control. It is unclear whether the presence of these pesticides is associated with historic application or landfill operations.

7.5.4.1.4 Herbicides

2,4,5-T was detected in three of 21 samples and dinoseb was detected in one of six surface soil samples. 2,4,5-T is a plant hormone used as a herbicide and plant growth regulator. 2,4,5-T was historically applied to control plant growth on land and in water and is a component of Herbicide Orange which the U.S. Air Force stored in drums at NCBC Gulfport (Site 8) between 1968 and 1977. Cancellation of all registered uses of 2,4,5-T was effective January 2, 1985.

Dinoseb is a phenolic herbicide formerly used largely for the selective control of grass and broadleaf weeds. The use of dinoseb in the United States was cancelled by the USEPA in 1986, an action based primarily on the risk of birth defects by applicators and other persons with substantial dinoseb exposure (Exttoxnet, 1993).

ESVs or other surface soil guidelines have not been established for these two herbicides.

7.5.4.1.5 Metals

Maximum concentrations of nine metals exceeded their respective ESVs (Table 7-4); these are discussed below.

Aluminum

Aluminum concentrations in all samples exceeded the 50 mg/kg ESV (Table 7-4). Aluminum is considered a COPC only when the soil pH is less than 5.5 (USEPA, 2003a), but soil pH data are not available from Site 1 or other nearby locations. Aluminum is the most commonly occurring metallic element in the earth's crust, and aluminum concentrations in Site 1 soil samples are similar to those at other NCBC Gulfport sites. While there is some degree of uncertainty at Site 1, aluminum probably does not pose site-related risk to plants or soil invertebrates.

Antimony

Antimony was detected in only 2 of 21 samples (Table 7-4); its detected concentrations (1.1 and 3.6 mg/kg) exceeded the 0.27 mg/kg screening value, which is an Eco-SSL for risk to mammals (USEPA, 2005a) rather than risks to plants or soil invertebrates. The antimony Eco-SSL for soil invertebrates is 78 mg/kg. An Eco-SSL for plants is not available, but the ORNL plant toxicity threshold is 5 mg/kg

(Efroymson et al, 1997a). The maximum antimony concentration (3.6 mg/kg) and detection limits in non-detect samples are less than the ORNL and Eco-SSL values. Therefore, antimony is not expected to pose risk to plants or soil invertebrates.

Copper

Copper was detected in 19 of 21 samples (Table 7-4). Only one sample 01SS015 (210 mg/kg) exceeded the 28 mg/kg screening value; the next highest detected concentration was 16.6 mg/kg. The ESV is an Eco-SSL based on risk to avian receptors (USEPA, 2007a) rather than risks to plants or soil invertebrates. The copper Eco-SSLs for plants and soil invertebrates are 70 mg/kg and 80 mg/kg, respectively. Since only one sample had a copper concentration greater than the Eco-SSL values, overall potential risk from copper to plants and soil invertebrates at Site 1 is considered low.

Iron

Iron concentrations exceeded the 200 mg/kg ESV in all 21 surface soil samples (Table 7-4). The ESV is an ORNL value for toxicity to soil micro-organisms but the authors of the ORNL publication state that their confidence in the 200 mg/kg benchmark is low because of the limited data available (Efroymson et al, 1997b). There are no ORNL soil screening values for iron toxicity to plants or earthworms (Efroymson et al, 1997a; 1997b). Iron is an essential element that is required by all forms of life, but toxicity thresholds for earthworms and plants could not be located, and USEPA (2003b) concludes that identifying a specific benchmark for iron in soil is difficult because iron toxicity depends on site-specific soil conditions such as pH, redox potential, and soil-water conditions. Iron is not expected to be toxic to plants in well-aerated soils between pH 5 and 8 (USEPA, 2003b), but soil pH data are not available from Site 1 or other nearby locations. The iron concentrations in Site 1 soil samples are similar to those at other NCBC Gulfport sites. In summary, potential risks to plants or soil invertebrates are uncertain, but are probably not related to activities at the former landfill.

Lead

Lead was detected in all samples and concentrations exceeded the 11 mg/kg ESV in seven samples, with a maximum HQ of 6.4 (Table 7-4). The ESV is an Eco-SSL value that is based on risks to birds instead of risks to plants and soil invertebrates. The lead Eco-SSLs for plants and soil invertebrates are 120 mg/kg and 1,700 mg/kg, respectively (USEPA, 2005b). The maximum concentration of 70.6 mg/kg is less than these guidelines. Therefore, lead poses no risks to plants and soil invertebrates.

Manganese

Manganese was detected in all samples with only sample 01SS017 (358 mg/kg) exceeding the ESV of 220 mg/kg (Table 7-4). The ESV is the eco-SSL value that is based on risks to plants. The Eco-SSL for

risks to soil invertebrates is 450 mg/kg. The plant eco-SSL was exceeded in only one sample generating a low HQ (HQ = 1.6) so any risks to plants are limited to the vicinity of sample 01SS017.

Selenium

Selenium was detected in 4 of 21 samples with three samples having concentrations (0.69 mg/kg, 1 mg/kg, 1.3 mg/kg) exceeding the 0.52 mg/kg screening value (Table 7-4). Its detection limits in non-detect samples (0.61 to 0.78 mg/kg) slightly exceeded the ESV. The ESV is an Eco-SSL value that is based on selenium risks to plants; the Eco-SSL for soil invertebrates is 4.1 mg/kg (USEPA, 2007b). Other screening values for selenium in soil include an ORNL earthworm value of 70 mg/kg (Efroymsen et al, 1997b), an ORNL plant value of 1.0 mg/kg (Efroymsen et al, 1997a), and a Canadian soil quality guideline of 1.0 mg/kg (CCME, 2004). In summary, selenium concentrations indicate no risk to soil invertebrates. The detected selenium concentrations only slightly exceeded the Eco-SSL value for plant toxicity (0.52 mg/kg) and were not high relative to other guidelines, so potential risks are considered negligible.

Vanadium

Vanadium was detected in all samples and concentrations exceeded the 7.8 mg/kg ESV in 13 samples, with a maximum HQ of 2.1 (Table 7-4). The ESV is an Eco-SSL based on risks to birds rather than risks to plants and soil invertebrates. Eco-SSLs for plants and soil invertebrates are not available (USEPA, 2005c), but the Canadian soil quality guideline for vanadium is 130 mg/kg, and is based on toxicity tests using plants and soil invertebrates (EC, 1999; CCME, 2004). The maximum vanadium detection of 16 mg/kg is well below the Canadian guideline. Therefore, impacts to plants and invertebrates from vanadium in soil are not expected.

Zinc

Zinc was detected in all samples, with a maximum HQ of 1.9 (Table 7-4). Zinc concentrations exceeded the 46 mg/kg ESV in two samples: 01SS137 at 89 mg/kg and 01SS10 at 54 mg/kg. The ESV is an Eco-SSL value that is based on risks to birds instead of risks to plants and soil invertebrates. The zinc Eco-SSLs for plants and soil invertebrates are 160 mg/kg and 120 mg/kg, respectively (USEPA, 2007c). Other screening values for zinc in soil include the 100 mg/kg ORNL benchmark for earthworms (Efroymsen et al 1997b) and the Canadian soil quality guideline of 200 mg/kg (CCME, 2004). Zinc concentrations in surface soil are less than guidelines for plants and soil invertebrates; therefore, zinc does not pose risks to plants and soil invertebrates.

7.5.4.1.6 Summary and Conclusions: Surface Soil

Chemicals initially selected as COPCs in the screening process were further evaluated to determine the likelihood that concentrations in surface soil pose risk to soil invertebrates and plants.

Caprolactam was the only SVOC that was a COPC in surface soil. The absence of toxicity data precludes an evaluation of potential impacts to surface soil organisms from caprolactam, which was detected in three surface soil samples.

Several organochlorine insecticides were detected in Site 1 surface soil samples; these pesticides are no longer used but are extremely persistent in soil, and it is unclear whether their concentrations at Site 1 are due to historical use or to landfill wastes. While the majority of surface soil samples were less than the ESV for total organochlorinated pesticides suggesting negligible risks to soil invertebrates, two samples exceeded it. This indicates that potential risks are limited to the vicinity of these two sample locations.

2,4,5-T was detected in 3 of 21 surface soil samples and dinoseb was detected in one of six samples. Surface soil toxicity thresholds have not been established for these herbicides, so there is uncertainty regarding their potential risks to soil invertebrates.

Concentrations of metals tended to be low and pose negligible potential risks to soil invertebrates and plants. Manganese and copper may be associated with elevated potential risk in the vicinity of the single sample locations where each exceeded their respective ESVs.

7.5.4.2 Potential Risk to Aquatic and Benthic Organisms

Benthic invertebrates and aquatic organisms represent different assessment endpoints, and the measurement endpoints used to evaluate risks to these assessment endpoints are different. Specifically, chemical concentrations in sediment are used to evaluate potential risks to benthic invertebrates, while chemical concentrations in surface water are used to evaluate potential risks to aquatic organisms. Nevertheless, they are evaluated together in this section because of the close association between surface water and sediment.

Chemicals that were COPCs in surface water or sediment are discussed below.

7.5.4.2.1 Volatile Organic Compounds

Acetone

USEPA Region 4 ESVs were not available regarding acetone's effects to aquatic and benthic organisms. The toxicity of acetone to animals is in the parts-per-thousand range (Opresko. 1994). Acetone was detected in two of five sediment samples (28 to 220 µg/kg) and in all five surface water samples (3.4 to 5.1 µg/L). Acetone is produced and used as a solvent and chemical intermediate in the manufacture of numerous chemical products, such as oils, waxes, resins, plastics, pharmaceuticals, rubber cement, and

paint and varnish removers. Acetone is typically released into the environment as stack emissions or in wastewater. Acetone also occurs naturally as a metabolic byproduct of plants and animals, and is released into the atmosphere by volcanoes and forest fires. If released into water, acetone will biodegrade (Spectrum, 2003). However, acetone is volatile and tends to biodegrade fairly rapidly, so its presence in sediment and surface water samples at Site 1 is puzzling, unless due to laboratory contamination. Acetone is a common laboratory contaminant sometimes present in environmental samples.

The National Oceanic and Atmospheric Administration (NOAA) has compiled tables of commonly used screening values for environmental media known as the Screening Quick Reference Tables or SQUIRT tables (Buchman, 2008). The SQUIRT tables were reviewed for screening values. Screening values for acetone in the SQUIRT tables include the secondary chronic and acute values calculated by the ORNL (Suter and Tsao, 1996), using methods developed by the USEPA (USEPA, 1993b) for the Great Lakes. The methods developed for calculating secondary, or Tier II, values were designed for instances where there were some acceptable toxicity data for a chemical, but not enough to satisfy the requirements for calculating water quality criteria, or Tier I values. "The Tier II methodology generally produces more stringent values than the Tier I methodology, to reflect greater uncertainty in the absence of additional toxicity data" (USEPA, 1993b). ORNL used methods similar to the USEPA in qualifying toxicological data for inclusion in the Tier II calculations. Both the USEPA and ORNL used primarily effect level values from 48- and 96-hour acute tests to set water quality criteria and secondary values. Chronic values are usually developed from acute values using acute-chronic ratios based on tests incorporating both types of endpoints and performed in a similar manner. ORNL developed an acute Tier II value of 28,000 ug/L and chronic Tier II value of 1,500 ug/L for acetone. All detections of acetone in surface water were much less than the Tier I and II values. The presence of acetone at relatively low concentrations in surface water does not appear to be associated with risk to aquatic organisms.

Carbon Disulfide

Carbon disulfide is used as an industrial and chemical solvent and is also a natural product of anaerobic biodegradation. It is also a common laboratory contaminant used as an extraction solvent. It was detected in only two of five surface water samples, at a relatively low concentration of 0.18 to 0.2 µg/L (Table 7-5). It was not detected in sediment. ORNL developed an acute Tier II value of 17 ug/L and chronic Tier II value of 0.92 ug/L for carbon disulfide (Buchman, 2008). Although toxicity data is sparse regarding its effects to aquatic organisms and plants, the presence of carbon disulfide at relatively low concentrations in surface water does not appear to represent a potential risk to aquatic organisms.

2-Butanone

2-Butanone (also known as methyl ethyl ketone) was detected in four of five sediment samples at low concentrations (5.8 to 80 µg/kg) (Table 7-6). There is no USEPA Region 4 ESV for 2-butanone. The NOAA SQUIRT tables (Buchman, 2008) contain an “intervention” value of 35,000 ug/kg for 2-butanone developed by the Dutch Ministry of the Environment (MVRM, 2000). The Dutch (MVRM, 2000) values typically include a target value, which represents clean soil and sediment, and an intervention value, which represents seriously contaminated soil and sediment. In the case of 2-butanone, however, a target value was not derived (Buchman, 2008). Sediment concentrations of 2-butanone were much less than the intervention value, but since the intervention value is not a toxicity threshold, the potential for toxicity at Site 1 is unclear. 2-butanone is also a common laboratory contaminant. Based on this information, the concentrations of 2-butanone in sediment probably do pose significant risks to benthic invertebrates.

Toluene

Toluene was detected in one of five sediment samples (33 ug/kg) (Table 7-6). An USEPA Region 4 sediment screening is not available. The Dutch Target value for toluene in sediment is 10 ug/kg while the intervention level is 47,000 ug/kg (Buchman, 2008). As mentioned above, the Dutch target value represents clean soil and sediment and the intervention value represents seriously contaminated soil and sediment. In addition, the concentration midway between the target value and the intervention value is designated as an “intermediate” value. The Dutch guidelines specify that concentrations greater than the target value but less than the intermediate value require no further investigation, while further investigation is required when concentrations exceed the intermediate value but are less than the intervention value (Swartjes, 1999). With this in mind, toluene poses negligible risk at Site 1.

1,1,2-Trichlorotrifluoroethane

1,1,2-Trichlorotrifluoroethane was detected in one of five surface water samples at a concentration of 6.6 ug/L (Table 7-5). ORNL developed an acute Tier II value of 5,200 ug/L and chronic Tier II value of 1,200 ug/L for 1,1,2-trichlorotrifluoroethane (Buchman, 2008). The detected concentration is three orders of magnitude less than the lower Tier II value; therefore, 1,1,2-trichlorotrifluoroethane does not pose potential risks to aquatic organisms.

7.5.4.2.2 Semivolatile Organic Compounds

Caprolactam was the only SVOC detected in surface water, and was detected in five of five samples (Table 7-5). In water, caprolactam is not expected to adsorb to suspended solids or to sediments based upon its estimated K_{oc} of 57. Biodegradation in aquatic environments is expected to be extensive. An estimated BCF of 3.2 suggests the potential for bioconcentration in aquatic organisms is low (HSDB, 2009). Based on biodegradation and low bioconcentration potential, any potential risk to aquatic organisms from caprolactam is considered to be low.

Five PAHs (benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene) were detected in one of five sediment samples (01SD01) (Table 7-6) . Three of the five PAHs had ESVs that were exceeded with a HQ range of 1.1 to 3.9. Two PAHs had no ESVs. The HQ for total PAHs was also low (2.2). Any potential risk from PAHs to benthic invertebrates is considered low and would be isolated around sample location 01SD01.

4-methylphenol was detected in one of five sediment samples (01SD01) at a concentration of 420 ug/kg (Table 7-6). 4-methylphenol is also known as p-cresol. Cresols, including p-cresol are a group of widely distributed natural compounds formed as metabolites of microbial activity and excreted in the urine of mammals. 4-methylphenol is also released to the environment through automobile exhaust and tobacco smoke. If released into water, 4-methylphenol is not expected to adsorb to suspended solids and sediment in the water column based upon log K_{oc} values; it is expected to biodegrade quickly in water under aerobic conditions (HSDB, 2009). The Dutch Target level for 4-methylphenol in sediment is 5.1 ug/kg while the intervention level is 2,600 ug/kg (Buchman, 2008). Thus, 4-methylphenol (p-cresol) appears to represent minimal potential risks (if any) to benthic invertebrates, and any potential risk would be isolated to the single location where it was detected.

Bis(2-ethylhexyl)phthalate was detected in five of five sediment samples and diethyl phthalate was detected in three of five samples (Table 7-6). The Dutch Target level for bis(2-ethylhexyl)phthalate in sediment is less than 100 ug/kg while the intervention level is 10,000 ug/kg (Buchman, 2008). The maximum concentration for bis(2-ethylhexyl)phthalate was 450 ug/kg with a HQ of 2.5 so it appears to represent a low level of potential risk. Sediment screening values and toxicity thresholds were not located regarding diethyl phthalate's effects to benthic invertebrates. The Dutch Target level for diethyl phthalate in sediment is 530 ug/kg while the intervention level is 53,000 ug/kg (Buchman, 2008). There is uncertainty regarding the results for diethyl phthalate as the minimum detection limit was much higher than the reported positively detected concentrations. Phthalates are common environmental contaminants due to their use in plastics. Their presence in sediment at Site 1 might be an artifact of the sampling and/or analytical methods. With a maximum concentration of 220 ug/kg any potential risk from diethyl phthalate to benthic invertebrates is considered negligible.

7.5.4.2.3 Pesticides and Herbicides

No pesticides were detected in surface water above their ESV. Alpha-chlordane and gamma-chlordane were COPCs in sediment because detected concentrations exceeded USEPA Region 4 ESVs in three of five samples (01SD0101, 01SD0401, 01SD0501). Alpha-chlordane had a maximum HQ of 3.5 and gamma-chlordane had a maximum HQ of 2.1 (Table 7-3). Alpha-BHC, delta-BHC, aldrin, and heptachlor epoxide were COPCs in sediment because ESVs were not available (Table 7-3).

Numerous guidelines are available for sediment contaminants, encompassing a wide range of values. MacDonald et al (2003) reviewed and evaluated eight separate approaches to support the establishment of guidelines protective of sediment dwelling organisms in Florida inland waters. Based on the results of that evaluation, threshold effect concentrations (TECs) and probable effect concentrations (PECs) were developed and are used by the Florida Department of Environmental Protection to evaluate risk to sediment dwelling organisms in inland (freshwater) systems. Although developed for Florida freshwater sediments, the MacDonald et al (2003) values are often used to evaluate freshwater sediments in other states, especially when those states have not developed their own TECs and PECs. The TECs identify sediment concentrations below which adverse effects on sediment-dwelling organisms are unlikely to occur, while the PEC values indicate sediment concentrations above which adverse effects on sediment-dwelling organisms are likely to occur (MacDonald et al., 2003). Sediment samples with concentrations between the TEC and PEC are neither predicted to be toxic nor nontoxic. However, sediments which have concentrations of one or more COPCs between the TECs and PECs should be considered to be of moderate priority, while sediments with COPC concentrations in excess of one or more PECs should be considered to be of relatively high concern (MacDonald et al, 2003). Furthermore, the magnitude and frequency of exceedances of the PECs provide a basis for assigning relative priority to areas of concern with respect to contaminated sediments (MacDonald et al, 2003).

As previously discussed, the alpha- and gamma-isomers of chlordane were detected in three sediment samples at relatively low concentrations. All chlordane concentrations were less than the 18 ug/kg PEC. One sample (01SD0101) had a gamma-chlordane concentration (3.5 ug/kg) that slightly exceeded the TEC (3.2 µg/kg). Alpha chlordane concentrations slightly exceeded the TEC in sample 01SD0401 (3.3 ug/kg). Samples 01SD0101 and 01SD0501 had higher concentrations (6 ug/kg and 4.4 ug/kg respectively). The maximum HQ for alpha-chlordane was 3.5 indicating a low level of potential risk; however, this result was “J flagged”. This signifies that the analyte was positively identified but its concentration could not be precisely quantified since it was less than the contract-required quantitation limit but greater than the instrument detection limit.

Sediment toxicity guidelines were not available for aldrin, which was detected only in duplicate sample 01SD0301D at a reported concentration of 0.45 ug/kg. This result was “J flagged”. The original sample 01SD0301 had a result that was reported as 0.4U indicating below detection limits. There is uncertainty, therefore, with these results. NOAA (Buchman, 2008) contains a Lowest Effects Level for aldrin of 2 ug/kg and a Severe Effects Level of 80 ug/kg. Potential risks from aldrin are considered to be negligible.

Sediment toxicity guidelines were not available for the alpha- and delta-isomers of BHC. Alpha-BHC was detected in one sediment sample (0.17 µg/kg) and delta-BHC was detected in one sediment sample

(2.1 µg/kg). The detected concentration of alpha-BHC was less than the lower end of the detection limit, and was “J-flagged”. The detected concentration of gamma-BHC was also “J flagged”. The detected concentrations of both alpha- and delta-BHC were lower than the ESV for gamma-BHC (3.3 µg/kg). Based on this information, potential risk from alpha- and delta-BHC is considered negligible. The fairly low concentrations of alpha- and delta-BHC at Site 1 and their similarity to concentrations at other parts of NCBC Gulfport (i.e. west of Site 3) suggests that their presence is probably due to historical pesticide usage for insect control rather than to landfill-related activities.

Heptachlor epoxide was detected in one of five sediment samples (Table 7-3) at a low concentration (0.46 ug/kg) and was “J flagged”. The TEC for heptachlor epoxide is 2.5 ug/kg (MacDonald et al, 2003). Based on this information, potential risk from heptachlor epoxide to benthic invertebrates is not anticipated.

Silvex was detected in four of five surface water samples at very low concentrations that were “J flagged”. No ESVs or alternate screening values were identified (Table 7-2). In the absence of screening values there is uncertainty as to potential risk associated with Silvex.

7.5.4.2.4 Inorganics

Arsenic and zinc were COPCs in sediment because one sample (01SD0101) had concentrations that exceeded their respective ESVs. Lead exceeded its ESV in two sediment samples (01SD001, and 01SD004) and was retained as a COPC in sediment. Sediment ESVs were not available for aluminum, barium, beryllium, iron, manganese, and vanadium (Table 7-3). In surface water, aluminum, iron, and lead were retained as COPCs because their maximum concentrations exceeded ESVs, while ESVs were not available for barium and manganese (Table 7-2). These COPCs are discussed below.

Aluminum

Aluminum was detected in all surface water samples collected from the east and west ditches at Site 1 with concentrations ranging from 430 ug/L to 1690 ug/L. The maximum HQ was 19.4 in sample 01SW04 collected in the eastern ditch. Aluminum concentrations in the eastern ditch were over two times higher than aluminum concentrations in the western ditch. The 87 µg/L ESV is the National Ambient Water Quality Criteria (AWQC) for aluminum (USEPA, 2004). The aluminum criterion is based on water hardness of <10 mg/L, and USEPA (2004) states that aluminum is substantially less toxic at higher hardness, although the effects are not well quantified. Hardness was not measured in surface water samples collected for this project, but using calcium and magnesium concentrations in sample 01SW04 (the location of the maximum aluminum concentration), water hardness in that sample was 68.3 mg/L when calculated using the following equation from American Public Health Association (APHA, 1998):

$$\text{Hardness, mg equivalent CaCO}_3/\text{L} = 2.497 [\text{Ca, mg/L}] + 4.118 [\text{mg, mg/L}]$$

The 68.3 mg/L hardness value is substantially higher than the 10 mg/L value used to derive the ESV, so the actual toxicity threshold value of aluminum in sample 01SW04 is probably greater than the 87 µg/L ESV, but the precise toxicity threshold value is uncertain.

Aluminum was detected in all five sediment samples, and concentrations ranged from 1,000 to 17,200 mg/kg, with an average of 7,534 mg/kg (Table 7-5). There is no USEPA Region 4 ESV for aluminum in sediment, and no TEC and PEC. The freshwater sediment threshold effect level (TEL) for aluminum in the NOAA SQUIRT tables is 25,500 mg/kg (Buchman, 2008). All sediment concentrations at Site 1 were less than this value, suggesting no potential risk to benthic receptors.

Arsenic

Arsenic was detected in surface water but at concentrations less than its ESV (Table 7-2). Arsenic concentrations in sediment exceeded the sediment ESV in one sample (001SW01) collected from the western ditch at Site 1, with a maximum HQ of 2.7. The arsenic concentration in this sample (19.8 mg/kg) was greater than the TEC of 9.8 mg/kg, and below the 33 mg/kg PEC (Table 7-6). Arsenic concentrations in 14 Mississippi coastal flatwoods soil samples ranged from 0.37 to 14.78 mg/kg, with an average of 4.42 mg/kg (Pettry and Switzer, 2001). All arsenic concentrations except the maximum concentration were within this range. The average arsenic concentration in Site 1 sediment samples was 4.7 mg/kg. Therefore, the arsenic sediment concentrations in Site 1 ditch samples might be due to naturally occurring conditions, but this is uncertain. In summary, arsenic was detected in surface water at concentrations less than its ESV. Sediment concentrations of arsenic exceeded the ESV in only one sample, and all concentrations were within the range reported by Pettry and Switzer (2001). As a result, site-related risks from arsenic are probably minor.

Barium

Barium was detected in all sediment and surface water samples but USEPA Region 4 ESVs were not available. Sediment concentrations exceeded the 20 mg/kg TEC in only one sample, at a maximum concentration of 61.2 mg/kg, which was also slightly more than the 60 mg/kg PEC of MacDonald et al (2003). It should be noted that this sample was “J flagged” so there is some uncertainty associated with this result. The average barium concentration in sediment of 17.6 is less than the TEC. Potential risk to benthic invertebrates from exposure to barium is considered negligible except at the location of the maximum concentration (01SD01).

Surface water concentrations of barium ranged from 21 to 30 ug/L with an average concentration of 27.4 ug/L. The Tier II acute value for barium in freshwater is 110 ug/L while the chronic value is 3.1 ug/L (Buchman, 2008). Potential risk to aquatic organisms from exposure to barium is considered low.

Beryllium

Beryllium was detected in only one of five sediment samples at a concentration of 1.1 mg/kg. No sediment toxicity data were located for beryllium, so its potential toxicity cannot be evaluated. However, it was detected in only on sediment sample and its concentration was not particularly high.

Iron

Iron was detected in all sediment samples, but there is no USEPA Region 4 ESV for iron in sediment, and no TEC and PEC. The freshwater sediment TEL for iron reported by NOAA is 188,400 mg/kg (Buchman, 2008). All sediment concentrations at Site 1 were less than this value.

Iron concentrations in surface water exceeded the 1,000 µg/L ESV, which is the National AWQC, in all five surface water samples with a maximum concentration of 2,410 µg/L and an average concentration of 2,078 µg/L (Table 7-5). It is not clear whether the iron concentrations in the ditches at Site 1 are due to regional conditions, an upstream source, or a combination of these.

It should be noted that the Site 1 surface water data are *total* iron concentrations, not *dissolved* iron concentrations. Concentrations of dissolved metals, rather than total metals, more closely approximate the bioavailable fraction of metals in the water column USEPA (1996a). Since dissolved metal concentrations were not measured in Site 1 surface water, the actual toxicity posed by iron is probably less than that suggested by the maximum HQ of 2.4.

Lead

Lead slightly exceeded its ESV of 30.2 ug/kg in two of five sediment samples (Table 7-6). Sample 01SD0101 had a concentration of 31 ug/kg while sample 01SD0104 had a concentration of 32.1 ug/kg; the maximum HQ was 1.1. The TEC for lead is 35.8 µg/kg, so based on this information the potential risk from lead in sediment is considered negligible.

Lead slightly exceeded its ESV of 1.32 ug/L in two of five surface water samples (01SW0301 and 01SW0401), at concentrations of 1.6 µg/L and 1.7 ug/L respectively. The 1.32 µg/L ESV was the National AWQC when the USEPA Region 4 ESV was promulgated (USEPA, 2001b), but the current National AWQC for lead in freshwater surface water is 2.5 µg/L (USEPA, 2004a). Based on the current AWQC, lead in surface water poses no risks to aquatic receptors.

Manganese

There is no USEPA Region 4 surface water or sediment ESV for manganese, which was detected in all surface water and sediment samples. The freshwater sediment TEL for manganese reported by NOAA is 630 mg/kg (Buchman, 2008). All sediment concentrations at Site 1 were well below this value (Table 7-5).

The chronic screening value reported by NOAA is 80 µg/L for manganese in surface water (Buchman, 2008). All manganese concentrations in surface water at Site 1 were less than 80 µg/L. No potential risk from exposure of aquatic organisms and benthic invertebrates to manganese is anticipated.

Vanadium

Vanadium was not detected in surface water but was detected in all sediment samples. Sediment concentrations ranged from 1.4 to 32.2 mg/kg. An ESV and other toxicity thresholds for vanadium were not available. NOAA SQUIRT tables report a background sediment vanadium concentration of 50 mg/kg (Buchman, 2008). Although the absence of vanadium toxicity data for benthic invertebrates precludes an evaluation of potential risk posed by vanadium in sediment, all sediment concentrations were less than 50 mg/kg, and vanadium was not detected in surface water. Any potential risk posed by vanadium in sediment does not appear to be site-related.

Zinc

Zinc slightly exceeded its ESV of 124 mg/kg in one of five samples. Sample 01SD01 had a zinc concentration of 132 mg/kg yielding a HQ of 1.1. The TEC and PEC for zinc are 120 mg/kg and 460 mg/kg respectively (MacDonald et al, 2003). Based on this information, potential risk to benthic invertebrates is considered low at worst and isolated to the area around sample 01SD01.

7.5.4.2.5 Summary and Conclusions: Sediment and Surface Water

Chemicals initially selected as COPCs in surface water and sediment were further evaluated to determine the likelihood that concentrations pose risk to aquatic and benthic receptors.

Acetone, 2-butanone and toluene were the only VOCs detected in sediment, and acetone, carbon disulfide, and trichlorofluoroethane were the only VOCs detected in surface water. A low level of potential risk from exposure of benthic invertebrates to toluene may be present around sample 01SD01 but overall risk to benthic invertebrates from exposure to VOCs is considered negligible. Likewise, the low levels of VOCs detected in surface water do not appear to represent a potential risk to aquatic organisms.

SVOCs detected in sediment included PAHs, phthalates, and methyl phenol. Any potential risk from PAHs to benthic invertebrates is considered low and if present would be isolated around sample location

01SD01. Bis(2-ethylhexyl)phthalate was found in all sediment samples and appears to represent a low level of potential risk. Potential risk from 4-methyl phenol is considered low and isolated to the single location where it was detected. Caprolactam was the only SVOC detected in surface water. Based on extensive biodegradation and low bioconcentration any potential risk to aquatic organisms is considered low.

Alpha chlordane was the only pesticide and Silvex the only herbicide detected in surface water. Alpha chlordane was detected at a concentration less than its ESV but no ESV was available for Silvex. Silvex was detected in four of five surface water samples at very low concentrations that were "J flagged". In the absence of screening values there is uncertainty as to potential risk associated with Silvex.

Several organochlorine insecticides were detected in sediment. Overall, pesticides appear to pose negligible risks to benthic receptors.

Concentrations of most metals tended to be low and pose negligible potential risks to aquatic and benthic organisms, or do not appear to be related to former activities at the landfill. While most barium concentrations in sediment indicated negligible potential risk, localized potential risk to benthic invertebrates may be present at the maximum concentration location. Barium concentrations in surface water indicate low levels of potential risk to aquatic organisms.

7.5.4.3 Potential Risk to Wildlife via the Food Chain

Food-chain modeling was conducted to evaluate potential risks to representative piscivorous receptors from ingested doses of sediment and surface water COPCs that are known to bioaccumulate or biomagnify. As discussed in Sections 7.1.4 and 7.5.2, the former landfill is covered by fill dirt within an intensively managed landscape including a golf course in the northern portion of the site, and the surface soil exposure pathway for upper trophic level terrestrial receptors such as birds and mammals is incomplete or negligible and insignificant. Thus, food chain modeling was conducted only for piscivorous wildlife receptors. The methods used to model the doses that representative piscivorous receptors could receive, as well as the selection of toxicity reference values (TRVs), are presented in Appendix F.

Based on maximum concentrations and conservative assumptions, food chain HQs exceeded 1.0 for arsenic, lead, and zinc (Table 7-7). NOAEL-based HQs for the green heron were highest for zinc, with an HQ of 2.3. For the mink, the highest NOAEL-based HQ was 1.8 for arsenic. In the average concentration scenario, all food chain HQs were less than 1.0 (Table 7-8). All food chain HQs shown in Tables 7-7 and 7-8 assume an area use factor of 1.0; for example, the representative receptors are assumed to forage exclusively in the water bodies bordering Site 1.

Maximum NOAEL-based food chain HQs for metals in the conservative scenario are not particularly high considering the conservative assumptions used in the food chain model, such as maximum food ingestion rates, minimum body weights, exposure to maximum concentrations, etc. In addition, arsenic concentrations in sediment were within the range reported by Pettry and Switzer (2001), so potential risk from arsenic is probably not site-related. Site-related potential risks from lead and zinc in sediment are considered minor, and the food chain HQs greater than 1.0 for these two metals in the conservative scenario are largely a function of the conservative assumptions used in the food chain model. Note that all HQs for arsenic, lead, and zinc in the average scenario are well below 1.0 (Table 7-8).

Avian LOAELs and NOAELs were not available for aldrin or heptachlor epoxide so potential food chain risks could not be calculated for piscivorous birds. As previously discussed, aldrin was detected only in the duplicate sample of 01SD0301D and was not detected in the original sample of 01SD0301. Heptachlor epoxide was detected in only one of five samples (in the eastern ditch). Piscivorous birds and mammals forage over large areas and would obtain only a small portion of their food from the eastern and western ditches at Site 1. With this in mind, minimal risks to these receptors are anticipated.

7.6 UNCERTAINTY

Uncertainty is associated with all aspects of the ecological assessment methodology presented in the preceding sections. Some uncertainties were discussed in Section 7.5.4. This section provides a summary of the uncertainties, and focuses on those that have not been previously discussed.

The extent to which piscivorous wildlife receptors forage in the ditches at Site 1 is uncertain. All food chain HQs shown in Tables 7-7 and 7-8 and discussed in Section 7.5.4.3 assume an area use factor of 1.0; for example, the representative receptors are assumed to forage exclusively in the water bodies near Site 1. Due to conditions at Site 1, this assumption is overly conservative for piscivorous receptors. The green heron and mink, as well as other piscivorous bird and mammal species, would probably obtain only a portion of their diet from the ditches, resulting in a small exposure to metals, which were responsible for the highest food chain HQs. To be conservative, the ecological risk assessment attempted to err on the side of caution, and specific area-use factors were not estimated.

The extent to which terrestrial wildlife receptors are exposed to site-related soil contamination at the site is uncertain. The site is covered by fill dirt, and terrestrial habitat consists of an intensively managed landscape with very little ground cover. Some wildlife species forage at the site, but even if wildlife are exposed to small areas of site-related soil contamination, such areas would comprise only a miniscule amount of foraging habitat for most wildlife receptors, especially wide-ranging receptors such as birds. With this in mind, the exposure pathway for terrestrial receptors such as birds, mammals, and reptiles is

incomplete or negligible and insignificant, and food chain modeling was not conducted for terrestrial receptors. The resulting uncertainty is believed to be minor.

Laboratory-derived NOAELs and LOAELs might not adequately represent toxicity thresholds for receptors under field conditions. In addition, NOAELs and LOAELs derived for species used in toxicity tests might not adequately represent toxicity thresholds for other species. These uncertainties may overestimate or underestimate potential risks.

Surface water hardness was not measured in Site 1 surface water. Freshwater surface water ESVs for seven metals are based on hardness, and two of those metals (lead, and zinc) were detected in Site 1 surface water. The USEPA Region 4 ESVs used in this evaluation (and shown in Tables 7-2 and 7-5) assume a hardness of 50 mg/L as CaCO₃. Calcium and magnesium concentrations were measured in all five surface water samples at Site 1, and using the average concentrations of calcium and magnesium in those samples, a hardness value of 47.3 mg/L is obtained using the following equation from APHA (1998):

$$\text{Hardness, mg equivalent CaCO}_3/\text{L} = 2.497 [\text{Ca, mg/L}] + 4.118 [\text{Mg, mg/L}]$$

The 47.3 mg/L hardness value closely approximates the 50 mg/L generic value used by USEPA Region 4, so ESVs for lead, and zinc were not adjusted for hardness. The differences in ESVs for hardness of 50 mg/L versus 47.3 mg/L are inconsequential.

Concentrations of dissolved metals were not measured in Site 1 surface water. Instead, the surface water data are concentrations of total metals. This creates some uncertainty in the evaluation of potential risks to aquatic life from iron, since concentrations of dissolved metals more closely approximate the bioavailable fraction of metals in the water column than concentrations of total metals (USEPA, 1996a).

Ecological screening values and toxicity thresholds were not available for some detected chemicals. For example, invertebrate and plant toxicity data were not available for dinoseb in soil. However, dinoseb was detected in only one of five samples, which somewhat reduces the inherent uncertainty for this chemical.

Data for investigating toxicity to reptiles and amphibians from oral ingestion of contaminants are sparse. Thus, potential risks via the food chain were not evaluated for reptiles and amphibians.

Soil samples evaluated in this risk assessment consisted of samples no deeper than 1 foot below the soil surface. However, tree roots extend deeper than 1 foot below the surface, and mammals such as moles could burrow deeper than 1 foot. With the exception of moles and trees, terrestrial species at the site

would probably not be significantly exposed to soils deeper than 1 foot below the surface, so the uncertainty resulting in evaluating only surface soils is negligible.

The source of fill soil used at Site 1 is unknown. There is uncertainty as to whether contaminants detected in surface soil are associated with the former landfill operations or from another source not related to Site 1.

The absence of a base-wide background data set resulted in uncertainty regarding whether some contaminant concentrations were related to Site 1 or were due to natural and/or anthropogenic background conditions.

7.7 SUMMARY AND CONCLUSIONS

Site 1 is a former landfill facility encompassing approximately 9 acres, although the areal extent of the waste disposal is likely much smaller. The landfill was operated from 1942 until 1948, during which time it received solid and chemical waste generated at NCBC Gulfport. In addition to solid wastes, waste fuel, oil, solvents, paint, and paint thinners were transported to the site and buried in trenches. Materials at Site 1 were disposed in trench and fill operations, often accompanied by incineration prior to covering the trenches with soil.

The primary contaminant migration pathway at Site 1 is the infiltration of soil contaminants into groundwater and subsequent seepage into surface water and sediment in the ditches located east and west of the former landfill. Analytical data from surface soil samples collected at the site, and sediment and surface water samples collected from ditches on the eastern and western edges of the site, were evaluated in the ecological risk assessment.

7.7.1 Risks to Soil Invertebrates and Plants

VOCs and SVOCs (with the exception of caprolactam) in surface soil do not pose risks to ecological receptors. The absence of toxicity data precludes an evaluation of potential impacts to surface soil organisms from caprolactam, which was detected in three surface soil samples.

Several organochlorine insecticides were detected in surface soil samples. Concentrations tended to be low, and impacts to ecological receptors from these compounds are not expected. Concentrations in some samples might pose isolated risks to soil invertebrates, but potential risks (if any) might be due to historical use of these insecticides rather than landfill operations. There is uncertainty with this conclusion as a background dataset has not been generated for NCBC Gulfport.

2,4,5-T was detected in 3 of 21 samples and dinoseb was detected in one of six surface soil samples. Surface soil toxicity thresholds have not been established for these herbicides, so there is uncertainty regarding their potential impacts.

Concentrations of metals tended to be low and pose negligible potential risks to soil invertebrates and plants. Copper and manganese may be associated with elevated potential risks in the vicinity of the single sample location where each exceeded its ESV.

7.7.2 Risks to Benthic Invertebrates and Aquatic Organisms

Acetone, 2-butanone and toluene were the only VOCs detected in sediment, and acetone, carbon disulfide, and trichlorofluoroethane were the only VOCs detected in surface water. A low level of potential risk from exposure of benthic invertebrates to toluene may be present around sample 01SD01 but overall risk to benthic invertebrates from exposure to VOCs is considered negligible. Likewise, the low levels of VOCs detected in surface water do not appear to represent a potential risk to aquatic organisms.

Any potential risks to aquatic and benthic receptors at the site from SVOCs are considered low.

Alpha chlordane was the only pesticide and Silvex the only herbicide detected in surface water. Alpha chlordane poses negligible potential risks. Silvex was detected in four of five surface water samples at very low concentrations. In the absence of screening values there is uncertainty as to potential risk associated with Silvex.

Several organochlorine insecticides were detected in sediment. Pesticides appear to pose negligible risks to benthic receptors.

Concentrations of most metals tended to be low and pose negligible potential risks to aquatic and benthic organisms, or do not appear to be related to former activities at the landfill. While barium concentrations in most sediment samples indicated negligible potential risk, potential risk to benthic invertebrates may exist in the vicinity of 01SD01. Iron concentrations in surface water indicate potential risk to aquatic organisms, but it is uncertain as to whether the iron concentrations are the result of Site 1 operations, to another source, or to regional conditions.

7.7.3 Risks to Piscivorous Birds and Mammals

Food-chain modeling was conducted to evaluate potential risks to representative piscivorous receptors from ingested doses of sediment and surface water COPCs that are known to bioaccumulate or biomagnify. Screening-level COPCs in Site 1 sediment and surface water that are known to

bioaccumulate or biomagnify consisted of aldrin, alpha-BHC, delta-BHC, alpha-chlordane, gamma-chlordane, heptachlor epoxide, arsenic, lead, and zinc. Risk via the food chain was evaluated using two scenarios. The first scenario used maximum detected COPC concentrations in sediment and surface water and conservative assumptions for body weight and food consumption. The second scenario used average COPC concentrations, and less conservative values for body weight and food consumption.

Based on maximum concentrations and conservative assumptions, food chain HQs exceeded 1.0 for arsenic, lead, and zinc. NOAEL-based HQs for the green heron were highest for zinc while arsenic had the highest NOAEL-based HQ for the mink. In the average concentration scenario, all food chain HQs were less than 1.0. Based on factors discussed in Section 7.5.4.3, site-related impacts to piscivorous receptors from bioaccumulative COPCs in surface water and sediment are not expected.

TABLE 7-1
SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 2

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Non-Detects ⁽¹⁾		Ecological Screening Value	Maximum Hazard Quotient ⁽²⁾	COPC (Yes/No) ³
		Minimum	Maximum		Minimum	Maximum			
Volatile Organics (µg/kg)									
2-BUTANONE	2/21	1.8	4	01SS12	1.3	11	NA	NA	Yes
4-METHYL-2-PENTANONE	4/21	0.71	1.2	01SS015	0.54	11	NA	NA	Yes
TETRACHLOROETHENE	2/21	0.22	0.28	01SS137	0.9	11	10	0.03	No
Semivolatile Organics (µg/kg)									
BENZO(B)FLUORANTHENE	1/21	78	78	GPT-01-QT-04	34	420	1100	0.07	No
CAPROLACTAM	3/21	140	300	GPT-01-QT-09	72	420	NA	NA	Yes
DI-N-BUTYL PHTHALATE	1/21	53	53	GPT-01-QT-05	33	410	200000	0.0003	No
DIETHYL PHTHALATE	3/21	40	60	01SS015	36	420	100000	0.0006	No
TOTAL PAHS	1/21	78	78	GPT-01-QT-04	-	-	1000	0.08	No
Pesticides/PCBs (µg/kg)									
4,4'-DDE	4/21	0.58	1.5	01SS10	0.18	0.84	21	0.07	No
4,4'-DDT	7/20	0.23	2	01SS10	0.18	0.84	21	0.1	No
TOTAL DDT	7/21	0.31	3.5	01SS10	-	-	21	0.2	No
ALDRIN	3/21	0.16	6.3	01SS017	0.12	0.42	2.5	2.5	Yes
ALPHA-BHC	1/21	0.26	0.26	GPT-01-QT-05	0.12	0.41	2.5	0.1	No
BETA-BHC	4/20	0.16	0.36	GPT-01-QT-08	0.12	0.41	1.0	0.4	No
DELTA-BHC	1/21	0.26	0.26	01SS014	0.12	0.42	1.0 ⁽⁴⁾	0.3	No
GAMMA-BHC (LINDANE)	1/21	0.23	0.23	01SS139	0.12	0.42	0.05	4.6	Yes
ALPHA-CHLORDANE	5/21	0.23	4.9	01SS024	0.12	0.42	NA	NA	Yes
GAMMA-CHLORDANE	4/21	0.22	3.4	01SS024	0.12	0.42	NA	NA	Yes
AROCLOR-1260	1/21	17	17	01SS10	4.5	21	20	0.9	No
DIELDRIN	8/20	0.36	460	01SS025	0.18	0.84	4.9	93.9	Yes
ENDOSULFAN II	6/21	0.24	1.6	01SS420	0.18	0.84	NA	NA	Yes
ENDOSULFAN SULFATE	1/21	0.29	0.29	01SS014	0.18	0.84	NA	NA	Yes
ENDRIN ALDEHYDE	2/21	0.31	2	01SS10	0.18	0.84	1.0 ⁽⁵⁾	2.0	Yes
HEPTACHLOR	1/21	0.19	0.19	GPT-01-QT-08	0.12	0.42	NA	NA	Yes
HEPTACHLOR EPOXIDE	5/20	0.25	1.7	01SS10	0.12	0.42	NA	NA	Yes
METHOXYCHLOR	4/21	0.29	140	01SS017	0.12	0.42	NA	NA	Yes

TABLE 7-1
SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN IN SURFACE SOIL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
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Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Non-Detects ⁽¹⁾		Ecological Screening Value	Maximum Hazard Quotient ⁽²⁾	COPC (Yes/No) ³
		Minimum	Maximum		Minimum	Maximum			
Herbicides (µg/kg)									
2,4,5-T	3/21	1.2	6	GPT-01-QT-08	0.92	2.1	NA	NA	Yes
DINOSEB	1/6	8.8	8.8	GPT-01-QT-03	9.3	10	NA	NA	Yes
Inorganics (mg/kg)									
ALUMINUM	21/21	1770	12300	01SS138	-	-	50	246	Yes
ANTIMONY	2/21	1.1	3.6	01SS420	1	1.3	0.27	13.3	Yes
ARSENIC	19/21	0.78	4.8	GPT-01-QT-04	0.61	0.78	18	0.3	No
BARIUM	21/21	2	70	01SS017	-	-	330	0.2	No
CADMIUM	1/21	0.3	0.32	01SS014	0.2	0.26	0.36	0.9	No
CALCIUM	15/21	233	42400	01SS137	205	261	NA	NA	No
CHROMIUM	21/21	2.2	11	01SS420	-	-	26	0.4	No
COBALT	1/21	6.8	6.8	01SS017	1	1.3	13	0.5	No
COPPER	19/21	1.4	210	01SS015	1	1.3	28	7.5	Yes
IRON	21/21	546	9050	01SS017	-	-	200	45.3	Yes
LEAD	21/21	3.2	70.6	01SS420	-	-	11	6.4	Yes
MAGNESIUM	11/21	233	3390	GPT-01-QT-04	205	261	NA	NA	No
MANGANESE	21/21	1	358	01SS017	-	-	220	1.6	Yes
MERCURY	16/21	0.01175	0.059	GPT-01-QT-01	0.013	0.016	0.1	0.6	No
NICKEL	19/21	1.3	5.7	01SS138	1	1.3	38	0.2	No
SELENIUM	4/21	0.505	1.3	GPT-01-QT-06	0.61	0.78	0.52	2.5	Yes
SODIUM	3/21	188.75	329	01SS137	205	261	NA	NA	No
VANADIUM	21/21	2.7	16	01SS017	-	-	7.8	2.1	Yes
ZINC	21/21	1.7	89	01SS137	-	-	46	1.9	Yes

Notes

(1) Sample-specific quantitation limits.

(2) Hazard quotient (HQ) = maximum detected concentration ÷ ecological screening value.

(3) An analyte was an ecological chemical of potential concern (COPC) if the maximum detected concentration was greater than the ecological screening value (i.e., HQ>1), or if an ecological screening value was not available. However, calcium, magnesium, and sodium are nutrients that were not considered to be COPCs.

(4) Ecological screening value for beta-BHC.

(5) Ecological screening value for endrin.

NA = Ecological screening value not available.

TABLE 7-2
SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN IN SURFACE WATER
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Non-Detects ⁽¹⁾		Ecological Screening Value	Maximum Hazard Quotient ⁽²⁾	COPC (Yes/No) ³
		Minimum	Maximum		Minimum	Maximum			
Volatile Organics (µg/L)									
1,1,2-TRICHLOROTRIFLUOROETHANE	1/5	6.6	6.6	01SW04	1	1	NA	NA	Yes
ACETONE	5/5	3.4	5.1	01SW02	-	-	NA	NA	Yes
CARBON DISULFIDE	2/5	0.18	0.2	01SW03	1	1	NA	NA	Yes
TOLUENE	1/5	0.22	0.22	01SW04	1	1	175	0.001	No
Semivolatile Organics (µg/L)									
CAPROLACTAM	5/5	0.91	2.1	01SW04	-	-	NA	NA	Yes
Pesticides/PCBs (µg/L)									
ALPHA-CHLORDANE	1/5	0.004	0.004	01SW04	0.0092	0.0098	0.0043	0.9	No
Herbicides (µg/L)									
2,4,5-TP (SILVEX)	4/5	0.044	0.067	01SW01	0.069	0.069	NA	NA	Yes
Inorganics (µg/L)									
ALUMINUM	5/5	430	1690	01SW04	-	-	87	19.4	Yes
ARSENIC	1/5	3.4	3.4	01SW01	3	3	190	0.02	No
BARIUM	5/5	20.75	30.1	01SW05	-	-	NA	NA	Yes
CALCIUM	5/5	13200	24800	01SW04	-	-	NA	NA	No
IRON	5/5	1720	2410	01SW01	-	-	1000	2.4	Yes
LEAD	2/5	1.6	2	01SW03	1.5	1.5	1.32	1.5	Yes
MAGNESIUM	5/5	1160	1560	01SW04	-	-	NA	NA	No
MANGANESE	5/5	26.3	53.1	01SW01	-	-	NA	NA	Yes
POTASSIUM	1/5	1080	1080	01SW04	1000	1000	NA	NA	No
SODIUM	5/5	5220	5940	01SW01	-	-	NA	NA	No
ZINC	5/5	5.4	10.4	01SW05	-	-	58.91	0.2	No

Notes

(1) Sample-specific quantitation limits.

(2) Hazard quotient (HQ) = maximum detected concentration ÷ ecological screening value.

(3) An analyte was an ecological chemical of potential concern (COPC) if the maximum detected concentration was greater than the ecological screening value (i.e., HQ>1), or if an ecological screening value was not available. However, calcium, magnesium, potassium, and sodium are nutrients that were not considered to be COPCs.

NA = Ecological screening value not available.

TABLE 7-3
 SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN IN SEDIMENT
 SITE 1
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
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Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Non-Detects ⁽¹⁾		Ecological Screening Value	Maximum Hazard Quotient ⁽²⁾	COPC (Yes/No) ³
		Minimum	Maximum		Minimum	Maximum			
Volatile Organics (µg/kg)									
2-BUTANONE	4/5	5.8	80	01SD01	12	12	NA	NA	Yes
ACETONE	2/5	28	220	01SD01	12	12	NA	NA	Yes
TOLUENE	1/5	33	33	01SD01	12	12	NA	NA	Yes
Semivolatile Organics (µg/kg)									
4-METHYLPHENOL	1/5	420	420	01SD01	400	470	NA	NA	Yes
BENZO(A)PYRENE	1/5	190	190	01SD01	400	470	330	0.6	No
BENZO(B)FLUORANTHENE	1/5	330	330	01SD01	400	470	NA	NA	Yes
BENZO(K)FLUORANTHENE	1/5	220	220	01SD01	400	470	NA	NA	Yes
BIS(2-ETHYLHEXYL)PHTHALATE	5/5	74	450	01SD01	-	-	182	2.5	Yes
CHRYSENE	1/5	400	400	01SD01	400	470	330	1.2	Yes
DIETHYL PHTHALATE	3/5	52	220	01SD01	410	470	NA	NA	Yes
FLUORANTHENE	1/5	1300	1300	01SD01	400	470	330	3.9	Yes
PHENANTHRENE	1/5	360	360	01SD01	400	470	330	1.1	Yes
PYRENE	1/5	930	930	01SD01	400	470	330	2.8	Yes
TOTAL PAHS	1/5	3730	3730	01SD01	-	-	1684	2.2	Yes
Pesticides/PCBs (µg/kg)									
4,4'-DDE	3/5	0.41	0.91	01SD03	0.81	3.5	3.3	0.3	No
ALDRIN	1/5	0.325	0.45	01SD03	0.4	1.7	NA	NA	Yes
ALPHA-BHC	1/5	0.17	0.17	01SD05	0.4	1.7	NA	NA	Yes
ALPHA-CHLORDANE	4/5	0.85	6	01SD01	0.4	0.41	1.7 ⁽⁴⁾	3.5	Yes
DELTA-BHC	1/5	2.1	2.1	01SD01	0.4	0.48	NA	NA	Yes
DIELDRIN	3/5	0.73	1.8	01SD03	0.43	3.5	3.3	0.5	No
GAMMA-CHLORDANE	4/5	0.52	3.5	01SD01	0.4	0.41	1.7 ⁽⁴⁾	2.1	Yes
HEPTACHLOR EPOXIDE	1/5	0.46	0.46	01SD05	0.3	1.7	NA	NA	Yes

TABLE 7-3
SELECTION OF ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN IN SEDIMENT
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 2

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Non-Detects ⁽¹⁾		Ecological Screening Value	Maximum Hazard Quotient ⁽²⁾	COPC (Yes/No) ³
		Minimum	Maximum		Minimum	Maximum			
Inorganics (mg/kg)									
ALUMINUM	5/5	1000	17200	01SD01	-	-	NA	NA	Yes
ARSENIC	4/5	0.81	19.8	01SD01	0.74	0.74	7.24	2.7	Yes
BARIIUM	5/5	5.3	61.2	01SD01	-	-	NA	NA	Yes
BERYLLIUM	1/5	1.1	1.1	01SD01	0.24	0.29	NA	NA	Yes
CALCIUM	3/5	229.25	5050	01SD01	245	259	NA	NA	No
CHROMIUM	5/5	1.1	17.6	01SD01	-	-	52.3	0.3	No
COPPER	1/5	11.7	11.7	01SD01	1.2	1.5	18.7	0.6	No
IRON	5/5	650	28100	01SD01	-	-	NA	NA	Yes
LEAD	5/5	1.9	32.1	01SD01	-	-	30.2	1.1	Yes
MANGANESE	5/5	1.5	295	01SD01	-	-	NA	NA	Yes
NICKEL	1/5	6.4	6.4	01SD01	1.2	1.5	15.9	0.4	No
VANADIUM	5/5	1.4	32.2	01SD01	-	-	NA	NA	Yes
ZINC	5/5	4.2	132	01SD01	-	-	124	1.1	Yes

Notes

(1) Sample-specific quantitation limits.

(2) Hazard quotient (HQ) = maximum detected concentration ÷ ecological screening value.

(3) An analyte was an ecological chemical of potential concern (COPC) if the maximum detected concentration was greater than the ecological screening value (i.e., HQ>1), or if an ecological screening value was not available. However, calcium (a nutrient) was not considered to be a COPC.

(4) Ecological screening value for chlordane.

NA = Ecological screening value not available.

TABLE 7-4
DATA SUMMARY FOR SURFACE SOIL ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Detection Limits ⁽¹⁾		Average Conc. ⁽²⁾	Ecological Screening Value (ESV)	Maximum Hazard Quotient	Number of Detects > ESV	Number of Nondetects > ESV	
		Min.	Max.		Min.	Max.						
Volatile Organics (µg/kg)												
2-BUTANONE	2/21	1.8	4	01SS12	1.3	11	4.1	NA	NA	-	-	
4-METHYL-2-PENTANONE	4/21	0.71	1.2	01SS015	0.54	11	3.0	NA	NA	-	-	
Semivolatile Organics (µg/kg)												
CAPROLACTAM	3/21	140	300	GPT-01-QT-09	72	420	173.4	NA	NA	-	-	
Pesticides/PCBs (µg/kg)												
ALDRIN	3/21	0.16	6.3	01SS017	0.12	0.42	0.5	2.5	2.5	1	0	
GAMMA-BHC (LINDANE)	1/21	0.23	0.23	01SS139	0.12	0.42	0.2	0.05	4.6	1	20	
ALPHA-CHLORDANE	5/21	0.23	4.9	01SS024	0.12	0.42	0.5	NA	NA	-	-	
GAMMA-CHLORDANE	4/21	0.22	3.4	01SS024	0.12	0.42	0.4	NA	NA	-	-	
DIELDRIN	8/20	0.36	460	01SS025	0.18	0.84	24.7	4.9	93.9	3	0	
ENDOSULFAN II	6/21	0.24	1.6	01SS420	0.18	0.84	0.4	NA	NA	-	-	
ENDOSULFAN SULFATE	1/21	0.29	0.29	01SS014	0.18	0.84	0.3	NA	NA	-	-	
ENDRIN ALDEHYDE	2/21	0.31	2	01SS10	0.18	0.84	0.4	1.0	2.0	1	0	
HEPTACHLOR	1/21	0.19	0.19	GPT-01-QT-08	0.12	0.42	0.2	NA	NA	-	-	
HEPTACHLOR EPOXIDE	5/20	0.25	1.7	01SS10	0.12	0.42	0.4	NA	NA	-	-	
METHOXYCHLOR	4/21	0.29	140	01SS017	0.12	0.42	7.1	NA	NA	-	-	
Herbicides (µg/kg)												
2,4,5-T	3/21	1.2	6	GPT-01-QT-08	0.92	2.1	1.3	NA	NA	-	-	
DINOSEB	1/6	8.8	8.8	GPT-01-QT-03	9.3	10	5.5	NA	NA	-	-	
Inorganics (mg/kg)												
ALUMINUM	21/21	1770	12300	01SS138	-	-	6723.8	50	246.0	21	-	
ANTIMONY	2/21	1.1	3.6	01SS420	1	1.3	0.7	0.27	13.3	2	19	
COPPER	19/21	1.4	210	01SS015	1	1.3	14.0	28	7.5	1	0	
IRON	21/21	546	9050	01SS017	-	-	3622.7	200	45.3	21	-	
LEAD	21/21	3.2	70.6	01SS420	-	-	15.4	11	6.4	7	-	
MANGANESE	21/21	1	358	01SS017	-	-	31.8	220	1.6	1	-	
SELENIUM	4/21	0.505	1.3	GPT-01-QT-06	0.61	0.78	0.4	0.52	2.5	3	17	
VANADIUM	21/21	2.7	16	01SS017	-	-	8.6	7.8	2.1	13	-	
ZINC	21/21	1.7	89	01SS137	-	-	18.7	46	1.9	2	-	

Notes

(1) Sample-specific quantitation limits in non-detected samples.

(2) Average concentration of all samples calculated using ½ the detection limit for nondetected samples.

NA = Ecological screening value not available.

TABLE 7-5
DATA SUMMARY FOR SURFACE WATER ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Detection Limits ⁽¹⁾	Average Conc. ⁽²⁾	Ecological Screening Value (ESV)	Maximum Hazard Quotient	Number of Detects > ESV	Number of Nondetects > ESV
		Min.	Max.							
Volatile Organics (µg/L)										
1,1,2-TRICHLOROTRIFLUOROETHANE	1/5	6.6	6.6	01SW04	1	1.7	NA	NA	NA	NA
ACETONE	5/5	3.4	5.1	01SW02	-	4.4	NA	NA	NA	NA
CARBON DISULFIDE	2/5	0.18	0.2	01SW03	1	0.38	NA	NA	NA	NA
Semivolatile Organics (µg/L)										
CAPROLACTAM	5/5	0.91	2.1	01SW04	-	1.26	NA	NA	NA	NA
Herbicides (µg/L)										
2,4,5-TP (SILVEX)	4/5	0.044	0.067	01SW01	0.069	0.049	NA	NA	NA	NA
Inorganics (µg/L)										
ALUMINUM	5/5	430	1690	01SW04	-	836	87	19.4	5	-
BARIUM	5/5	20.75	30.1	01SW05	-	27.4	NA	NA	NA	NA
IRON	5/5	1720	2410	01SW01	-	2078	1000	2.4	5	-
LEAD	2/5	1.6	2	01SW03	1.5	1.2	1.32	1.5	2	3
MANGANESE	5/5	26.3	53.1	01SW01	-	38.2	NA	NA	NA	NA

Notes

(1) Sample-specific quantitation limits in non-detected samples.

(2) Average concentration of all samples calculated using ½ the detection limit for nondetected samples.

NA = Ecological screening value not available.

TABLE 7-6
DATA SUMMARY FOR SEDIMENT ECOLOGICAL CHEMICALS OF POTENTIAL CONCERN
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Analyte	Frequency of Detection	Range of Detected Concentrations		Location of Maximum Detected Concentration	Range of Detection Limits ⁽¹⁾		Average Conc. ⁽²⁾	Ecological Screening Value (ESV)	Maximum Hazard Quotient	Number of Detects > ESV	Number of Nondetects > ESV	
		Min.	Max.		Min.	Max.						
Volatile Organics (µg/kg)												
2-BUTANONE	4/5	5.8	80	01SD01	12	12	22.2	NA	NA	-	-	
ACETONE	2/5	28	220	01SD01	12	12	53.2	NA	NA	-	-	
TOLUENE	1/5	33	33	01SD01	12	12	11.4	NA	NA	-	-	
Semivolatile Organics (µg/kg)												
4-METHYLPHENOL	1/5	420	420	01SD01	400	470	254.0	NA	NA	-	-	
BENZO(B)FLUORANTHENE	1/5	330	330	01SD01	400	470	236.0	NA	NA	-	-	
BENZO(K)FLUORANTHENE	1/5	220	220	01SD01	400	470	214.0	NA	NA	-	-	
BIS(2-ETHYLHEXYL)PHTHALATE	5/5	74	450	01SD01	-	-	164.5	182	2.5	1	0	
CHRYSENE	1/5	400	400	01SD01	400	470	250.0	330	1.2	1	4	
DIETHYL PHTHALATE	3/5	52	220	01SD01	410	470	163.7	NA	NA	-	-	
FLUORANTHENE	1/5	1300	1300	01SD01	400	470	430.0	330	3.9	1	4	
PHENANTHRENE	1/5	360	360	01SD01	400	470	242.0	330	1.1	1	4	
PYRENE	1/5	930	930	01SD01	400	470	356.0	330	2.8	1	4	
TOTAL PAHS	1/5	3730	3730	01SD01	-	-	746.0	1684	2.2	1	-	
Pesticides/PCBs (µg/kg)												
ALDRIN	1/5	0.325	0.45	01SD03	0.4	1.7	0.37	NA	NA	-	-	
ALPHA-BHC	1/5	0.17	0.17	01SD05	0.4	1.7	0.3	NA	NA	-	-	
ALPHA-CHLORDANE	4/5	0.85	6	01SD01	0.4	0.41	3.0	1.7	3.5	3	0	
DELTA-BHC	1/5	2.1	2.1	01SD01	0.4	0.48	0.6	NA	NA	-	-	
GAMMA-CHLORDANE	4/5	0.52	3.5	01SD01	0.4	0.41	1.8	1.7	2.1	3	0	
HEPTACHLOR EPOXIDE	1/5	0.46	0.46	01SD05	0.3	1.7	0.38	NA	NA	-	-	
Inorganics (mg/kg)												
ALUMINUM	5/5	1000	17200	01SD01	-	-	4928.0	NA	NA	-	-	
ARSENIC	4/5	0.81	19.8	01SD01	0.74	0.74	4.7	7.24	2.7	1	0	
BARIIUM	5/5	5.3	61.2	01SD01	-	-	17.6	NA	NA	-	-	
BERYLLIUM	1/5	1.1	1.1	01SD01	0.24	0.29	0.3	NA	NA	-	-	
IRON	5/5	650	28100	01SD01	-	-	6632.3	NA	NA	-	-	
LEAD	5/5	1.9	32.1	01SD01	-	-	14.8	30.2	1.1	2	-	
MANGANESE	5/5	1.5	295	01SD01	-	-	62.3	NA	NA	-	-	
VANADIUM	5/5	1.4	32.2	01SD01	-	-	9.2	NA	NA	-	-	
ZINC	5/5	4.2	132	01SD01	-	-	34.0	124	1.1	1	-	

Notes

(1) Sample-specific quantitation limits in non-detected samples.

(2) Average concentration of all samples calculated using ½ the detection limit for nondetected samples.

NA = Ecological screening value not available.

TABLE 7-7
FOOD CHAIN MODEL - ECOLOGICAL HAZARD QUOTIENTS
PISCIVOROUS RECEPTORS - CONSERVATIVE SCENARIO
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Chemical	Green Heron		Mink	
	HQ _{NOAEL}	HQ _{LOAEL}	HQ _{NOAEL}	HQ _{LOAEL}
Pesticides/PCBs				
ALDRIN	NA	NA	3.7E-03	7.3E-04
ALPHA-BHC	6.2E-04	1.5E-04	2.0E-02	2.0E-03
ALPHA-CHLORDANE	1.5E-02	3.0E-03	5.6E-03	2.8E-03
DELTA-BHC	7.7E-03	1.9E-03	2.4E-01	2.4E-02
GAMMA-CHLORDANE	4.1E-03	8.2E-04	1.5E-03	7.7E-04
HEPTACHLOR EPOXIDE	NA	NA	7.5E-03	7.5E-04
Inorganics				
ARSENIC	1.0E+00	5.0E-01	1.8E+00	4.2E-01
LEAD	2.0E+00	7.3E-02	5.9E-01	1.5E-02
ZINC	2.3E+00	9.0E-01	1.6E+00	4.2E-01

Notes:

Cells are shaded if the value is greater than 1.0

HQ - Ecological Hazard Quotient

NOAEL - No Observed Adverse Effects Level

LOAEL - Lowest Observed Adverse Effects Level

NA - HQ could not be calculated because avian NOAEL and LOAEL were not available.

TABLE 7-8
FOOD CHAIN MODEL - ECOLOGICAL HAZARD QUOTIENTS
PISCIVOROUS RECEPTORS - AVERAGE SCENARIO
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Chemical	Green Heron		Mink	
	HQ _{NOAEL}	HQ _{LOAEL}	HQ _{NOAEL}	HQ _{LOAEL}
Pesticides/PCBs				
ALDRIN	NA	NA	9.8E-04	2.0E-04
ALPHA-BHC	1.0E-03	2.5E-04	1.1E-02	1.1E-03
ALPHA-CHLORDANE	6.9E-03	1.4E-03	9.1E-04	4.6E-04
DELTA-BHC	2.0E-03	5.0E-04	2.3E-02	2.3E-03
GAMMA-CHLORDANE	1.9E-03	3.9E-04	2.6E-04	1.3E-04
HEPTACHLOR EPOXIDE	NA	NA	2.0E-03	2.0E-04
Inorganics				
ARSENIC	5.7E-02	2.9E-02	4.3E-02	9.8E-03
LEAD	1.6E-01	5.7E-03	2.1E-02	5.2E-04
ZINC	1.4E-01	5.6E-02	3.7E-02	9.3E-03

Notes:

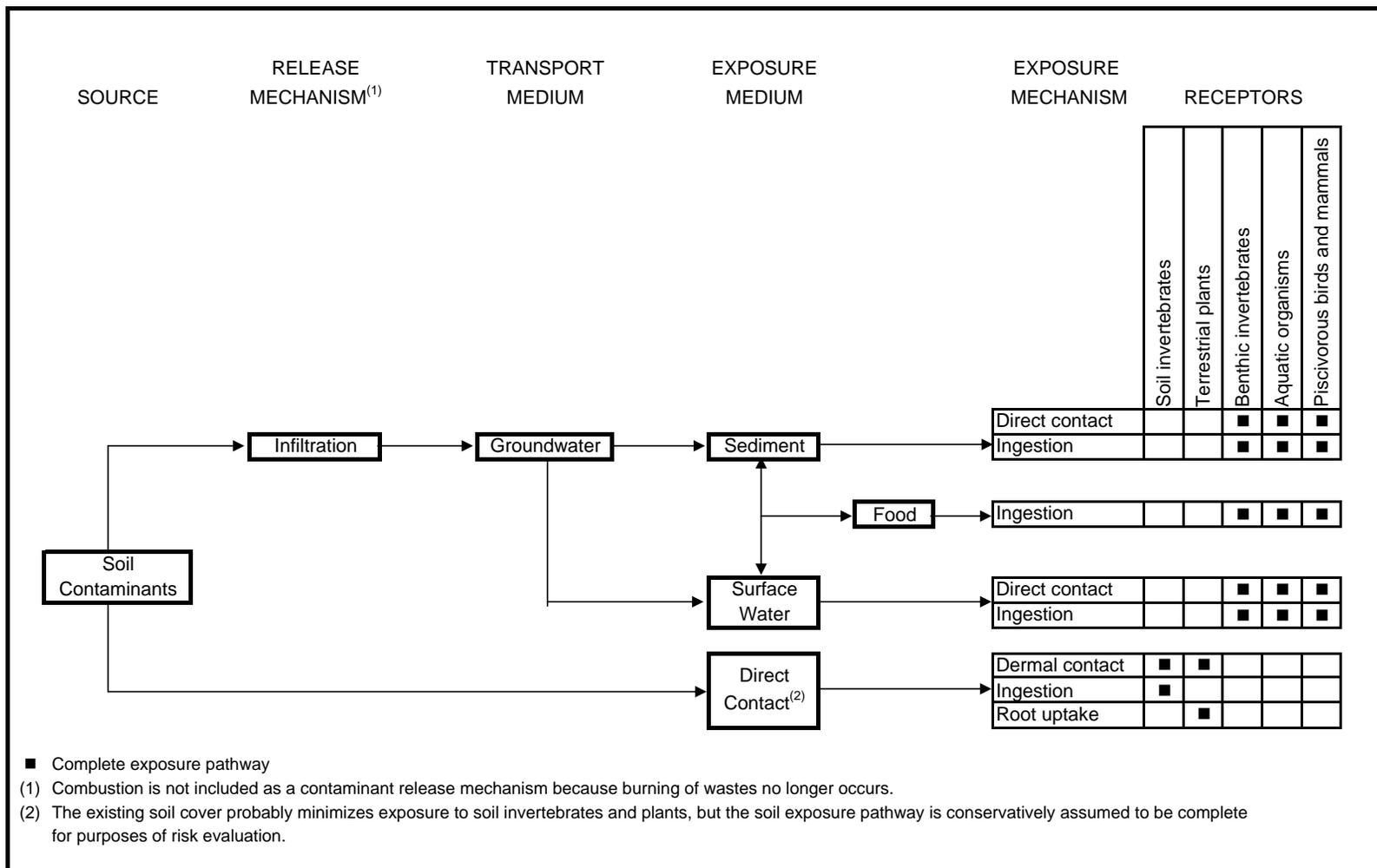
HQ - Ecological Hazard Quotient

NOAEL - No Observed Adverse Effects Level

LOAEL - Lowest Observed Adverse Effects Level

NA - HQ could not be calculated because avian NOAEL and LOAEL were not available.

**FIGURE 7-1
CONCEPTUAL EXPOSURE MODEL
SITE 1
NCBC GULFPORT
GULFPORT, MISSISSIPPI**



8.0 SUMMARY AND CONCLUSIONS

The primary objective of the RI was to provide data to evaluate current environmental conditions and guide the selection of a remedy that is protective of human health and the environment for any contamination present at Site 1. To achieve this primary objective, samples from various media were collected and analyzed to fill data gaps from previous investigations.

The following sections summarize the findings of the RI. The screening criteria used to evaluate the nature and extent of contamination in environmental media at Site 1 included the following:

- MDEQ Tier 1 TRGs
- USEPA Region 9 Preliminary Remedial Goals
- USEPA SSLs for migration to air and groundwater
- USEPA GVCs
- USEPA Region 4 ESVs

The potential impacts of these contaminants to human and ecological receptors were evaluated in the HHRA (based on comparisons to USEPA and state of Mississippi human health benchmarks) and the screening-level ecological risk assessment (based on comparisons to USEPA ESVs).

8.1 SITE HYDROLOGY

Surface water at Site 1 is found in ditches on the eastern and western sides of the site. The drainage ditch on the western side of the site receives surface water runoff from most of the disposal area identified at Site 1 and discharges to Canal No. 1 on the northern side of 8th Street. The canal on the eastern side of Site 1 receives limited runoff from the eastern part of Site 1 and flows to the north and discharges south of 28th Street at Outfall 3.

Groundwater elevations measured in September 2008 indicated groundwater flow in the shallow zone shows a north-south oriented divide near the middle of the site, with groundwater flow to the northwest to the west of the divide and to the northeast to the east of the divide. Groundwater elevation data from the three deep zone wells was plotted and the groundwater flow direction is estimated to be to the northwest.

Groundwater flow velocity was determined from the groundwater elevations measured at the site and slug test data from Sites 3 and 4, which are nearby. The horizontal gradient in the shallow surficial aquifer in the western half of Site 1 was 0.003 ft/ft. With a hydraulic conductivity of 23.5 ft/day, the groundwater flow velocity in this part of Site 1 was 0.24 ft/day. The horizontal gradient in the shallow surficial aquifer in

the eastern half of Site 1 was 0.002 ft/ft. With a hydraulic conductivity of 23.5 ft/day, the groundwater flow velocity in this part of Site 1 was 0.16 ft/day. The horizontal gradient in the deep surficial aquifer at Site 1 was 0.008 ft/ft. With a hydraulic conductivity of 3.2 ft/day, the groundwater flow velocity in this aquifer zone at Site 1 was 0.09 ft/day.

8.2 SOIL ASSESSMENT

The results of the soil analytical program are consistent with the containment strategy of the presumptive remedy, and the direct observation of the field samples confirmed the waste disposal area defined by the geophysical investigation.

The following chemicals were retained as surface soil COPCs for the risk assessments:

- Direct Exposure (carcinogen) – dieldrin and arsenic
- Direct Exposure (non-carcinogen) – aluminum, antimony, cobalt, iron, and manganese
- Leaching to groundwater – tetrachloroethene, benzo(b)fluoranthene, Aroclor-1260, aldrin, alpha chlordane, BHC isomers, dieldrin, heptachlor epoxide, antimony, arsenic, chromium, cobalt, iron, lead, manganese, and selenium
- Ecological Receptors – aldrin, gamma BHC, dieldrin, endrin aldehyde, aluminum, antimony, copper, iron, lead, manganese, selenium, vanadium, and zinc
- Ecological Receptors (No ESV) – 2-butanone, 4-methyl-2-pentanone, caprolactam, chlordane, endosulfan II, endosulfan sulfate, heptachlor, heptachlor epoxide, methoxychlor, 2,4,5-T, and dinoseb

The following chemicals were retained as subsurface soil COPCs for the HHRA:

- Direct Exposure (carcinogen) – Aroclor-1242 and arsenic
- Direct Exposure (non-carcinogen) – aluminum
- Leaching to groundwater – alpha chlordane, Aroclor-1242, beta BHC, delta BHC, dieldrin, heptachlor epoxide, arsenic, chromium, and iron

The containment presumptive remedy strategy for Site 1 includes the installation and maintenance of a soil cover system. Strategically covering the existing surface will remove important exposure pathways including direct exposure to surface soil by ecological receptors, potential leaching of contaminants from soil to groundwater, and erosion and transport of surface soil from the landfill. Direct exposure to subsurface soil will be prevented by institutional controls established to maintain the integrity of the cover.

8.3 GROUNDWATER ASSESSMENT

Groundwater characterization samples collected at Site 1 were analyzed for TCL, TAL, and Appendix IX analytes. Groundwater delineation samples were collected using DPT and analyzed for selected VOCs.

The following chemicals were retained as groundwater COPCs for the HHRA:

- Direct Exposure (carcinogen) – tetrachloroethene, trichloroethene, naphthalene, and arsenic
- Direct Exposure (non-carcinogen) – iron, manganese, and thallium
- Volatilization from groundwater – tetrachloroethene and trichloroethene

The interaction between the layers of sandy and clayey silt and the contaminants at the site appears to have created a vertical barrier to migration. Although not a true aquaclude, these lower permeability layers restrict the movement of contaminants such that the containment strategy of a soil cover should be effective in reducing future migration of contaminants and will be evaluated in the FS.

8.4 SURFACE WATER AND SEDIMENT ASSESSMENT

The concentrations of organic compounds (VOCs, SVOCs, pesticides, PCBs, and herbicides) reported in the surface water samples collected at Site 1 were less than the human health screening criteria; therefore, none of the organic compounds were retained as COPCs for the HHRA. The organic compounds detected in surface water samples at Site 1 that do not have established ESVs (1,1,2-trichlorofluoroethane, acetone, carbon disulfide, caprolactam, and Silvex) were retained as COPCs for the SLERA.

Arsenic was detected in one surface water sample at a concentration greater than the RSL tap water criteria and is retained as a COPC in the HHRA. Iron concentrations in all the surface water samples were less than the TRGs and RSL.

Aluminum, iron and lead were reported in Site 1 surface water samples at concentrations greater than the ESVs and are retained as ecological COPCs. Barium and manganese were retained as COPCs for the SLERA because ESVs have not been established for these metals.

The following chemicals were retained as sediment COPCs for the risk assessments:

- Direct Exposure (carcinogen) – benzo(a)pyrene, benzo(b)fluoranthene, and arsenic
- Direct Exposure (non-carcinogen) – aluminum, iron, and manganese
- Ecological Receptors – chrysene, fluoranthene, phenanthrene, pyrene, bis(2-ethylhexyl)phthalate, and chlordane
- Ecological Receptors (No ESV) – 2-butanone, acetone, toluene, aldrin, 4-methylphenol, diethyl phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, BHC isomers, heptachlor epoxide, aluminum, barium, beryllium, iron, manganese, and vanadium

These results suggest that the contaminant levels reported in Site 1 surface water and sediment samples reflect base-wide conditions and do not result from releases from the landfill at Site 1.

8.5 MEDIA TO AIR MIGRATION PATHWAY

Air samples were not collected from Site 1 during the RI because the concentrations of volatile contaminants previously detected in soil and groundwater were relatively low. Air monitoring for workers was conducted as part of the site investigation activities as a health and safety precaution to identify potential exposure to concentrations of volatile contaminants. The passive soil gas survey detected only the limited occurrence of VOCs.

To determine the potential for migration of soil contaminants to the atmosphere, contaminant concentrations were compared to USEPA SSLs. SSLs have been established for various volatiles, pesticides/PCBs, and metals. Concentrations of these classes of analytes that were detected in soil at Site 1 were less than the default SSL values.

USEPA GVCs have been established for many of the VOCs detected in groundwater at Site 1. Tetrachloroethene and trichloroethene were detected in one or more groundwater samples at concentrations greater than the default criteria, indicating the potential for migration and accumulation of vapors from the groundwater into the atmosphere.

8.6 HUMAN HEALTH RISK ASSESSMENT

The HHRA was performed to evaluate exposure to COPCs in subsurface and surface soil, groundwater, surface water, and sediment at Site 1. Estimated risks for construction/excavation workers and adult trespassers assumed to be exposed to COPCs in site media were less than or equal to USEPA and MDEQ risk management benchmarks. The quantitative risk evaluation indicated that risk estimates for the site maintenance worker and adolescent trespasser were only marginally greater than the MDEQ benchmark. Additionally, although the total ILCR for the site industrial worker exceeds the MDEQ cancer benchmark, the risk estimate is within one order of magnitude of the MDEQ benchmark and is primarily due to PCBs and dieldrin in soil, which may be attributable to the limited presence of contamination hot spots.

The quantitative risk evaluation also indicated that potential adverse health effects may be associated with the hypothetical future residential use of groundwater. The maximum detected concentration of tetrachloroethene in groundwater exceeded the ORNL RSL for tap water, and the maximum concentration of arsenic in groundwater exceeded both the ORNL tap water RSL and the MDEQ groundwater TRG. However, there is considerable uncertainty in the risk estimates calculated for exposure to COPCs in groundwater, and the numerical risk results are likely overestimated. In addition, the residential groundwater use scenario is evaluated to be conservative and to provide information to risk managers for Site 1. The groundwater underlying and downgradient of Site 1 is not currently used as a source of drinking water and there are no plans to develop this resource in the future. Residential cancer risk estimates slightly exceeded the MDEQ benchmark for soils (for both adult and child residents) due to dieldrin, arsenic, and PCBs. However, arsenic is within published background levels for soil. Sediment also exceeded the MDEQ cancer benchmark for the child resident only due to arsenic. Residential risks estimated for surface water did not exceed USEPA and MDEQ risk management benchmarks.

8.7 ECOLOGICAL RISK ASSESSMENT

The primary contaminant migration pathway at Site 1 is the infiltration of soil contaminants into groundwater and subsequent seepage into surface water and sediment in the ditches located east and west of the former landfill. Analytical data from surface soil samples collected at the site, and sediment and surface water samples collected from ditches on the eastern and western edges of the site, were evaluated in the ecological risk assessment.

VOCs and SVOCs (with the exception of caprolactam) in surface soil do not pose risks to ecological receptors. Several organochlorine insecticides were detected in surface soil samples. Concentrations tended to be low, and impacts to ecological receptors from these compounds are not expected. 2,4,5-T

was detected in 3 of 21 samples and dinoseb was detected in one of six surface soil samples. Surface soil toxicity thresholds have not been established for these herbicides, so there is uncertainty regarding their potential impacts. Concentrations of metals tended to be low and pose negligible potential risks to soil invertebrates and plants.

Acetone, 2-butanone and toluene were the only VOCs detected in sediment, and acetone, carbon disulfide, and trichlorofluoroethane were the only VOCs detected in surface water. A low level of potential risk from exposure of benthic invertebrates to toluene may be present around sample 01SD01 but overall risk to benthic invertebrates from exposure to VOCs is considered negligible. Likewise, the low levels of VOCs detected in surface water do not appear to represent a potential risk to aquatic organisms. Pesticides appear to pose negligible risks to benthic receptors.

Concentrations of most metals tended to be low and pose negligible potential risks to aquatic and benthic organisms, or do not appear to be related to former activities at the landfill. While barium concentrations in most sediment samples indicated negligible potential risk, potential risk to benthic invertebrates may exist in the vicinity of 01SD01. Iron concentrations in surface water indicate potential risk to aquatic organisms.

Based on maximum concentrations and conservative assumptions, food chain HQs exceeded 1.0 for arsenic, lead, and zinc. NOAEL-based HQs for the green heron were highest for zinc while arsenic had the highest NOAEL-based HQ for the mink. In the average concentration scenario, all food chain HQs were less than 1.0; therefore, site-related impacts to piscivorous receptors from bioaccumulative COPCs in surface water and sediment are not expected.

8.8 CONCLUSIONS

Based on the results of the RI, an FS using CERCLA guidelines is recommended for Site 1. As discussed throughout this report, Site 1 meets the requirements of the presumptive remedy framework for municipal and military landfills. Therefore, the primary remedial strategy for Site 1 will be containment of the disposal area with a soil cap meeting state and USEPA requirements to prevent exposure to site soil.

The containment strategy should focus on three areas: (1) soil cover to prevent direct exposure to landfill materials; (2) elimination of the potential for mechanical disturbance of the cover during site operations; and (3) minimization of erosion of surface soil.

Based on the locations and types of chemicals detected during this investigation, interim removal or time-critical actions will not be required. After the above actions are taken, there will be a low likelihood for the

migration of contaminated media, and the local population will not be exposed to contaminants in subsurface soil and groundwater at the site if current base operations and restrictions are maintained.

The FS will incorporate the presumptive remedy strategy including the soil cover to prevent recontamination in the future. The current soil cover is not likely to be adequate for permanent site closure under either MDEQ or USEPA regulations. Long-term monitoring and maintenance of the soil cover will be required.

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APPENDIX A
GEOPHYSICAL SURVEY REPORT

1.0 INTRODUCTION

This report has been prepared by Tetra Tech NUS, Inc. (TtNUS) on behalf of the United States Navy, Naval Facilities Engineering Command (NAVFAC) Southeast under the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62467-04-D-0055, Contract Task Order (CTO) 0065. This report summarizes geophysical surveys performed from January 9 through January 16, 2008 by Tetra Tech, at Site 1 within the Naval Construction Battalion Center (NCBC) in Gulfport, Mississippi. Figure 1-1 shows the general location of the complex.

1.1 SITE BACKGROUND

The NCBC is an approximately 1,100 acre facility used to provide military readiness for battalions of the Naval Construction Force, and to provide property to store and maintain pre-positioned war reserve material. Site 1 (on the installation) is currently defined as an approximately 16 acre area shown on Figure 1-2. The site limits have expanded significantly over time based on previous findings and investigations. Site 1 is used as a training ground for mock disaster recovery operations. Several buildings are present, providing classrooms and enclosed training exercise areas. Most of Site 1 however, is fairly flat, open terrain with a moderate amount of tree cover. The site is well maintained, and the ground surface consists mostly of mowed grass and small paved portions. A few underground utilities (some non-metallic) are present.

Previously, Site 1 was used as an unlined landfill for receiving solid and chemical wastes reportedly in 55 gallon drums from 1942 to 1948, when it was closed and covered by a layer of soil. In 1984 four or five drums were reportedly encountered during a water line repair. In 1987 a geophysical survey was conducted, and the report concluded that large areas of disturbed ground were present at the site. More specific information, delineation of possible locations of drum cache disposals, was requested, and prompted Tetra Tech's geophysical surveys documented in this report.

The adjacent golf course portion north of Site 1 was also prospected with a reconnaissance meandering path geophysical survey to confirm non-anomalous readings outside of Site 1. This section of the golf course formerly contained catfish ponds that were subsequently filled in to build the golf course, and reportedly clean fill was used for this process.

2.0 PERSONNEL

A TtNUS Project Geophysicist from the Pittsburgh office (James Coffman) assisted by Tetra Tech personnel from the Tallahassee office performed the fieldwork from January 9 to 16, 2008.

TtNUS personnel met the medical, training experience, and educational requirements specified in the United States Army Corps of Engineers (USACE) DID OE-025.02, and Chapter 29 Code of Federal Regulations 1910.120.

3.0 OBJECTIVES AND SCOPE

The geophysical objective was to locate buried metal anomalies that could represent small to large drum cache disposals within the accessible portions of Site 1. The geophysical methods employed detect, but do not identify, buried metallic objects. In simple cases where the expected types of buried objects are limited, a guess can sometimes be made as to what might be buried at an anomaly location. Such cases are generally rare on developed sites within military bases because these sites often had mixed uses throughout their histories and consequently, any number of buried object types may be present.

4.0 EQUIPMENT

TtNUS conducted the geophysical surveys using a Geonics EM31 model MK2 and Geometrics G-858 and G-856 magnetometer instruments in the accessible portions of Site 1.

The Geonics EM31 is a frequency domain electromagnetic (EM) instrument. The EM31 generates a primary electromagnetic field, and secondary EM fields are measured as a function of frequency allowing stark differences in terrain conductivity to be differentiated. Two measurement components are typically recorded; quadrature-phase (QP) and in-phase (IP). The QP component is sensitive to metal and non-metal components of the ground, and the IP component is predominantly sensitive to metal. The instrument can be operated in horizontal or vertical dipole mode, which nominally measure 9 or 18 foot depths, respectively. The EM31 was set to acquire data 5 times per second, and operated in the vertical dipole mode.

The G-858 and G-856 magnetometers measure the Earth's magnetic field at selected time increments. Both magnetometer instruments are only capable of detecting ferrous metal. The G-858 was used to collect data across the site, and the G-856 was used to collect stationary background readings to correct the G-858 data for potential magnetic field spikes that might occur from increased or decreased solar activity (diurnal changes). As magnetic bodies above and below ground add or subtract to the Earth's magnetic field, anomalies can be identified by the increases and decreases measured. Diurnal changes in the Earth's magnetic field must be accounted for to correct for potential data shifts that might otherwise be attributed to these survey anomalies (ferrous metal objects). The G-858 instrument was used to automatically record five readings per second from a single sensor, and the base station (G-856) was set up to acquire readings every 60 seconds.

A Trimble Ag 114 DGPS (equipped to receive Omnistar and WAAS differential corrections) was used to accurately locate data stations (sub-meter accuracy). This global positioning system (GPS) unit was integrated in real time with the EM31 and G-858 once per second during survey acquisition.

5.0 GEOPHYSICAL SURVEY

A survey grid (20-foot spaced pin flags) was established in Site 1 to serve as a guide for conducting EM31 and G-858 surveys using 10-foot spaced survey lines oriented north-south across the accessible portions of the site and beyond. The 10-foot survey line spacing provides thorough detection capabilities for small to large caches of drums; however, individual buried drums or small objects could escape detection if located between survey lines. The site is currently defined as approximately 16 acres, and the geophysical survey was expanded north beyond these limits to encompass a total of about 19 acres. Several buildings and obstructions created gaps in survey data, and these gaps are presented as white-blanked or annotated areas in the survey plot. The adjacent golf course was surveyed with a meandering path survey where the predominant survey direction was in the east-west direction.

Prior to field acquisition, the equipment was set up according to manufacturer's recommendations (calibrations and operational checks, and instrument null). Geophysical data were acquired at a rate of five readings per second (corresponding to approximately one reading per foot given the walking pace with the instrument). GPS readings were real-time integrated with the geophysical data every second.

6.0 RESULTS AND DISCUSSION

The accessible portions of Site 1 were surveyed with EM31 and G-858 geophysical instruments using a 10-foot survey line spacing, selected to provide thorough detection capabilities for small

to large caches of drums. High accuracy data positioning was provided via real-time GPS integration (sub-meter accuracy). The data collected are displayed in color contour maps superimposed on a site plan, and displayed in Figures 6-1 (EM31 Quadrature-Phase), Figure 6-2 (EM31 In-Phase) and 6-3 (Total Magnetic Field). Figure 6-4 is a comprehensive interpretation of all the geophysical data superimposed on the EM31 in-phase plot.

Data contouring was performed using Geosoft's Oasis montaj software (v. 6.4.2, 2007 release). Background levels are shown by green to light green color contours on the plots. Anomalies are evident in response values greater and less than these background levels (ranging from blue to light blue and also yellow to pink colored contours), and the color bar shown on the figure provides an indication of the amplitude of the displayed anomalies. The anomaly response from a particular object is not unique, in that the depth of burial will affect the same object's response values.

Anomaly response was recorded near buildings and other noted aboveground metallic objects shown on the figures, and the presence or absence of subsurface objects in those areas cannot be determined from the geophysical data alone.

Numerous anomalies from small to large are interpreted from the contour data. Larger anomalies, possibly attributed to a cluster or cache of buried objects or to a single large buried item are shown on Figure 6-4 by a hatched pattern labeled with a number or letter. Numbered anomalies represent the largest anomalies (referred to as large anomalies), and all contain at least a significant portion of ferrous material (EM and magnetic anomalies are associated). Because of their size and amplitude, these anomalies represent the highest probability of possible drum disposal areas. Lettered anomalies are smaller (referred to as medium-sized anomalies), though still significant in size and amplitude, and any of these hatched anomalies could potentially represent small drum disposal caches (ferrous component is associated with each of these anomalies). The smallest interpreted anomalies, possibly attributed to an individual small item or small amounts of buried metal, are shown by a shaded square symbol followed by a number, and anomalies 1, 4 and 5 appear to have a ferrous component. These smaller anomalies are judged to be too small in size and amplitude to represent even small caches of drums, but still could represent significant small individual items.

All of the largest (numbered) anomalies were located and marked in the field, and some of the medium-sized (lettered) anomalies were also marked in the field (B, C, E and G marked). Please note that all medium sized anomalies are judged to be significant, not just the selected ones marked in the field. Tables 6-1 through 6-3 display State Plane coordinates for large, medium and small anomalies, respectively, to provide location information in the event that site surface features are removed.

Several linear anomalies were detected and are interpreted as possible underground metallic utilities or utility ducts (shown by a dashed line symbol on Figure 6-4). Neither of the two survey instruments can detect a non-metallic utility, nor was utility locating a specific objective of the project. One short linear anomaly off the southwest corner of Building 109 was interpreted in-field from the magnetometer data as a medium-sized hatched anomaly; however, upon further review (using the EM data in conjunction) the anomaly is interpreted as a possible section of pipe, and is consequently shown by a dashed line symbol labeled with the letter "G" on Figure 6-4. Please note that this anomaly was marked in-field along with the other medium-sized (lettered) anomalies interpreted in the field.

Figure 6-5 displays the EM31 in-phase response of the meandering path reconnaissance geophysical survey of the golf course area. The objective here was to reconnoiter the area to determine whether there is evidence of buried metal disposal in the vicinity of the former catfish ponds shown on Figure 6-5. A single meandering path survey (one survey line) was conducted by walking back and forth along the long axis of the golf course to reconnoiter the catfish pond areas. The data indicate few anomalies; primarily where the golf cart paths, which appear to be

reinforced, were crossed. One moderate amplitude anomaly was detected in the southeast corner of the meandering path, and a small quantity of buried metal may be associated. Otherwise, low EM response was recorded along the remainder of the survey path indicating the absence of significant buried metal.

**TABLE 6-1
SITE 1
POSITIONAL COORDINATES FOR LARGE ANOMALIES
NCBC GULFPORT, MISSISSIPPI**

Anomaly Number	State Plane Coordinate (in feet)		Anomaly Number	State Plane Coordinate (in feet)	
	Easting	Northing		Easting	Northing
2	2674220.7074	321158.3593	6	2674758.0548	320913.5042
	2674204.5108	321143.1154		2674745.6692	320899.2131
	2674253.1007	321105.0057		2674749.4801	320883.9692
	2674308.3599	321126.9188		2674782.8262	320869.6780
	2674308.3599	321140.2572		2674800.9283	320881.1110
	2674295.9742	321157.4066		2674799.0228	320900.1658
	2674218.8020	321160.2648		2674792.3536	320910.6460
3	2674504.6250	321024.9752	6	2674775.2042	320915.4097
	2674505.5778	320965.9051		2674759.9603	320912.5515
	2674539.8765	320965.9051		2674842.8490	320880.1582
	2674537.0183	321020.2115		2674821.8886	320875.3945
4	2674503.6723	321024.0225	7	2674810.4557	320881.1110
	2674698.9847	321007.8259		2674810.4557	320898.2603
	2674692.3155	320974.4798		2674821.8886	320904.9295
	2674741.8582	320958.2832		2674836.1798	320899.2131
	2674751.3856	320993.5347		2674841.8963	320879.2055
5	2674700.8902	321009.7313	2674913.3520	321297.4599	
	2674656.1113	320900.1658	2674913.3520	321284.1215	
	2674656.1113	320869.6780	2674923.8322	321282.2160	
	2674696.1265	320853.4814	2674960.9892	321242.2008	
	2674726.6143	320857.2924	2674969.5639	321256.4919	
	2674734.2362	320881.1110	2674930.5014	321298.4126	
	2674722.8033	320896.3549	2674914.3048	321297.4599	
	2674684.6936	320912.5515			
2674655.1585	320899.2131				

Note: Projections used: NAD 83 / Mississippi CS 83 West Zone.

TABLE 6-2
SITE 1
POSITIONAL COORDINATES FOR MEDIUM-SIZED ANOMALIES
NCBC GULFPORT, MISSISSIPPI

Anomaly Number	State Plane Coordinate (in feet)		Anomaly Number	State Plane Coordinate (in feet)		
	Easting	Northing		Easting	Northing	
A	2674209.2745	321106.9112	F	2674446.5077	321026.8807	
	2674193.0779	321093.5728		2674429.3583	321009.7313	
	2674194.0306	321076.4234		2674434.1220	320993.5347	
	2674204.5108	321064.0377		2674449.3659	320988.7710	
	2674222.6129	321073.5652		2674469.3735	321012.5896	
	2674220.7074	321103.1002		2674463.6571	321021.1643	
	2674208.3218	321106.9112		2674454.1296	321029.7390	
B	2674416.0199	321328.9004	G	2674443.6494	321027.8335	
	2674411.2562	321321.2785		2674502.7195	321127.8715	
	2674441.7440	321315.5620		2674487.4756	321115.4859	
	2674445.5549	321325.0895		2674497.9558	321098.3365	
	2674441.7440	321328.9004		2674527.4909	321104.0530	
	2674416.9726	321329.8532		2674529.3964	321122.1551	
C	2674625.6235	321173.6032		2674523.6799	321127.8715	
	2674601.8049	321165.9813		2674500.8141	321127.8715	
	2674602.7576	321157.4066		H	2674556.0732	321346.0498
	2674625.6235	321153.5956			2674546.5457	321337.4751
	2674645.6311	321161.2176			2674550.3567	321330.8059
	2674639.9146	321171.6978			2674563.6951	321336.5224
	2674624.6707	321173.6032			2674577.0335	321336.5224
D	2674443.6494	321166.9340			2674576.0808	321346.0498
	2674432.2165	321165.0285	2674556.0732		321346.0498	
	2674433.1693	321138.3517	I	2674479.8537	321452.7571	
	2674440.7912	321128.8243		2674467.4680	321441.3242	
	2674450.3186	321132.6353		2674469.3735	321427.9858	
	2674450.3186	321147.8792		2674486.5229	321423.2221	
	2674443.6494	321166.9340		2674503.6723	321437.5132	
E	2674650.3948	320975.4326		2674496.0503	321452.7571	
	2674636.1036	320971.6216		2674480.8064	321452.7571	
	2674635.1509	320945.8975				
	2674650.3948	320937.3228				
	2674668.4969	320935.4173				
	2674668.4969	320970.6689				
	2674648.4893	320975.4326				

Note: Projections used: NAD 83 / Mississippi CS 83 West Zone.

TABLE 6-3
SITE1
POSITIONAL COORDINATES FOR SMALL ANOMALIES
NCBC GULFPORT, MISSISSIPPI

Anomaly Number (#)	State Plane Coordinate (in feet)	
	Easting	Northing
1	2674288.3522	320983.0545
2	2674599.8994	320962.0942
3	2675022.9175	321010.6841
4	2675017.2011	320923.0317
5	2675077.2239	321007.8259

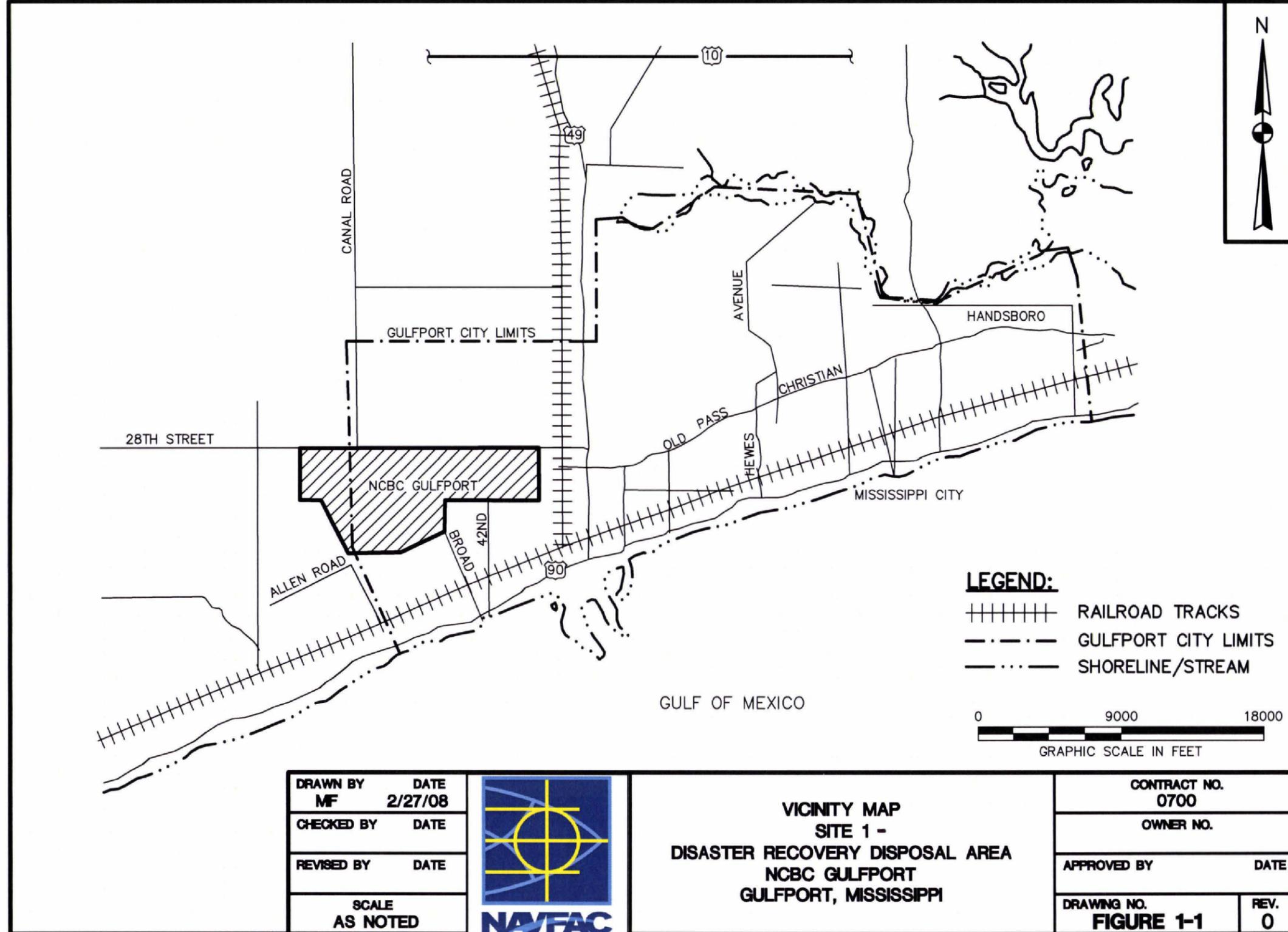
**Note: Projections used: NAD 83 /
Mississippi CS 83 West Zone.**

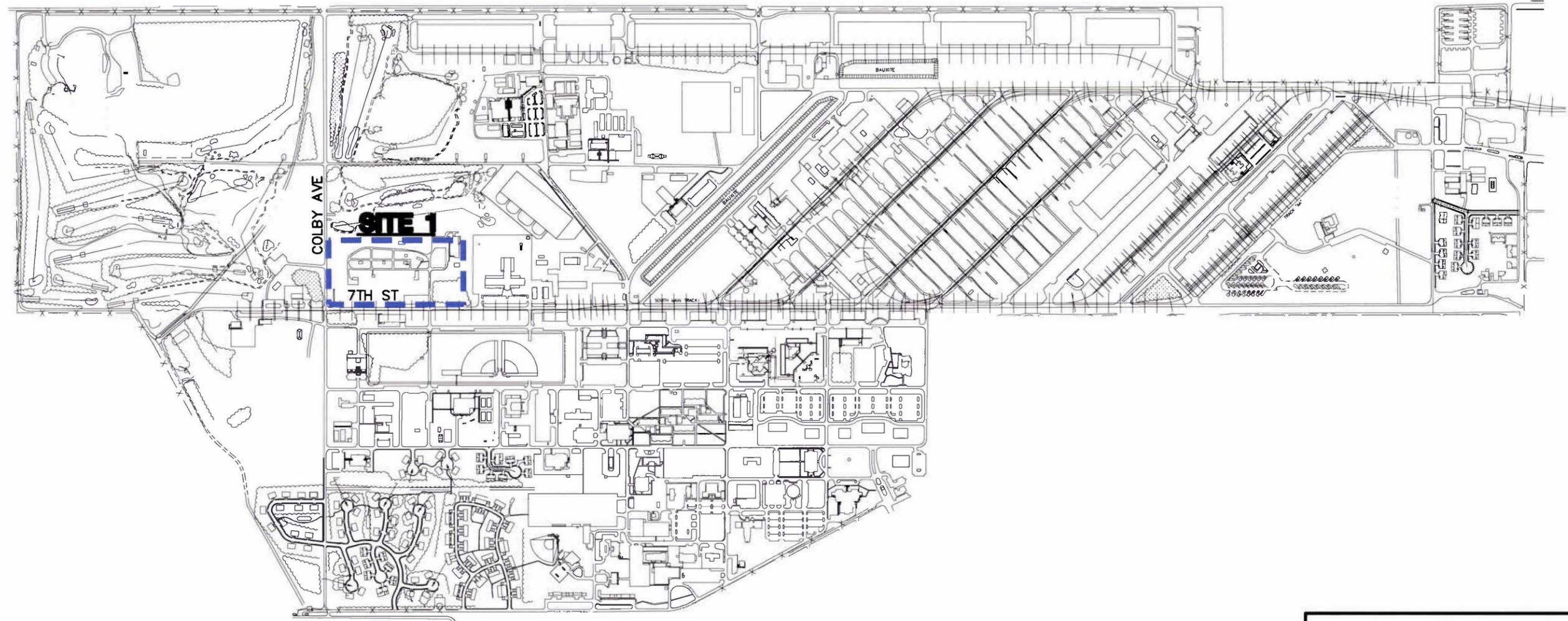
7.0 REFERENCES

USACE, 2004a. Data Item Description Number OE-25.02, *Personnel/Work Standards*, 11 February 2004.

ACRONYM LIST

CLEAN	Comprehensive Long-Term Environmental Action Navy
CTO	Contract Task Order
DID	data item description
EM	electromagnetic
GPS	global positioning satellite
NAVFAC	Naval Facilities Engineering Command
NAD	North American Datum
NCBC	Naval Construction Battalion Center
TtNUS	Tetra Tech NUS, Inc.
USACE	US Army Corps of Engineers



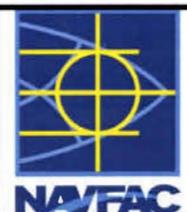


LEGEND:

— — — — — SITE LOCATION

GRAPHIC SCALE IN FEET

DRAWN BY	DATE
MF	2/27/08
CHECKED BY	DATE
REVISD BY	DATE
SCALE AS NOTED	



SITE LOCATION MAP
SITE 1 -
DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NO. 0700	
OWNER NO.	
APPROVED BY	DATE
DRAWING NO. FIGURE 1-2	REV. 0



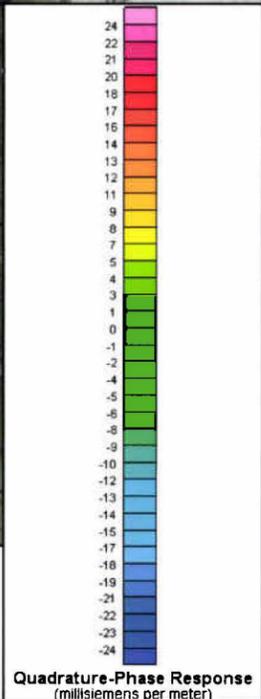
NOTE: Geometrics G858 single sensor data shown. G858 data collected along approximately 10-foot spaced survey lines (oriented north-south).

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY J. COFFMAN	DATE 2/29/08
COST SCHEDULE AREA	
SCALE AS NOTED	



TOTAL MAGNETIC FIELD COLOR CONTOUR MAP
SITE 1 - DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 6-1	REV 0



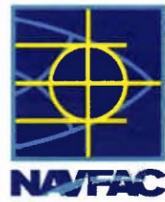
Legend

- Monitoring Well
- Road



NOTE: EM31-MK2 quadrature-phase response shown. EM31 data collected along approximately 10-foot spaced survey lines (oriented north-south).

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY J. COFFMAN	DATE 2/29/08
COST SCHEDULE AREA	
SCALE AS NOTED	



EM31 COLOR CONTOUR MAP (QUADATURE-PHASE)
SITE 1 - DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 6-2	REV 0



NOTE: EM31-MK2 in-phase response shown.
EM31 data collected along approximately 10-foot spaced survey lines (oriented north-south).

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY J. COFFMAN	DATE 2/29/08
COST SCHEDULE AREA	
SCALE AS NOTED	

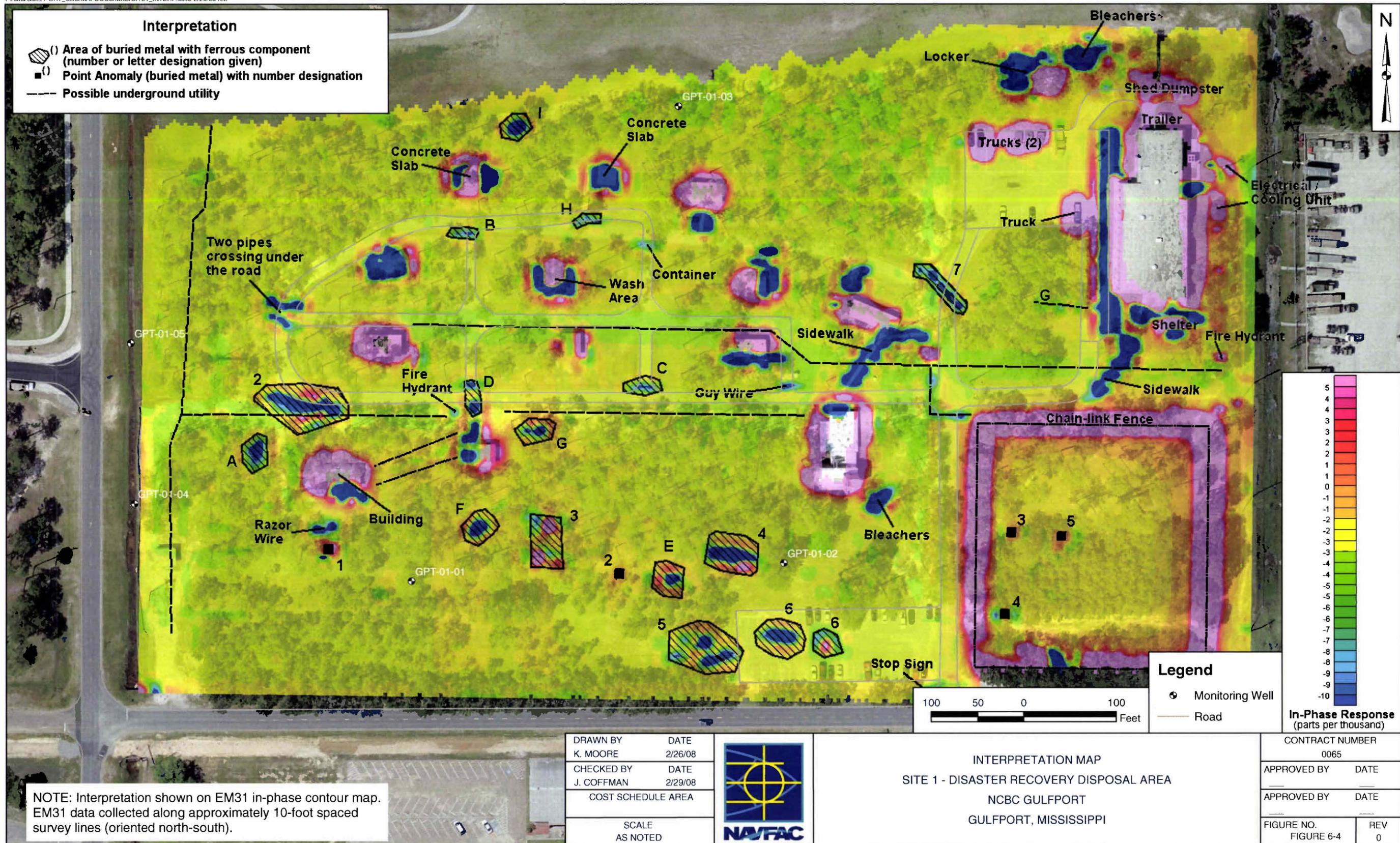


EM31 COLOR CONTOUR MAP (IN-PHASE)
SITE 1 - DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

Legend

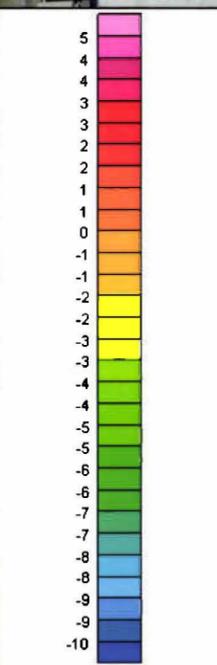
- Monitoring Well
- Road

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 6-3	REV 0



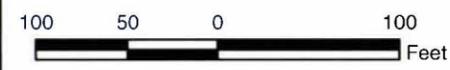
Interpretation

- (I) Area of buried metal with ferrous component (number or letter designation given)
- (I) Point Anomaly (buried metal) with number designation
- Possible underground utility



Legend

- ⊙ Monitoring Well
- Road



NOTE: Interpretation shown on EM31 in-phase contour map. EM31 data collected along approximately 10-foot spaced survey lines (oriented north-south).

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY J. COFFMAN	DATE 2/29/08
COST SCHEDULE AREA	
SCALE AS NOTED	



INTERPRETATION MAP
SITE 1 - DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 6-4	REV 0



NOTE: EM31-MK2 in-phase response shown.
EM31 data collected along one meandering path survey line.

DRAWN BY K. MOORE	DATE 2/26/08
CHECKED BY J. COFFMAN	DATE 2/27/08
COST SCHEDULE AREA	
SCALE AS NOTED	



EM31 COLOR CONTOUR MAP (IN-PHASE)
GOLF COURSE NORTH OF SITE 1 - DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI

CONTRACT NUMBER 0065	
APPROVED BY	DATE
APPROVED BY	DATE
FIGURE NO. FIGURE 6-5	REV 0

APPENDIX B

SOIL GAS SURVEY REPORTS



W. L. GORE & ASSOCIATES, INC.

100 CHESAPEAKE BLVD., P.O. BOX 10 • ELKTON, MARYLAND 21922-0010
PHONE: 410.392.7600 • FAX: 410.506.4780

GORE™ EXPLORATION SURVEY
GORE™ ENVIRONMENTAL SURVEY

April 22, 2008

Robert Fisher
Tetra Tech NUS
3360 Capital Circle NE
Suite B
Tallahassee, FL 32305

Site Reference: Site 1 – NCBC Gulfport
Gore Production Order Number: 13462081

Dear Mr. Fisher:

Thank you for choosing a GORE™ Survey.

The attached package consists of the following information (in duplicate):

- **Final report**
- **Chain of custody and analytical data table (included in Appendix A)**
- **Stacked total ion chromatograms (included in Appendix A)**

Please contact our office if you have any questions or comments concerning this report. We appreciate this opportunity to be of service to Tetra Tech, and look forward to working with you again in the future.

Sincerely,
W.L. Gore & Associates, Inc.

Hilary G. Trethewey
Environmental Project Manager

Attachments

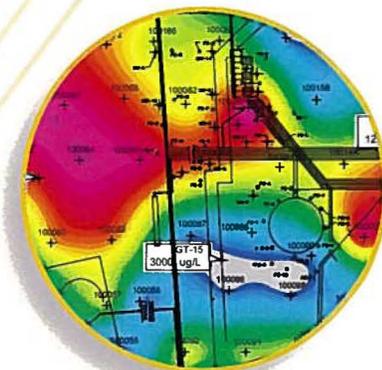
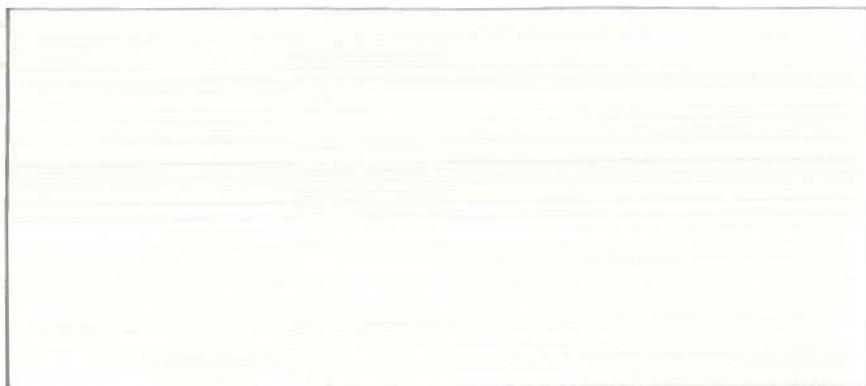
cc: GSHAW (W.L. Gore & Associates, Inc.)

S:\ENVIRONMENTAL\GORE SURVEYS\PROJECTS IN PROGRESS\13462081\080422R.DOC



GORE™ Surveys

Final Report



W. L. Gore & Associates, Inc.
Survey Products Group



W. L. GORE & ASSOCIATES, INC.

100 CHESAPEAKE BLVD., P.O. BOX 10 • ELKTON, MARYLAND 21922-0010
PHONE: 410.392.7600 • FAX: 410.506.4780

GORE™ EXPLORATION SURVEY
GORE™ ENVIRONMENTAL SURVEY

**GORE™ Surveys
Final Report**

**Site 1 – NCBC Gulfport
Gulfport, MS**

April 22, 2008

Prepared For:
Tetra Tech NUS
3360 Capital Circle NE
Suite B
Tallahassee, FL, 32305

W.L. Gore & Associates, Inc.

Written/Submitted by:
Hilary G. Trethewey, Project Manager

Reviewed/Approved by:
Jim E. Whetzel, Project Manager

Analytical Data Reviewed by:
Don D'Apollito, Chemist

This document shall not be reproduced, except in full, without written approval of W.L. Gore & Associates, Inc.

GORE™ Surveys - Final Report

REPORT DATE: 04/22/2008

AUTHOR: HGT

SITE INFORMATION

Site Reference: Site 1 – NCBC Gulfport

Gore Production Order Number: 13462087

Gore Site Code: EFN

FIELD PROCEDURES

Modules shipped: 33

Installation Date(s): 3/18 /2008

Modules Installed: 32

Field work performed by: Tetra Tech

Retrieval date(s): 4/3/2008

Modules Retrieved: 24

Modules Lost in Field: 8

Modules Not Returned: 0

Exposure Time: 16 [days]

Trip Blanks Returned: 1

Unused Modules Returned: 0

Date/Time Received by Gore: 4/8/2008 2:00 PM **By:** CW

Chain of Custody Form attached: Yes

Chain of Custody discrepancies: None

Comments:

Module 560095 was identified as a trip blank.

Modules 560060 – 064 and 560089, 560090 and 560094 were noted as “destroyed” and are considered lost in the field.

GORE™ Surveys - Final Report

ANALYTICAL PROCEDURES

W.L. Gore & Associates' Screening Module Laboratory operates under the guidelines of its Quality Assurance Manual, Operating Procedures and Methods. The quality assurance program is consistent with Good Laboratory Practices (GLP) and ISO Guide 25, "General Requirements for the Competence of Calibration and Testing Laboratories", third edition, 1990.

Instrumentation consists of state of the art gas chromatographs equipped with mass selective detectors, coupled with automated thermal desorption units. Sample preparation simply involves cutting the tip off the bottom of the sample module and transferring one or more exposed sorbent containers (sorbent, each containing engineered adsorbents) to a thermal desorption tube for analysis. Sorbent remain clean and protected from dirt, soil, and ground water by the insertion/retrieval cord, and require no further sample preparation.

Analytical Method Quality Assurance:

The analytical method employed is a modified EPA method 8260/8270. Before each run sequence, two instrument blanks, a sorbent containing 5µg BFB (Bromofluorobenzene), and a method blank are analyzed. The BFB mass spectra must meet the criteria set forth in the method before samples can be analyzed. A method blank and a sorbent containing BFB are also analyzed after every 30 samples and/or trip blanks. Standards containing the selected target compounds at five calibration levels are analyzed at the beginning of each run. The criterion for each target compound is less than 25% RSD (relative standard deviation). If this criterion is not met for any target compound, the analyst has the option of generating second- or third-order standard curves, as appropriate. A second-source reference standard, at a level of 10µg per target compound, is analyzed after every ten samples and/or trip blanks, and at the end of the run sequence. Positive identification of target compounds is determined by 1) the presence of the target ion and at least two secondary ions; 2) retention time versus reference standard; and, 3) the analyst's judgment.

NOTE: All data have been archived. Any replicate sorbent not used in the initial analysis will be discarded fifteen (15) days from the date of analysis.

Laboratory analysis: thermal desorption, gas chromatography, mass selective detection

Instrument ID: # 8 **Chemist:** DC/DD

Compounds/mixtures requested: A1

Deviations from Standard Method: None

Comments: Soil vapor analytes and abbreviations are tabulated in the Data Table Key (page 6).

GORE™ Surveys - Final Report

DATA TABULATION

CONTOUR MAPS ENCLOSED: none

NOTE: All data values presented in Appendix A represent masses of compound(s) desorbed from the GORE™ Modules received and analyzed by W.L. Gore & Associates, Inc., as identified in the Chain of Custody (Appendix A). The measurement traceability and instrument performance are reproducible and accurate for the measurement process documented. Semi-quantitation of the compound mass is based on a five-level standard calibration.

General Comments:

- This survey reports soil gas mass levels present in the vapor phase. Vapors are subject to a variety of attenuation factors during migration away from the source concentration to the module. Thus, mass levels reported from the module will often be less than concentrations reported in soil and groundwater matrix data. In most instances, the soil gas masses reported on the modules compare favorably with concentrations reported in the soil or groundwater (e.g., where soil gas levels are reported at greater levels relative to other sampled locations on the site, matrix data should reveal the same pattern, and vice versa). However, due to a variety of factors, a perfect comparison between matrix data and soil gas levels can rarely be achieved.
- Soil gas signals reported by this method cannot be identified specifically to soil adsorbed, groundwater, and/or free-product contamination. The soil gas signal reported from each module can evolve from all of these sources. Differentiation between soil and groundwater contamination can only be achieved with prior knowledge of the site history (i.e., the site is known to have groundwater contamination only).
- QA/QC trip blank modules were provided to document potential exposures that were not part of the soil gas signal of interest (i.e., impact during module shipment, installation and retrieval, and storage). The trip blanks are identically manufactured and packaged soil gas modules to those modules placed in the subsurface. However, the trip blanks remain unopened during all phases of the soil gas survey. Levels reported on the trip blanks may indicate potential impact to modules other than the contaminant source of interest.

GORE™ Surveys - Final Report

- Unresolved peak envelopes (UPEs) are represented as a series of compound peaks clustered together around a central gas chromatograph elution time in the total ion chromatogram. Typically, UPEs are indicative of complex fluid mixtures that are present in the subsurface. UPEs observed early in the chromatogram are considered to indicate the presence of more volatile fluids, while UPEs observed later in the chromatogram may indicate the presence of less volatile fluids. Multiple UPEs may indicate the presence of multiple complex fluids.
- Stacked total ion chromatograms (TICs) are included in Appendix A. The six-digit serial number of each module is incorporated into the TIC identification (e.g.: 123456S.D represents module #123456).

Project Specific Comments:

- No target compounds were detected on the trip blanks and/or the method blanks. Thus, target analyte levels reported for the field-installed modules that exceed trip and method blank levels, and the analyte method detection limit, are more likely to have originated from on-site sources.
- If the objective of the soil gas survey was to delineate the nature and extent of the contamination, then additional soil gas sampling is recommended in those areas where the color contours appear to extend into unsampled areas.

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KEY TO DATA TABLE Site 1 – NCBC Gulfport

UNITS

µg	micrograms (per sorber), reported for compounds
MDL	method detection limit
bdl	below detection limit
nd	non-detect

ANALYTES

TPH	total petroleum hydrocarbons
BTEX	combined masses of benzene, toluene, ethylbenzene and total xylenes (Gasoline Range Aromatics)
BENZ	benzene
TOL	toluene
EtBENZ	ethylbenzene
mpXYL	m-, p-xylene
oXYL	o-xylene
C11,C13&C15	combined masses of undecane, tridecane, and pentadecane (C11+C13+C15) (Diesel Range Alkanes)
UNDEC	undecane
TRIDEC	tridecane
PENTADEC	pentadecane
TMBs	combined masses of 1,3,5-trimethylbenzene and 1,2,4-trimethylbenzene
135TMB	1,3,5-trimethylbenzene
124TMB	1,2,4-trimethylbenzene
ct12DCE	cis- & trans-1,2-dichloroethene
t12DCE	trans-1,2-dichloroethene
c12DCE	cis-1,2-dichloroethene
NAPH&2-MN	combined masses of naphthalene and 2-methyl naphthalene
NAPH	naphthalene
2MeNAPH	2-methyl naphthalene
MTBE	methyl t-butyl ether
PHEN	phenanthrene
11DCA	1,1-dichloroethane
CHC13	chloroform
111TCA	1,1,1-trichloroethane
12DCA	1,2-dichloroethane
CC14	carbon tetrachloride
TCE	trichloroethene
OCT	octane
PCE	tetrachloroethene
CIBENZ	chlorobenzene
14DCB	1,4-dichlorobenzene
11DCE	1,1-dichloroethene
112TCA	1,1,2-trichloroethane
1112TetCA	1,1,1,2-tetrachloroethane
1122TetCA	1,1,2,2-tetrachloroethane
13DCB	1,3-dichlorobenzene
12DCB	1,2-dichlorobenzene

BLANKS

TBn	unexposed trip blanks, travels with the exposed modules
method blank	QA/QC module, documents analytical conditions during analysis

APPENDIX A:

1. CHAIN OF CUSTODY
2. DATA TABLE
3. STACKED TOTAL ION CHROMATOGRAMS

**GORE-SORBER® Screening Survey
Installation and Retrieval Log**

SITE NAME & LOCATION

*Site 1 - NCBC Gulfport
Gulfport, MS*

Page 1 of 1

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate)			MODULE IN WATER (check one)		COMMENTS
				LPH	ODOR	NONE	YES	NO	
1.	560060	2/23 1615	destroyed						
2.	560061	2/23 1626	destroyed						
3.	560062	2/23 1631	destroyed						
4.	560063	2/23 1659	destroyed						
5.	560064	2/23 1715	destroyed						
6.	560065	3/18 0854	4/3 1616			✓	✓		2
7.	560066	3/18 0859	4/3 1615			✓	✓		2
8.	560067	3/18 0905	4/3 1600			✓	✓		B
9.	560068	3/18 0915	4/3 1641			✓	✓		C
10.	560069	3/18 0932	4/3 1642			✓	✓		G
11.	560070	3/18 0935	4/3 1637			✓	✓		3
12.	560071	3/18 1010	4/3 1633			✓	✓		3
13.	560072	3/18 1020	4/3 1650			✓	✓		E
14.	560073	3/18 1030	4/3 1653			✓	✓		4
15.	560074	3/18 1040	4/3 1655			✓	✓		4
16.	560075	3/18 1050	4/3 1658			✓	✓		6
17.	560076	3/18 1055	4/3 1704			✓	✓		7
18.	560077	3/18 1059	4/3 1705			✓	✓		7
19.	560078	3/18 1215	4/3 1709			✓	✓		G
20.	560079	3/18 1200	4/3 1711			✓	✓		G
21.	560080	3/18 1215	4/3 1708			✓	✓		G
22.	560081	3/18 1225	4/3 1618			✓	✓		2
23.	560082	3/18 1235	destroyed			✓	✓		A
24.	560083	3/18 1245	4/3 1621			✓	✓		1
25.	560084	3/18 1255	4/3 1628			✓	✓		F
26.	560085	3/18 1305	4/3 1643			✓	✓		
27.	560086	3/18 1425	4/3 1646			✓	✓		
28.	560087	3/18 1450	4/3 1613			✓	✓		
29.	560088	3/18 1459	4/3 1610			✓	✓		
30.	560089	3/18 1552	destroyed			✓	✓		5
31.	560090	3/18 1559	destroyed			✓	✓		
32.	560094	3/18 1610	destroyed			✓	✓		
33.	560095								Trip Blank
34.									
35.									
36.									
37.									
38.									
39.									
40.									
41.									
42.									

GORE(TM) SURVEYS ANALYTICAL RESULTS
TETRA TECH NUS, TALLAHASSEE, FL
GORE STANDARD TARGET VOCs/SVOCs (A1)
SITE 1 - NCBC GULFPORT, GULFPORT, MS
SITE EFN - PRODUCTION ORDER #13462081

DATE ANALYZED	SAMPLE NAME	TPH, ug	BTEX, ug	BENZ, ug	TOL, ug	EtBENZ, ug	mpXYL, ug	oXYL, ug	C11, C13, &C15, ug	UNDEC, ug	TRIDEC, ug	PENTADEC, ug	TMBs, ug
	MDL=			0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.01	
04/15/08	560065	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560066	1.51	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560067	0.22	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560068	0.03	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560069	0.08	0.21	nd	0.21	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560070	12.30	nd	nd	nd	nd	nd	nd	0.09	0.08	0.01	nd	nd
04/15/08	560071	0.17	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560072	0.65	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560073	0.21	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560074	0.10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560075	0.22	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560076	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560077	0.08	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560078	0.32	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560079	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560080	0.16	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560081	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560082	0.03	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560083	0.15	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560084	0.16	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560085	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560086	0.01	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560087	0.03	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560088	0.02	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	560095	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/14/08	method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
04/15/08	method blank	0.00	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
	Maximum	12.30	0.21	0.00	0.21	0.00	0.00	0.00	0.09	0.08	0.01	0.00	0.00
	Standard Dev.	2.49	0.04	0.00	0.04	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00
	Mean	0.69	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GORE(TM) SURVEYS ANALYTICAL RESULTS
TETRA TECH NUS, TALLAHASSEE, FL
GORE STANDARD TARGET VOCs/SVOCs (A1)
SITE 1 - NCBC GULFPORT, GULFPORT, MS
SITE EFN - PRODUCTION ORDER #13462081

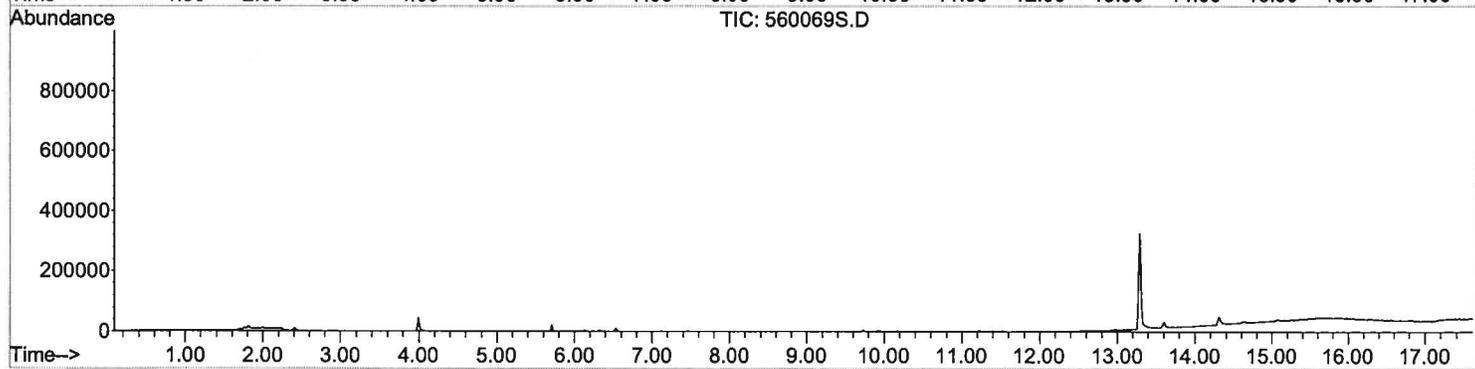
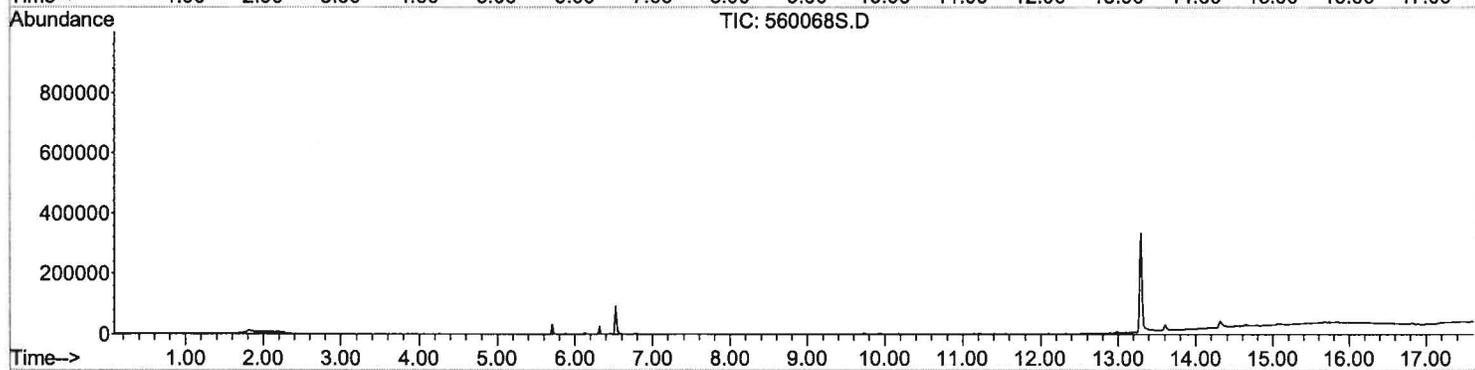
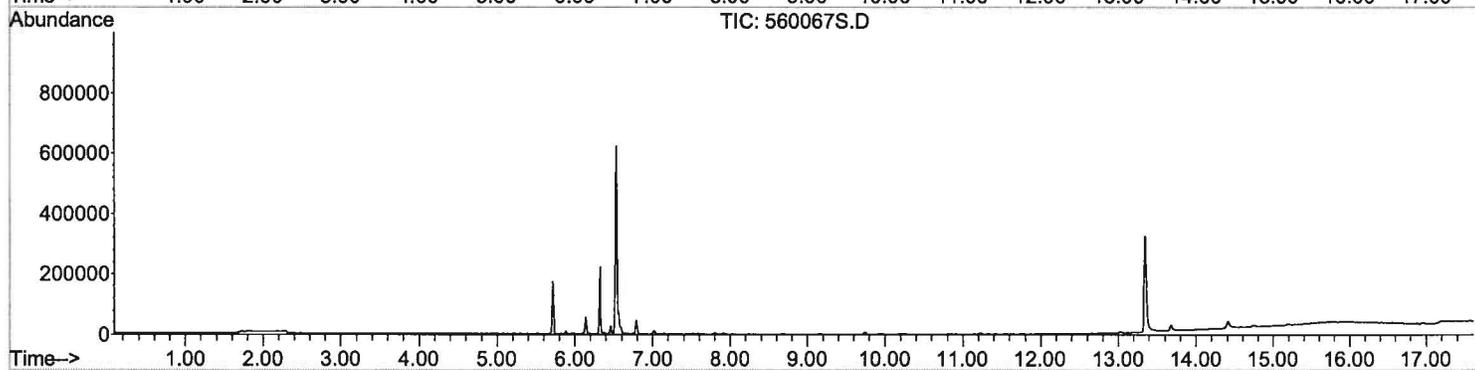
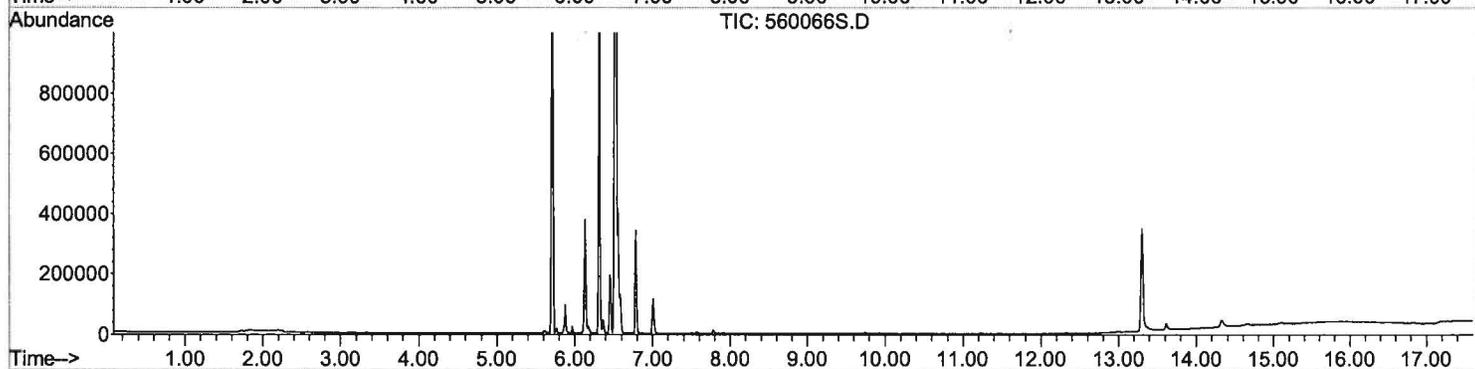
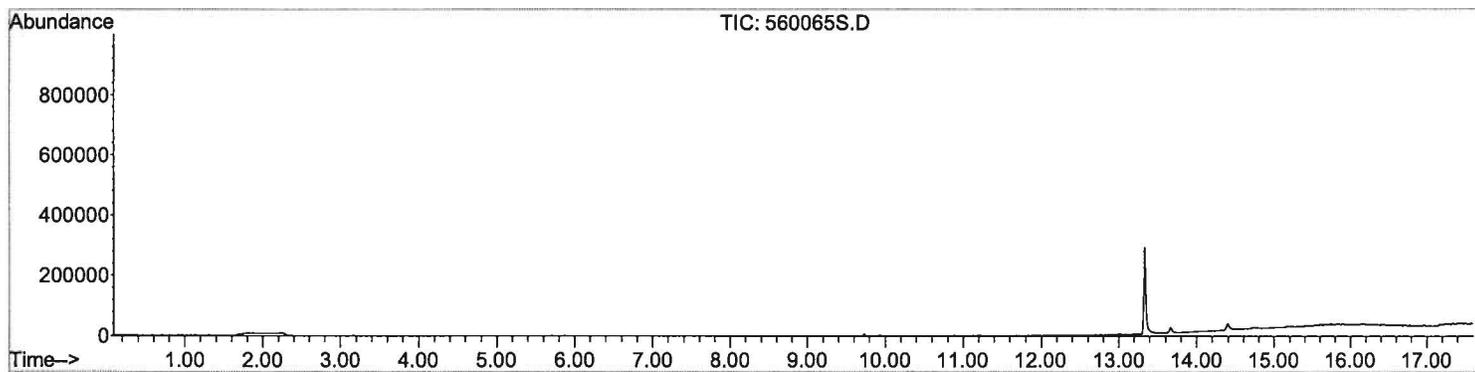
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MDL=	0.01	0.01		0.02	0.02		0.02	0.01	0.02	0.02	0.05	0.02	0.01	0.01
560065	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560066	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560067	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560068	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560069	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560070	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560071	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560072	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560073	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560074	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560075	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560076	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560077	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560078	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560079	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560080	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560081	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560082	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560083	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560084	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560085	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560086	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560087	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560088	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560095	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Dev.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mean	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

No mdl is available for summed combinations of analytes. In summed columns (eg., BTEX), the reported values should be considered ESTIMATED if any of the individual compounds were reported as bdl.

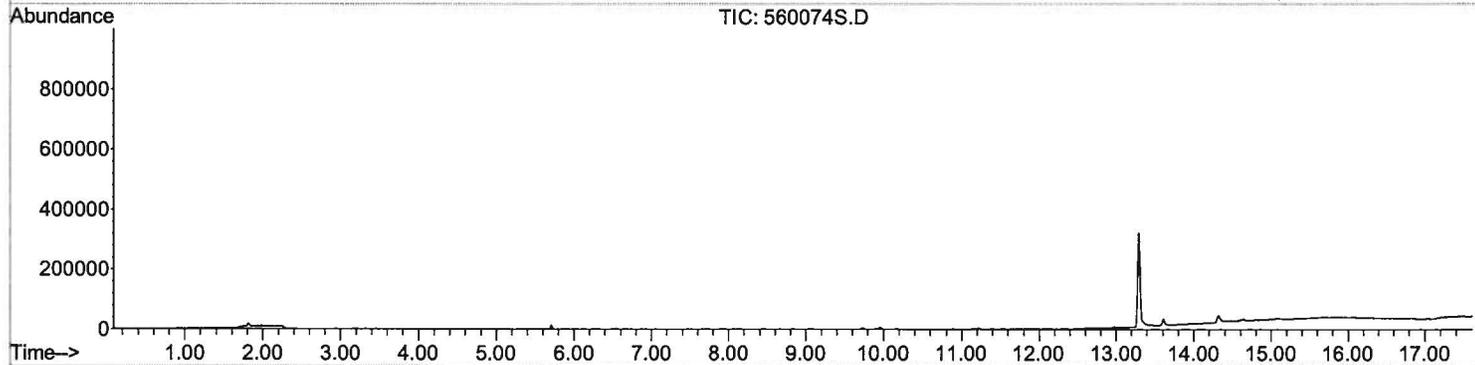
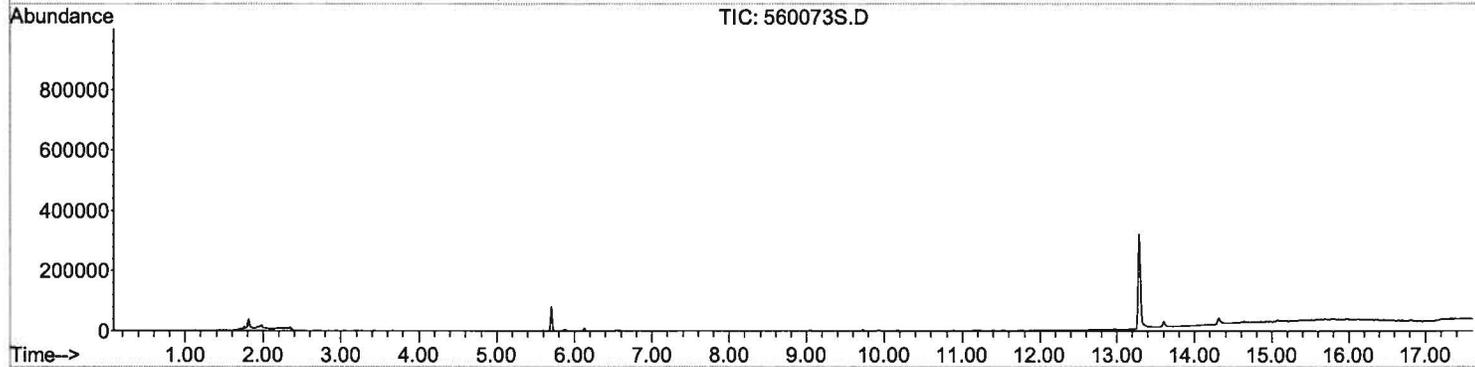
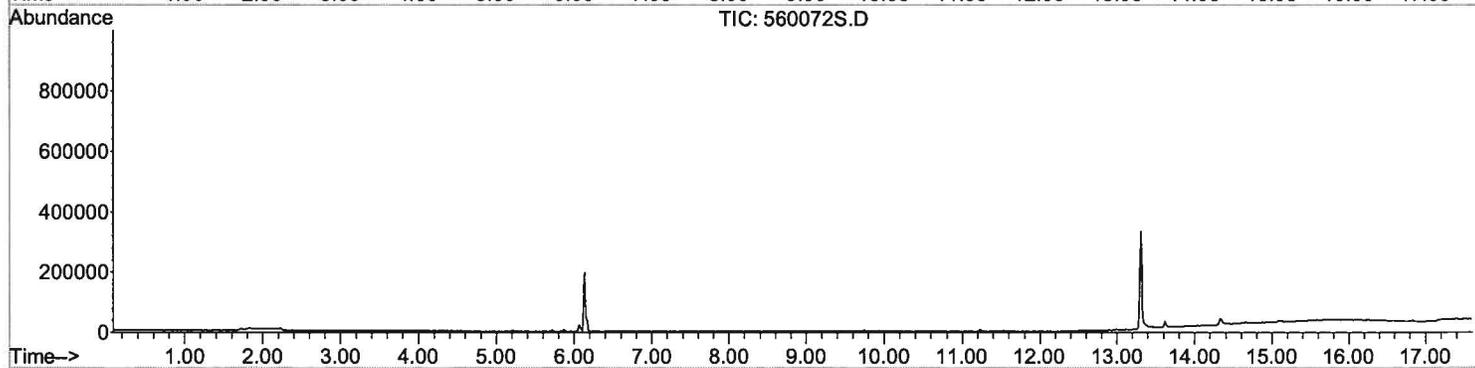
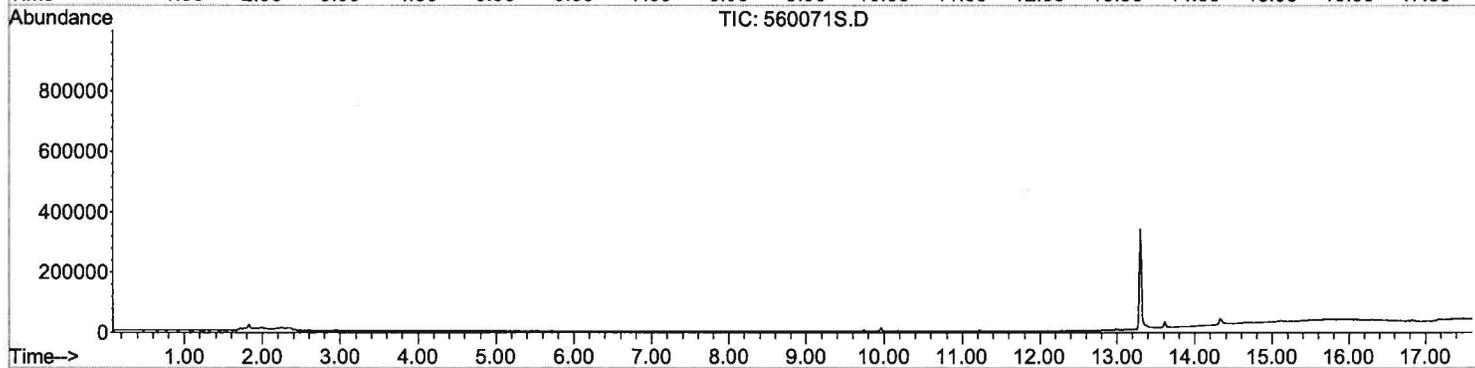
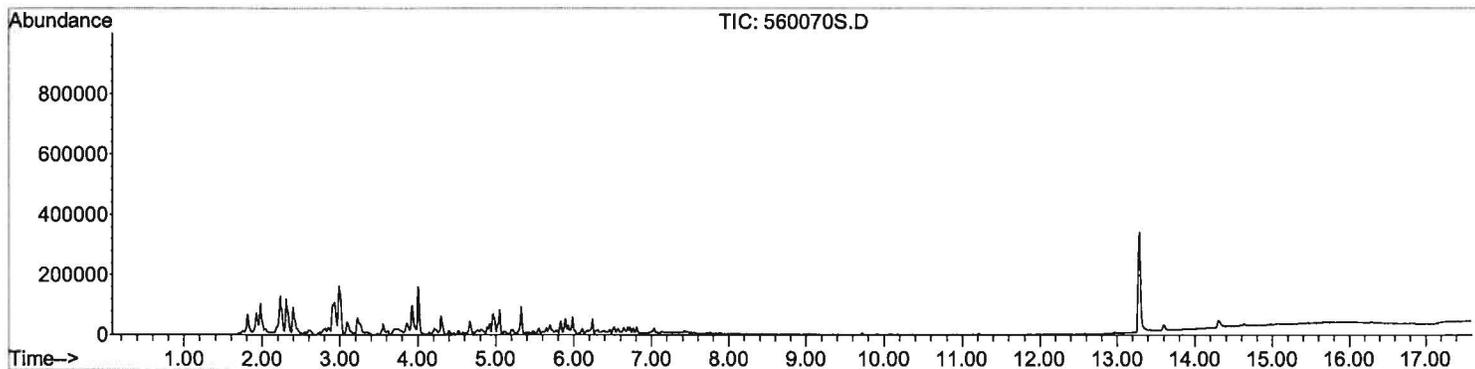
GORE(TM) SURVEYS ANALYTICAL RESULTS
TETRA TECH NUS, TALLAHASSEE, FL
GORE STANDARD TARGET VOCs/SVOCs (A1)
SITE 1 - NCBC GULFPORT, GULFPORT, MS
SITE EFN - PRODUCTION ORDER #13462081

SAMPLE NAME	OCT, ug	PCE, ug	14DCB, ug	CHCl3, ug	CCl4, ug	112TCA, ug	CIBENZ, ug	1112TetCA, ug	1122TetCA, ug	13DCB, ug	12DCB, ug
MDL=	0.01	0.02	0.01	0.05	0.05	0.05	0.01	0.01	0.05	0.01	0.05
560065	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560066	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560067	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560068	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560069	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560070	0.23	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560071	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560072	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560073	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560074	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560075	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560076	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560077	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560078	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560079	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560080	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
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560083	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560084	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560085	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560086	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560087	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560088	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
560095	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
method blank	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Maximum	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Dev.	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mean	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

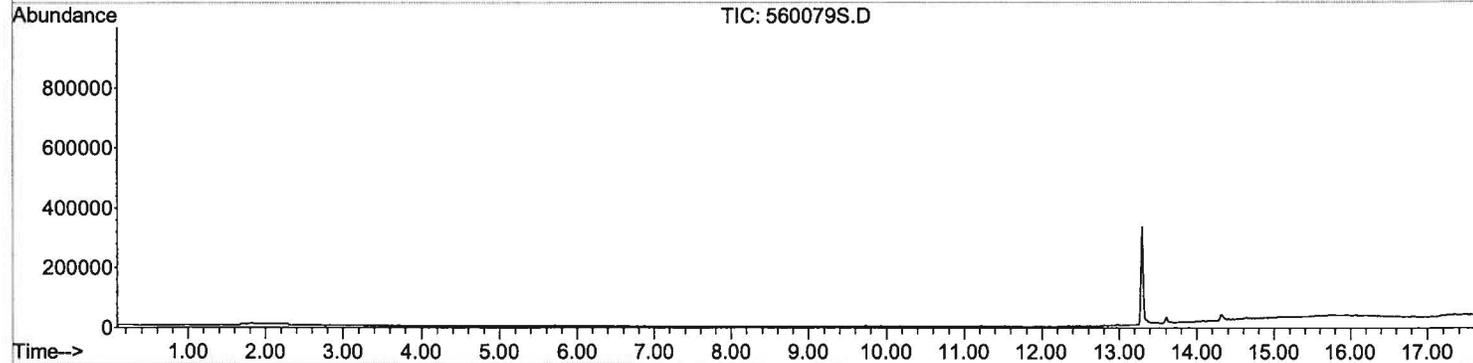
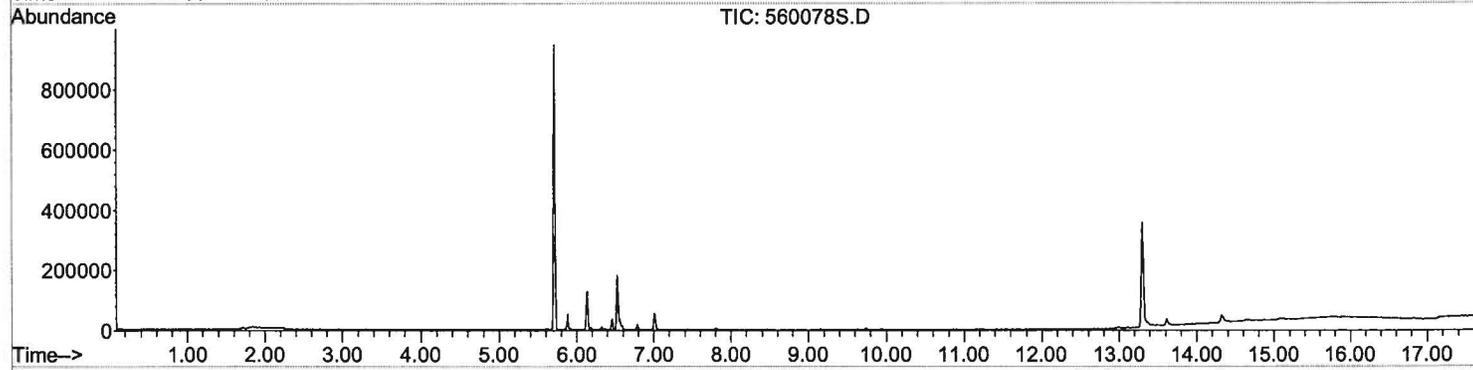
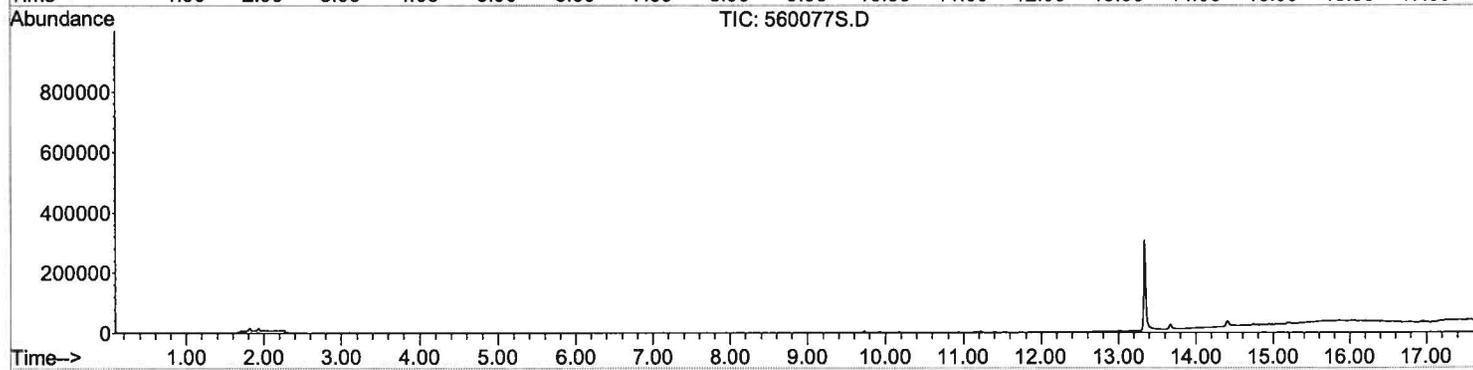
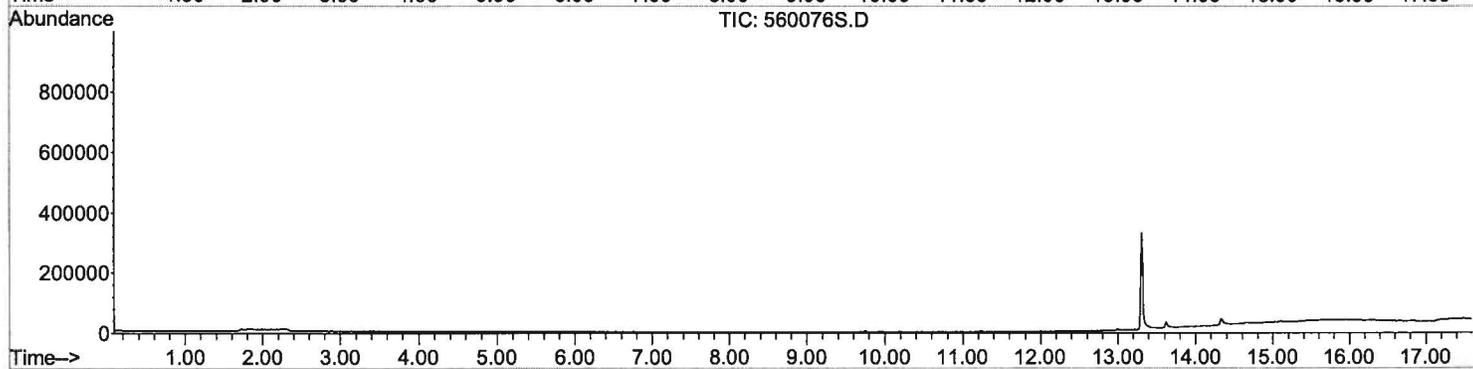
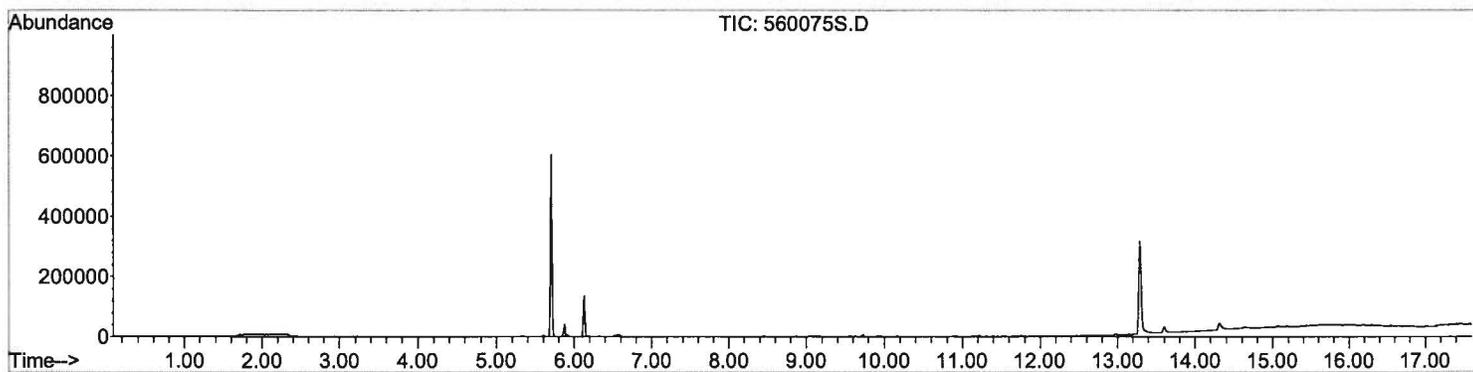
TIC-SITE CODE EFN- PRODUCTION ORDER #13462081
IN NUMERICAL ORDER



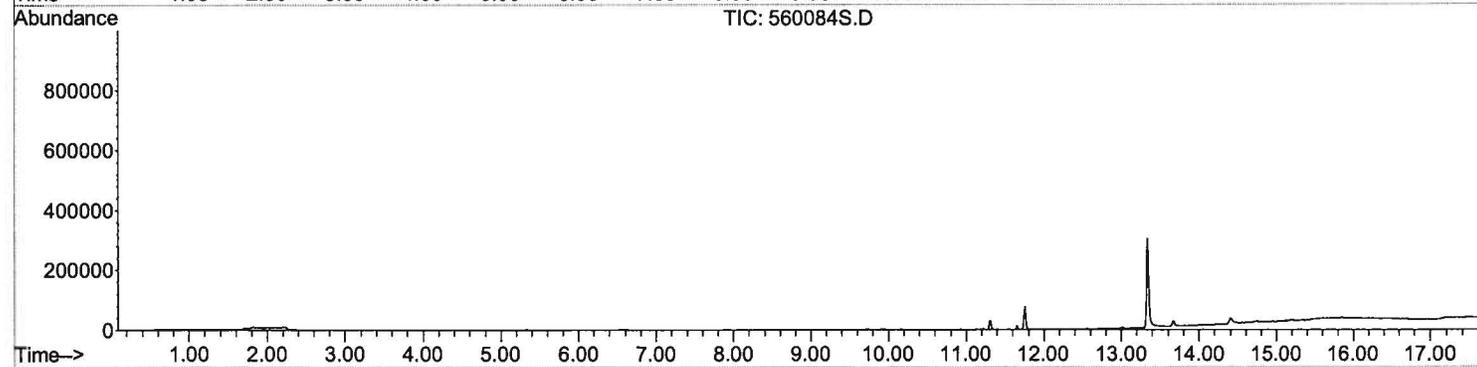
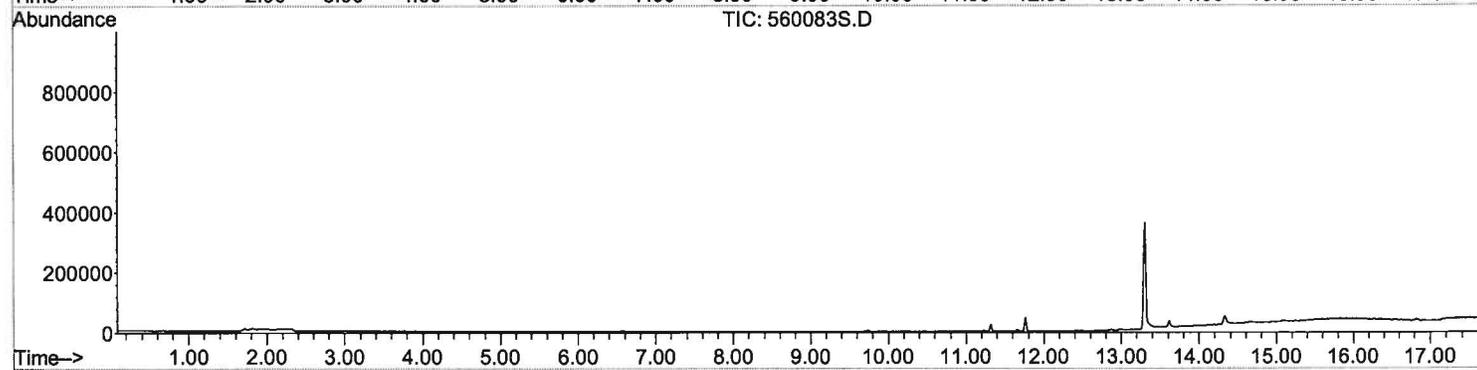
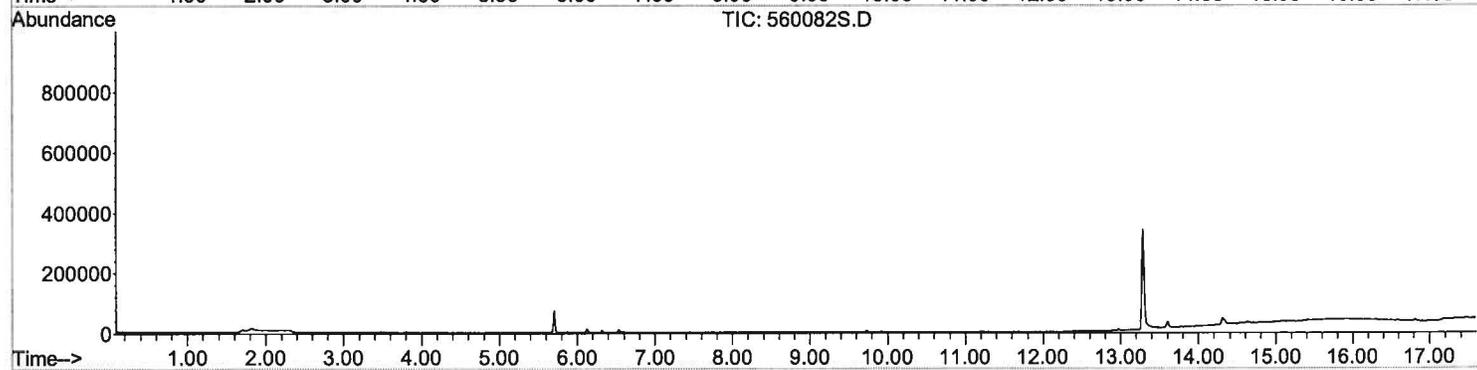
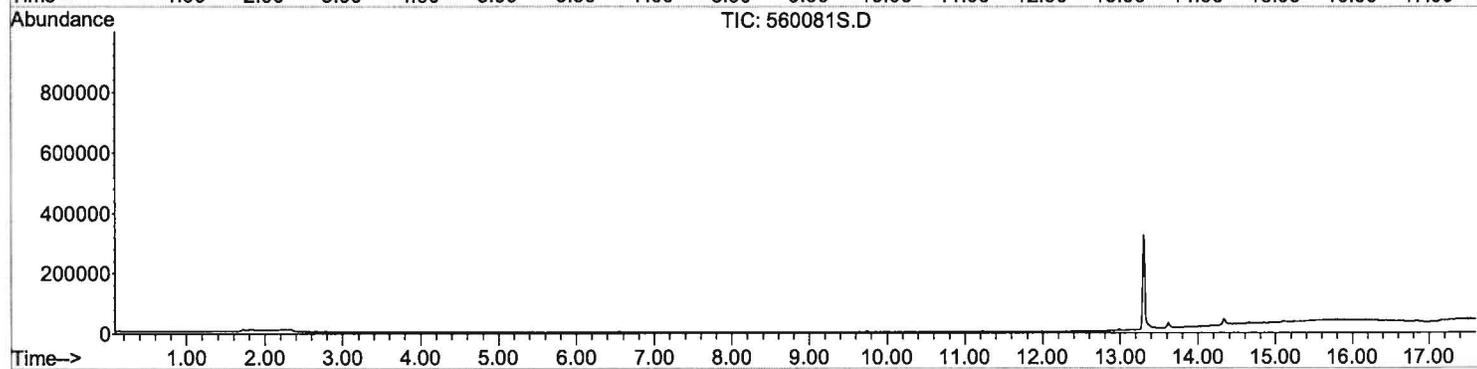
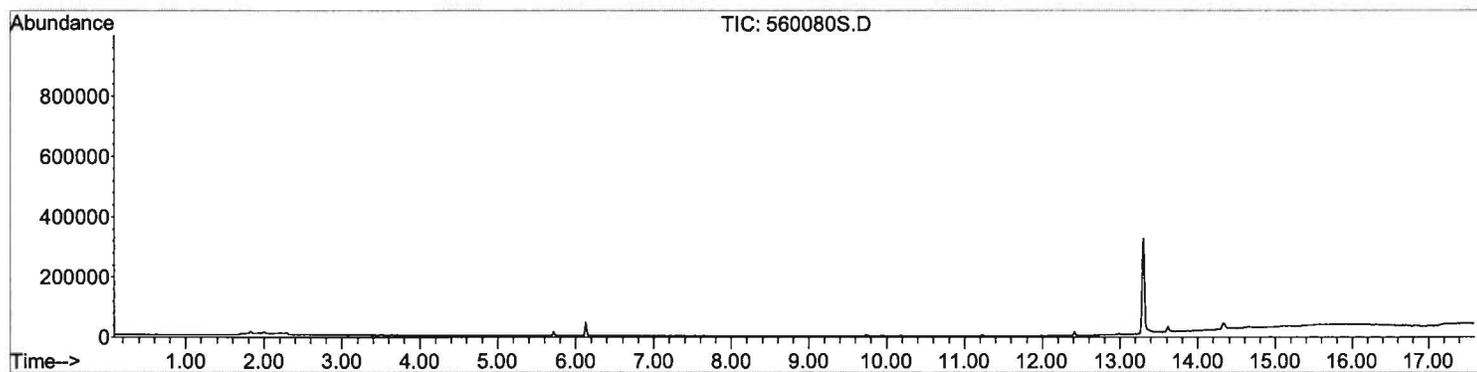
TIC-SITE CODE EFN- PRODUCTION ORDER #13462081
IN NUMERICAL ORDER



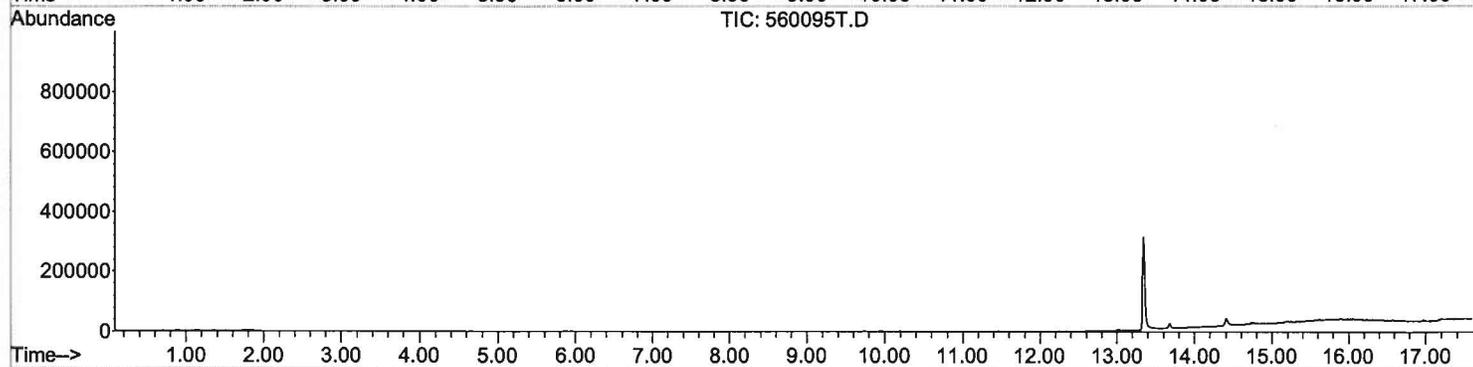
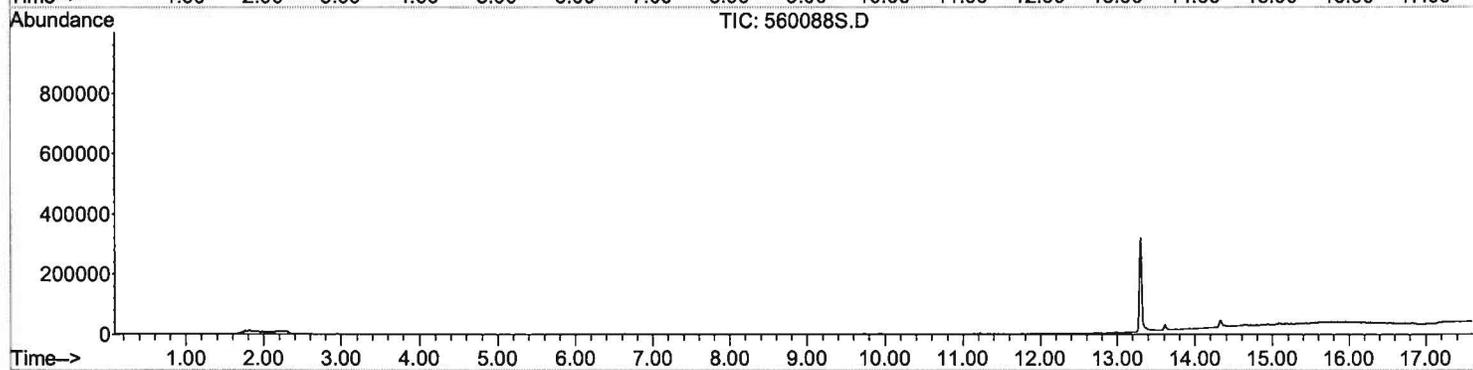
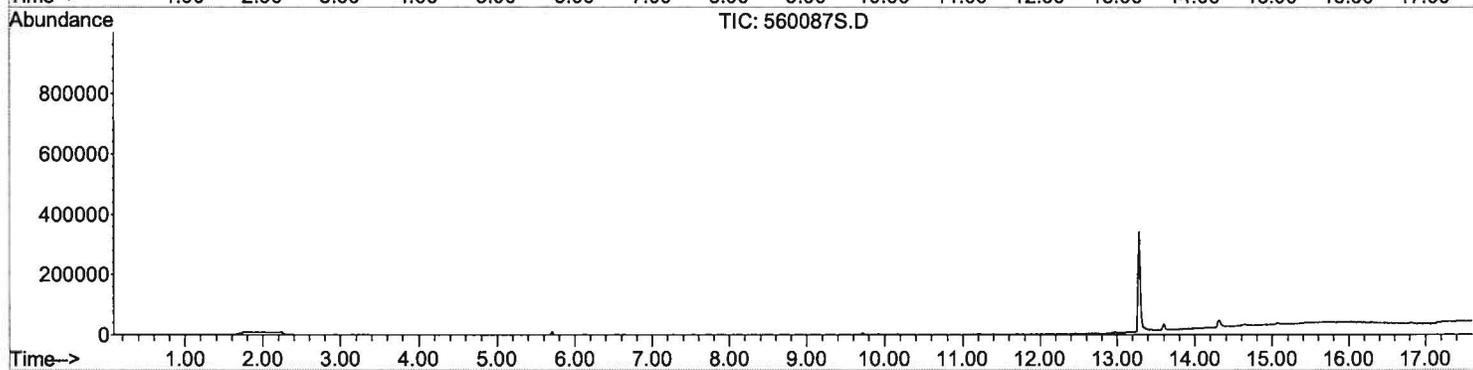
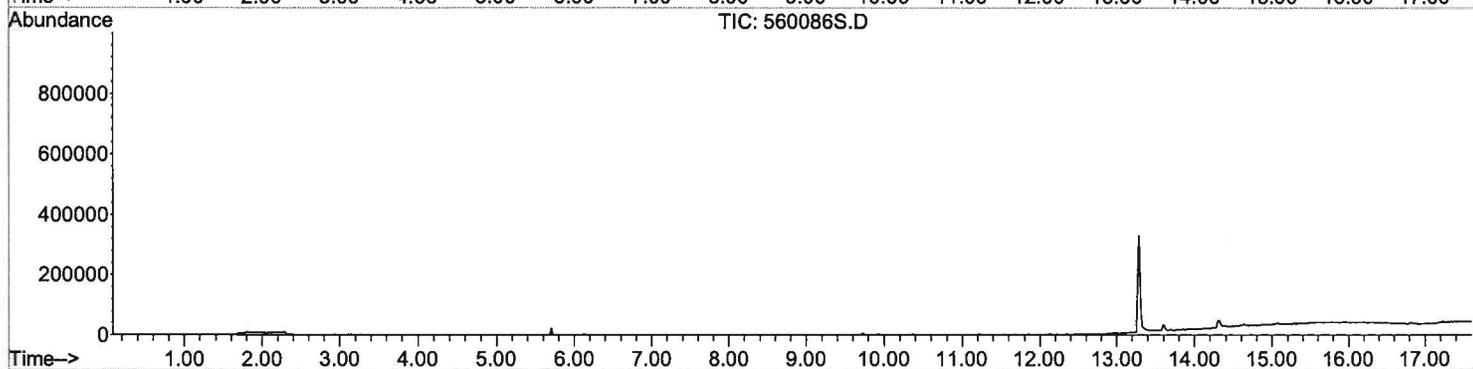
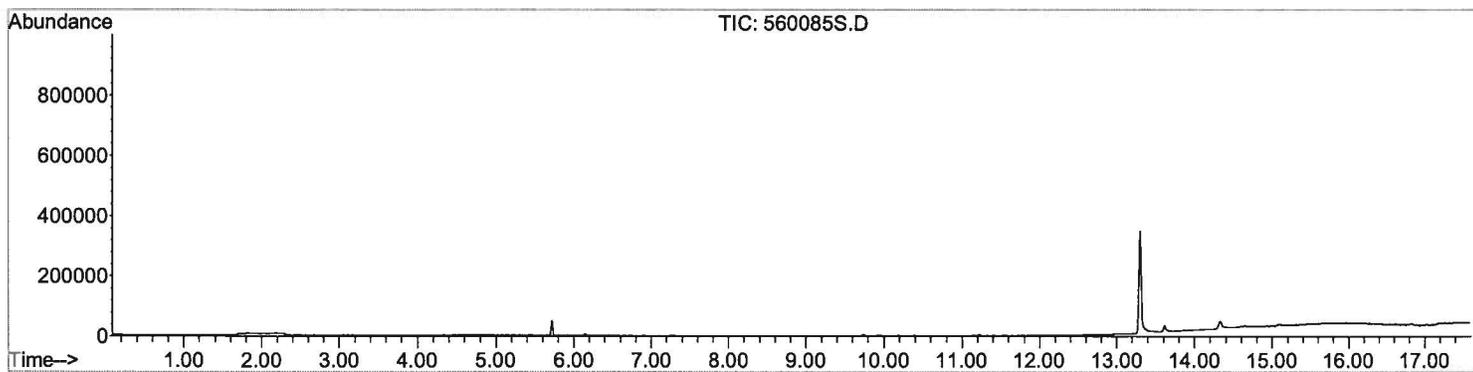
TIC-SITE CODE EFN- PRODUCTION ORDER #13462081
IN NUMERICAL ORDER



TIC-SITE CODE EFN- PRODUCTION ORDER #13462081
IN NUMERICAL ORDER



TIC-SITE CODE EFN- PRODUCTION ORDER #13462081
IN NUMERICAL ORDER



APPENDIX C

FIELD DATA



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 1126 00700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730 DT

BORING No.: 01-SB-03
 DATE: 05-10-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)					
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**		
				0			Hand Auger to 4' To clear utilities								
				4			4-5' Brown Med Fine		4-5'						
				5			Sand.		0.0 PPM						
				|			5-8' Light Brown Grey Med-Med Fine Sand								
					10			8-10' DK Brown/Black fine sand w/silt & Biotics? Not Grd surface		5-10' 1.2 PPM					
				|			10-12.5 Same as above								
					15			12.5-15 Poorly Sorted Poorly Graded sand Coarse-Med w/gravel Clasts		10-15 0.0 PPM					
				|			Same as above.		15-17.5 0.5 PPM						
					17.5										
				|			Tan/Brown Med Fine		17.5-20						
					20			Sand.		1.2 PPM					
				|			Light Grey-white Fine-Med Fine Sand.		20-22.5 1.7 PPM						
					22.5										
				|			Same as above.		22.5-25.0 3.5 PPM						
					25										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 01-SB-03
 DATE: 5-10-08
 GEOLOGIST: J. D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (FT.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/FT.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)									
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**						
				25			6" Clay Sand Grey												
							25.5-30' Green												
							Grey Clay w/silt												
							Silt Decreases w/ Depth.			25-25.5									
				30						7.8 PPM									
							Soil Sample 21-26												
							Water Sample 21-25												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 2 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 01-SB-02
 DATE: 5-10-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)								
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**					
				0			Hand Auger - 4'											
							4" Biotic Surface Soil											
							White Sand M-MF											
				4					4-5'									
				5			Tan Brown Sand Med Fine		1.3 PPM									
				10			Tan/Biege Brown Med Fine - Med Sand Wet											
							@ 5.5-6 ft		5-10'									
				12.5			Same as above.		10-12.5'									
									1.1 PPM									
				15			Brown - Rusty Brown Med Fine Sand w/ coarse sand clasts		12.5-15'									
									0.0 PPM									
				17.5			Same as above		15-17.5'									
									0.0 PPM									
				20			Same as above		17.5-20									
									0.0 PPM									
				22.5			Fouled Tooling Tan Brown Sand Med Fine - Med.		20-22.5									
									0.0 PPM									
				25			Tan Brown Sand Med - Med Fine w/ coarse clasts < 2% vol.		22.5-25.0									
									0.0 PPM									

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 2 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 01-SB-02
 DATE: 5-10-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**
				25			25-26 grey sand med		25-27.5'				
				27.5			26-27.5 green grey clay w/silt.		0.0 PPM				
									26-27.5				
							Soil Sample 3-8'						
							Water Sample 3-7'						

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area
 Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 01-SB-01
 DATE: 5-10-08
 GEOLOGIST: S.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)			
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Drifter BZ**
				0			4" Biotic Sand/soil Brown/tan med fine Sand $\approx 5'$		Hand Auger 0-4'				
				5			(		4-5' 0.0 PPM				
				10			5-6' Dark Grey Med fin Sand w/silt 6-10 Grey Brown Med Fine Sand (fill?)		5-10" 0.0 PPM				
				12.5			Tan med-med fine Sand 10-12.5'		10-12.5' 2.8 PPM				
				15			Tan-Brige Med fine Sand. (Not Ground)		12.5-15' 0.2 PPM				
				17.5			Rusty Brown Med -Med Fine Sand		15-17.5' 0.4 PPM				
				20			Brown-Rusty Brown Med Fine Sand.		17.5-20' 0.0 PPM				
				22.5			Brown Med fine Sand. w/gravel cists		20-22.5' 4.0 PPM				
							Fouled Tooling NO Recovery						

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3w
 DRILLING RIG: DP-7730PP

BORING No.: 01-SB-01
 DATE: 5-10-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)					
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**		
				25			25-26.5 Same as above								
				}			26.5-30 Poorly Sorted								
								Poorly graded Sand							
								Gravel-Fine Sand		25-30'					
				30			Brown-Rusty Brn.		0.0 PPM						
							30-31 Same as above		30-34'						
								31-34 Tan/gray Med Sand.		0.0 PPM					
				34			34-35 Green		34-35'						
				35			Gray clay w/silt.		0.1 PPM						
									Clay interface @ 34'						
							Soil VOA Taken From 20-22.5								
							Aqueous VOA Taken From 19-23'								

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 2 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730 DT

BORING No.: GPT-01-QT-04
 DATE: 5-6-08
 GEOLOGIST: J. D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)								
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**					
				0			Rusty Med fine Sand - 3'											
				5			3-5 Tan Brown med fine Sand											
				10			Tan-Brown Fine-Med Fine Sand Seasonal High Discoloration @ 6.5ft to 7ft											
				15			Tan Brown Med Fine - fine Sand / 12.5ft 12.5 / same as above 1 above 15		2.5ft Runs To Avoid Fouling Tooling									
				20			Same as above 17.5 Tan Brown Med 1 fine-fine Sand 20 Same as above.		Flowing Sands Encountered @ 15ft 5ft of sand in tooling									
				25			Grey Wet Poorly Sorted Very Poorly graded Sand 22.5 Grey Med fine Sand w/ gravel Clasts < 2% vol.		25 Run 5ft Recovery flowing Sands Clay in sample Tip @ 25ft									

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm): 0,0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 2 Cul Sport
 PROJECT NUMBER: 112C007001
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730 DT

BORING No.: 6PT-01-AT-03
 DATE: 5-7-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Purcay

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
				0			4" Biotic Surface Soil.							
				|			4"-5 Tan Brown Med Fine Sand							
								2 @ 4 ft						
				5			5-7' same @ above.							
				|			7-8.5 Tan - Bigge Med Fine - Fine Sand							
								8.5-10 Brown Rusty Med Fine Sand.						
				10			Dk Brown - Rusty Dk Brown Med Fin - Fine Sand. Diagenetic Zone staining of Sands		20.6 PPM Borehole					
				|					0.0 AA					
				15			No - Little Recovery Flowing Fine Grained Sand Fouled Tooling							
								Poorly Graded Very Poorly Sorted Sand gravel - Fine Grained.						
								Brn - Rusty Brn Bottom 6" Brn Med Fine Sand.						
				25										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0.0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730 DT

BORING No.: 6PT-01-QT-03
 DATE: 5-7-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)				
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**	
				25			Sealed Tooling Flowing Sands							
				30										
				35			Green Grey CISA w/silt - clay w/silt Aquacub Sample Depth Aqu 31-27ft							
				40										
				45										
				50										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm): 0.0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 2 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 6PT-01-QT-02
 DATE: 5-6-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)							
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**				
				0			Top 5" Biotics Soil										
							.5' - 3.5 Tan Brn Med Fin- Fine Sand w/silt										
				5			3.5-5 Tan Brn Molt Sand		3 @ 4.5								
							Brown - Dark Rusty Brown Med Fine - Med Sand fine ? Tanic Water ? High Iron										
				10			Scaled Tooling Sample is same as above.										
				15			15-19.5 ft Same @ above 19.5-20f Encounter Massive Green Grey Clay w/silt.										
				20			Green Grey Clay w/silt Massive No Sad. Structure. Aqua Clud.										
				25													

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Remarks: _____

Drilling Area Background (ppm): 0.0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 6PT-01-QT-01
 DATE: 5-06-08
 GEOLOGIST: J.P. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)							
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**				
				0			Top 4" Biotics										
				1			Tan Brown Med-Med Fine Sand wet @ 4'										
				5.5			5.5-6.0 Tan Brown Med Fine Sand wet										
				10.5			6-10' Dark Brn - Brn Med Fine Sand Wet.										
				15			10-14.5 Same as above										
				15			14.5-15.5 Rusty Brown Med-Med Fine Sand.										
				20			Same as above										
				20			↓										
				25			20-21 Same as above										
				25			21-23 Poorly Sorted Course-Med Fine Sand w/ Gravel Clasts										
				25			23.5-25 Grey/white Med Sand.										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 6PT-01-QT-01
 DATE: 5-6-08
 GEOLOGIST: J.P. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)									
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**						
				25			25-27' Some white - light grey Med grey Sand												
				30			27-27.5 Dk grey Med fine Sand												
							27.5-30 Green grey-green Clay - SACL												
							27.5-35' Green Grey Clay w/silt Marine/ Brackish Clay - @ Aqua Clud -> Water Sample @ 27.5-28.5 ft.												

* When rock coring, enter rock brokenness.
 ** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Converted to Well: Yes _____ No _____ Well I.D. #: _____

Drilling Area Background (ppm):



BORING LOG

PROJECT NAME: Site 2 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M&W
 DRILLING RIG: DP-7730DT

BORING No.: 01-SB-06
 DATE: 5-11-08
 GEOLOGIST: S.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)								
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**					
				0			Hand Auger 0-4'											
				}			Tan Brown Sand -3'											
								3-4 Rusty Sandy clay										
				4			clayey Sand.		4-5'									
				5			Rusty Brown med-med fine Sand @ 5'		0.0 PPM									
				}			5-7' Light Tan Biege med Sand		flowing sands @ 5-10' interval									
								7-10' DK Brown/Rusty Brown med fine-med Sand		5-10'								
				10					0.0 PPM									
				}			10-11' same as above											
								11-15' Tan-Biege med-med fine Sand.										
				15					10-15'									
				}			15-18' same as above											
								18-20' white-Light grey med sand.										
				20					15-20'									
				}			light grey - Tan grey med fine Sand.											
				25					20-25'									
									0.0 PPM									

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area
 Background (ppm): 0.0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport
 PROJECT NUMBER: 112600700
 DRILLING COMPANY: M3W
 DRILLING RIG: DP-7730DT

BORING No.: 01-55-05
 DATE: 5-11-08
 GEOLOGIST: J.D. Spalding
 DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)									
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**						
				0			Hand Auger 0-4'												
				}			4" surface Soil 4" Light Tan Med-Med Fine San.												
					4			4.5'		4-5'									
				5			Brown-DK Brown med fine - Med Sand		0.0 PPM										
				}			5-7' Same as above												
								7-8' Silty Clay Sand Grey											
					10			8-10' Tan Brn Med Fine Sand.		5-10' 0.0 PPM									
				}			Same as above		10-12.5' 0.0 PPM										
					12.5														
				}			Rusty Brown Borty sorted sand med-gravel		12.5-15' 0.0 PPM										
					15														
				}			Same as above		15-17.5' 0.0 PPM										
					17.5'														
				}			Faulted Tooling NO Recovery Sand observed @ Both Ends of Tooling		17.5-20' No Recovery										
					20'			white Med Sand		20-22.5'									
				22.5'			6" Green Grey Clay @ 22'		0.0 PPM										

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area
 Background (ppm): 0.0

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport BORING NUMBER: 01-SB-07
 PROJECT NUMBER: 112600700 DATE: 5-12-08
 DRILLING COMPANY: M3W GEOLOGIST: J.P. Spalding
 DRILLING RIG: DP-Ø 7730 DT DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Fl.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)								
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**					
				0			Hand Auger from 0-4'											
							5" Biotic tan Brown Sand 5"-4' light grey											
				4			White fine Sand.		4-5'									
				5			light grey-white fine sand w/ silt		0.7 PPM									
				10			Tan Brown med fine - fine grained sand w/ silt @ 5' ish.		5-10'									
									0.0 PPM									
				15			Brown med fine - med sand. w/ gravel clasts < 2%		10-15'									
									0.0 PPM									
				17.5			Brown-Tan Brown Med Sand w/ gravel clasts 7-10%		15-17.5'									
									0.0 PPM									
				20			No Recovery Flowing Sand. Failed Tooling											
				22.5			Light Tan - white med fine grain sand w/ gravel clasts < 2%		20-22.5'									
								Tan Brown Sand med - med fine w/ 3" white med sand @ 25'		0.0 PPM								
									22.5-25'									
									0.3 PPM									

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: Site 1 Gulfport BORING NUMBER: 01-SB-07
 PROJECT NUMBER: 112600700 DATE: 5-12-08
 DRILLING COMPANY: M3W GEOLOGIST: J.D. Spalding
 DRILLING RIG: DP-7730DT DRILLER: Dave Duncan

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)							
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**				
				25			Tan Brown Sand										
							Med Fine - Grey										
							White Sand Med Fine										
									25-30'								
				30					0.6 PPM								
							30 30-32 white										
							-1.5 Grey Med-										
							Med Fine Sand										
							32-35 - Green Grey			30-32'							
				35			Clay		0.0 PPM								

* When rock coring, enter rock brokenness.
 ** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.
 Remarks: _____ Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: GPT 1 RI BORING NUMBER: GPT-01-06
 PROJECT NUMBER: 112600700 DATE: 9-12-08
 DRILLING COMPANY: GPI GEOLOGIST: W.D. Olson
 DRILLING RIG: DPT DRILLER: R. Lebron

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)							
					Soil Density/ Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**				
	25						Green gray clay w/ silt and sand										
							Some dark brown organic stringers										
	30						Green gray clayey sand, soft grades to brown FS at bottom										
							Gray clayey sand + 6 gray sand										
	35																
	40						green silt w/ sand and clay										
	45'				TD												

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes _____ No _____ Well I.D. #: _____



BORING LOG

PROJECT NAME: GPT L RI
 PROJECT NUMBER: 112G-00700
 DRILLING COMPANY: GPI
 DRILLING RIG: DPT

BORING NUMBER: GPT-01-09
 DATE: 8-13-08
 GEOLOGIST: W.B. Olson
 DRILLER: R. Lebron

Sample No. and Type or RQD	Depth (Ft) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION			U S C S *	Remarks	PID/FID Reading (ppm)							
					Soil Density/Consistency or Rock Hardness	Color	Material Classification			Sample	Sampler BZ	Borehole**	Driller BZ**				
	20						TAU FS										
	25						gray clay w/silt gray sandy clay										
	30																
	35						lt gray silty sand soft										
	40						lt gray silty clay										
	45																

* When rock coring, enter rock brokenness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated response read.

Remarks: _____

Drilling Area Background (ppm):

Converted to Well: Yes No Well I.D. #: _____





Tetra Tech NUS, Inc.

GROUNDWATER LEVEL MEASUREMENT SHEET

Project Name: GPT Project No.: 112600705
 Location: S.M.L Personnel: W.D. Okon/C. Odion
 Weather Conditions: _____ Measuring Device: WLT
 Tidally Influenced: Yes ___ No x Remarks: _____

Well or Piezometer Number	Date	Time	Elevation of Reference Point (feet)*	Total Well Depth (feet)*	Water Level Indicator Reading (feet)*	Thickness of Free Product (feet)*	Groundwater Elevation (feet)*	Comments
W-06 6	9-10-08	0831		40.05	3.86	—		
W-07 7		0835		24.41	3.51	—		
3		0857		27.84	4.17	—		stick up
5		0923		24.58	1.17	—		Fm
W-01 1		0950		32.51	4.57	—		stick up
W-02 2		1010		29.68	5.39	—		stick up
8		0838		12.54	3.33	—		
9		0846		48.89	5.20	—		
10		0854		22.64	2.45	—		
11		0930		39.27	1.89	—		
12		0935		24.09	0.58	—		
13		0940		13.24	0.81	—		
14		1045		28.91	1.31	—		
15		1050		14.60	0.99	—		
16		0920		14.24	0.57	—		
17		0910		13.98	0.81	—		
18		1041		14.04	1.25	—		
19		1038		14.08	1.43	—		
20		0959		14.05	1.06	—		
21		0955		13.96	0.99	—		
22		0945		14.20	4.18	—		
23		1005		14.28	4.00	—		
24		1015		14.17	1.86	—		
25		1020		14.14	6.86	—		
26		1026		14.19	3.86	—		
27		1056		14.18	2.25	—		

0.70 is lowest mark on WLI tape readings less than 0.70 @ estimated

* All measurements to the nearest 0.01 foot



Project Site Name: NCBC Gulfport - Site 1
 Project No.: 112600700

Sample ID No.: 01QT1301

Sample Location: 01QT13

Sampled By: JB

C.O.C. No.: _____

Type of Sample: _____

Domestic Well Data

Monitoring Well Data

Other Well Type: Screen Point

QA Sample Type: _____

Low Concentration

High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
5/8/08	cloudy	4.66	11.4	23.5	128	1.07	0.0	
Time: 1700								
Method: peristaltic								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
5/8/08	2.5 gal	4.81	11.7	23.7	87.6	0.93	0.0	
Method: peristaltic	2.7 gal	4.72	11.4	23.6	196	1.03	0.0	
Monitor Reading (ppm): 0	2.9 gal	4.69	11.5	23.6	168	1.03	0.0	
Well Casing Diameter & Material	3.1 gal	4.66	11.4	23.5	128	1.07	0.0	
Type: 1/8" Steel Screen								
Total Well Depth (TD): 30'								
Static Water Level (WL):								
One Casing Volume (gal/L):								
Start Purge (hrs): 1635								
End Purge (hrs): 1655								
Total Purge Time (min): 20								
Total Vol. Purged (gal/L): 3.1								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Quikturn VOC	He1	40 mL Glass x 3	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 26-30' bls

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s):



Project Site Name: NCBC Golfport - Site 1
 Project No.: 112600700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: Screen Point
 QA Sample Type: _____

Sample ID No.: 01QT1201
 Sample Location: 01QT12
 Sampled By: JB
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
5-8-08	clear	5.22	5.9	24.6	5.57	4.86	0.0	

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
5-8-08	1.0 gal	5.43	6.4	24.5	79.1	4.42	0.0	
Method: peristaltic	1.1 gal	5.28	6.1	25.0	29.4	4.98	0.0	
Monitor Reading (ppm):	1.6 gal	5.26	6.1	24.6	14.3	4.80	0.0	
Well Casing Diameter & Material Type: 1/8" Steel Screen	1.8 gal	5.19	5.9	24.4	10.87	4.82	0.0	
Total Well Depth (TD): 25	2.0 gal	5.19	6.0	24.5	6.09	4.65	0.0	
Static Water Level (WL):	2.2 gal	5.22	5.9	24.6	5.57	4.86	0.0	
One Casing Volume (gal/L):								
Start Purge (hrs): 15.37								
End Purge (hrs): 16.00								
Total Purge Time (min): 23								
Total Vol. Purged (gal): 2.2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Quickturn VOC	HCl	40ml Glass X3	✓

OBSERVATIONS / NOTES:

Screen point @ 21-25 bls

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):



Project Site Name: NCBC Gulfport Site 1
Project No.: 112600700

Sample ID No.: 01QT1101
Sample Location: 01QT11
Sampled By: JB
C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample: _____
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>5/8/08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1440</u>	<u>cloudy</u>	<u>6.14</u>	<u>10.2</u>	<u>25.2</u>	<u>237</u>	<u>4.07</u>	<u>0.0</u>	
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5/8/08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>1.0 gal</u>	<u>6.14</u>	<u>10.4</u>	<u>25.4</u>	<u>227</u>	<u>3.95</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>1.0 gal</u>	<u>6.13</u>	<u>10.1</u>	<u>25.3</u>	<u>227</u>	<u>4.02</u>	<u>0.0</u>	
Well Casing Diameter & Material Type: <u>1/4" steel screen</u>	<u>1.2 gal</u>	<u>6.14</u>	<u>10.2</u>	<u>25.2</u>	<u>237</u>	<u>4.07</u>	<u>0.0</u>	
Total Well Depth (TD): <u>27</u>								
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>1402</u>								
End Purge (hrs): <u>1439</u>								
Total Purge Time (min): <u>37</u>								
Total Vol. Purged (gal/L): <u>1.2</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quickturn VOC</u>	<u>HCl</u>	<u>40mL Glass x 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 23-27' bts

Circle if Applicable:

MS/MSD Duplicate ID No.: FDO5080801

Signature(s):



Project Site Name: NCBC Gulfport - Site 1
Project No.: 112606700

Sample ID No.: 01RT1001

Sample Location: 01RT10

Sampled By: JS

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample: Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>5/8/08</u>	<u>cloudy</u>	<u>4.82</u>	<u>10.9</u>	<u>22.4</u>	<u>126</u>	<u>1.00</u>	<u>0.0</u>	
Time: <u>1330</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/8/08</u>	<u>2.6 gal</u>	<u>4.84</u>	<u>11.1</u>	<u>22.5</u>	<u>374</u>	<u>0.74</u>	<u>0.0</u>	
Method: <u>peristaltic</u>								
Monitor Reading (ppm): <u>0</u>	<u>3.0 gal</u>	<u>4.82</u>	<u>11.0</u>	<u>22.4</u>	<u>124</u>	<u>0.95</u>	<u>0.0</u>	
Well Casing Diameter & Material Type: <u>1/8 steel screen</u>	<u>3.2 gal</u>	<u>4.82</u>	<u>10.9</u>	<u>22.4</u>	<u>126</u>	<u>1.00</u>	<u>0.0</u>	
Total Well Depth (TD): <u>25</u>								
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>1308</u>								
End Purge (hrs): <u>1327</u>								
Total Purge Time (min): <u>19</u>								
Total Vol. Purged (gal): <u>3.2</u>								

SAMPLE COLLECTION INFORMATION:

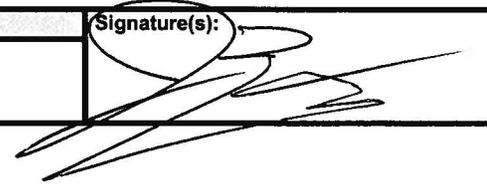
Analysis	Preservative	Container Requirements	Collected
<u>Quickturn VOC</u>	<u>HCl</u>	<u>40mL Glass X3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 21-25' b/s

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): 



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCBC Golfport - Site 1
 Project No.: 112600700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: Screen Point
 QA Sample Type: _____

Sample ID No.: 01QTO901
 Sample Location: 01QTO9
 Sampled By: JB
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>5-8-07</u>	<u>clear</u>	<u>5.47</u>	<u>12.3</u>	<u>22.7</u>	<u>203</u>	<u>0.65</u>	<u>0.0</u>	
Time: <u>1141</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5-8-07</u>	<u>1.8 gal</u>	<u>5.39</u>	<u>12.4</u>	<u>23.1</u>	<u>365</u>	<u>0.81</u>	<u>0.0</u>	
Method: <u>peristaltic</u>								
Monitor Reading (ppm): <u>0</u>	<u>2.2</u>	<u>5.42</u>	<u>12.4</u>	<u>22.9</u>	<u>179</u>	<u>0.64</u>	<u>0.0</u>	
Well Casing Diameter & Material Type: <u>8 steel screen</u>	<u>2.4</u>	<u>5.47</u>	<u>12.3</u>	<u>22.7</u>	<u>203</u>	<u>0.65</u>	<u>0.0</u>	
Total Well Depth (TD): <u>25</u>								
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>1125</u>								
End Purge (hrs): <u>1140</u>								
Total Purge Time (min): <u>15</u>								
Total Vol. Purged (gal/L): <u>~2.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quickturn VOC</u>	<u>HCl</u>	<u>40 mL Glass vials</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 21-25' b/s

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCBC Golfport - Site 1
 Project No.: 112G00700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: Screen Point
 QA Sample Type: _____

Sample ID No.: 01Q70801
 Sample Location: 01Q708
 Sampled By: JR
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>5/8/08</u>	<u>clear</u>	<u>5.49</u>	<u>11.2</u>	<u>23.3</u>	<u>78.1</u>	<u>1.11</u>	<u>0.0</u>	
<u>10:35</u>								
Method:								
<u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/8/08</u>	<u>2.5 gal</u>	<u>5.24</u>	<u>11.6</u>	<u>23.6</u>	<u>104.8</u>	<u>1.40</u>	<u>0.0</u>	
Method:								
<u>peristaltic</u>								
Monitor Reading (ppm):								
<u>0</u>	<u>2.7 gal</u>	<u>5.43</u>	<u>11.4</u>	<u>23.4</u>	<u>595</u>	<u>0.64</u>	<u>0.0</u>	
Well Casing Diameter & Material								
<u>2.7" steel screen</u>	<u>2.7 gal</u>	<u>5.45</u>	<u>11.1</u>	<u>23.4</u>	<u>220</u>	<u>0.89</u>	<u>0.0</u>	
Type:								
<u>8" steel screen</u>	<u>3.1 gal</u>	<u>5.48</u>	<u>11.1</u>	<u>23.4</u>	<u>175</u>	<u>0.94</u>	<u>0.0</u>	
Total Well Depth (TD):								
<u>27</u>	<u>3.2 gal</u>	<u>5.54</u>	<u>11.3</u>	<u>23.3</u>	<u>133</u>	<u>1.02</u>	<u>0.0</u>	
Static Water Level (WL):								
<u>—</u>	<u>3.4 gal</u>	<u>5.51</u>	<u>11.3</u>	<u>23.4</u>	<u>101.6</u>	<u>1.06</u>	<u>0.0</u>	
One Casing Volume (gal/L):								
<u>—</u>	<u>3.6 gal</u>	<u>5.51</u>	<u>11.2</u>	<u>23.4</u>	<u>76.2</u>	<u>1.08</u>	<u>0.0</u>	
Start Purge (hrs):								
<u>0958</u>	<u>3.8 gal</u>	<u>5.49</u>	<u>11.2</u>	<u>23.3</u>	<u>78.1</u>	<u>1.11</u>	<u>0.0</u>	
End Purge (hrs):								
<u>10:33</u>								
Total Purge Time (min):								
<u>35</u>								
Total Vol. Purged (gal/L):								
<u>3.8</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quickturn VOC</u>	<u>HCl</u>	<u>40 mL Glass #3</u>	<u>✓</u>

OBSERVATIONS / NOTES:

Screen set @ 23-27 b/s

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s):



Project Site Name: NEBC Gulfport - Site 1
Project No.: 112G00700

Sample ID No.: 01Q10701

Sample Location: 01Q107

Sampled By: JS

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample: _____
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>5/8/08</u>	<u>clear</u>	<u>5.12</u>	<u>11.3</u>	<u>25.0</u>	<u>16.7</u>	<u>0.93</u>	<u>0.0</u>	
Time: <u>0910</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/8/08</u>	<u>2.0 gal</u>	<u>5.02</u>	<u>11.8</u>	<u>25.2</u>	<u>74.1</u>	<u>1.62</u>	<u>0.0</u>	
Method: <u>peristaltic</u>								
Monitor Reading (ppm): <u>0</u>	<u>2.4 gal</u>	<u>5.13</u>	<u>11.4</u>	<u>25.0</u>	<u>30.0</u>	<u>0.69</u>	<u>0.0</u>	
Well Casing Diameter & Material Type: <u>1.8 steel screen pipe</u>	<u>2.6 gal</u>	<u>5.12</u>	<u>11.3</u>	<u>25.0</u>	<u>16.7</u>	<u>0.93</u>	<u>0.0</u>	
Total Well Depth (TD): <u>27'</u>								
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>0902</u>								
End Purge (hrs): <u>0910</u>								
Total Purge Time (min): <u>8 min</u>								
Total Vol. Purged (gal/L): <u>~2.6</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quaternary VOC</u>	<u>HCl</u>	<u>40mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 23-27'

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s):



Project Site Name: NOBC Gulfport-Sitel
Project No.: 112600700

Sample ID No.: 01QT0601

Sample Location: 01QT06

Sampled By: JB

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

Type of Sample: _____

Low Concentration

High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>5/7/08</u>	<u>clear</u>	<u>4.92</u>	<u>10.7</u>	<u>22.9</u>	<u>32.6</u>	<u>0.86</u>	<u>0.0</u>	
<u>1855</u>								
Method:								
<u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/7/08</u>	<u>3.0 gal</u>	<u>5.01</u>	<u>10.9</u>	<u>23.2</u>	<u>55.7</u>	<u>1.12</u>	<u>0.0</u>	
Method:								
<u>peristaltic</u>								
Monitor Reading (ppm):	<u>0</u>	<u>4.97</u>	<u>10.8</u>	<u>23.0</u>	<u>36.4</u>	<u>0.55</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>3.4 gal</u>	<u>4.94</u>	<u>10.8</u>	<u>23.0</u>	<u>32.4</u>	<u>0.80</u>	<u>0.0</u>	
Type:	<u>3.8 gal</u>	<u>4.92</u>	<u>10.7</u>	<u>22.9</u>	<u>32.6</u>	<u>0.86</u>	<u>0.0</u>	
Type:								
<u>18 steel screen</u>								
Total Well Depth (TD):								
<u>27</u>								
Static Water Level (WL):								
<u>✓</u>								
One Casing Volume(gal/L):								
<u>✓</u>								
Start Purge (hrs):								
<u>1840</u>								
End Purge (hrs):								
<u>1855</u>								
Total Purge Time (min):								
<u>15</u>								
Total Vol. Purged (gal/L):								
<u>3.6</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quichem Vol</u>	<u>HCl</u>	<u>40 mL Glass x 3</u>	<u>✓</u>

OBSERVATIONS / NOTES:

Screen set @ 23-27 bls

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s):



Project Site Name: NCBC Gulfport - Site 1
Project No.: 112600700

Sample ID No.: 01QT0501
Sample Location: 01QT05
Sampled By: JB
C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>5-8-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1745</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5-8-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>3.2 gal</u>	<u>4.98</u>	<u>6.8</u>	<u>22.9</u>	<u>127</u>	<u>1.06</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>3.4 gal</u>	<u>4.96</u>	<u>6.7</u>	<u>22.7</u>	<u>20</u>	<u>0.73</u>	<u>0.0</u>	
Well Casing Diameter & Material Type: <u>1.8 steel screen</u>	<u>3.6 gal</u>	<u>4.94</u>	<u>6.7</u>	<u>22.5</u>	<u>5</u>	<u>0.60</u>	<u>0.0</u>	
Total Well Depth (TD): <u>26</u>								
Static Water Level (WL): <u>—</u>								
One Casing Volume (gal/L): <u>—</u>								
Start Purge (hrs): <u>1730</u>								
End Purge (hrs): <u>1745</u>								
Total Purge Time (min): <u>15</u>								
Total Vol. Purged (gal/L): <u>3.6</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quaternary VOC</u>	<u>HCl</u>	<u>40mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 22-26 bls

Circle if Applicable:		Signature(s):
MS/MSD	Duplicate ID No.:	



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCBC Gulfport - Site 1
Project No.: 112600700

Sample ID No.: 01QT0401
Sample Location: 01QT04
Sampled By: JR/JS
C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Type of Sample: _____
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>5/7/08</u>	<u>clear</u>	<u>4.65</u>	<u>9.0</u>	<u>21.8</u>	<u>112</u>	<u>1.18</u>	<u>0.0</u>	

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/7/08</u>	<u>3.5 gal</u>	<u>4.70</u>	<u>9.7</u>	<u>22.2</u>	<u>150</u>	<u>1.79</u>	<u>0.0</u>	
Method: <u>peristaltic</u>	<u>3.7 gal</u>	<u>4.70</u>	<u>9.0</u>	<u>21.9</u>	<u>143</u>	<u>0.81</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>3.9 gal</u>	<u>4.66</u>	<u>9.0</u>	<u>21.9</u>	<u>125</u>	<u>0.89</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>4.1 gal</u>	<u>4.65</u>	<u>9.0</u>	<u>21.8</u>	<u>112</u>	<u>1.18</u>	<u>0.0</u>	
Type: <u>7.8 screenpoint sample</u>								
Total Well Depth (TD): <u>27.5</u>								
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>1355</u>								
End Purge (hrs): <u>1620</u>								
Total Purge Time (min): <u>25</u>								
Total Vol. Purged (gal/L): <u>4.1</u>								

25.0

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quaternary VOC</u>	<u>HCl</u>	<u>40 mL Glass x 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ ~~23.5~~ 27.5 b/s
21-25

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s):



Project Site Name: NCBC Gulfport - Site 1 Sample ID No.: 01QT0301
 Project No.: 112800700 Sample Location: 01QT03
 Sampled By: JB/SD
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
5/7/08	Clear	5.14	2.7	22.4	144	0.64	0.0	
Time: 1105								
Method: peristaltic								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
5/7/08	4.0	5.15	11.6	22.4	281	0.86	0.0	
Method: peristaltic	4.2	5.10	10.5	22.4	148	0.56	0.0	
Monitor Reading (ppm): 0	4.4	5.12	11.1	22.5	141	0.57	0.0	
Well Casing Diameter & Material	4.6	5.14	9.8	22.5	134	0.50	0.0	
Type: 1/8 Steel Screen Pack	4.8	5.14	9.7	22.4	144	0.64	0.0	
Total Well Depth (TD): 31								
Static Water Level (WL):								
One Casing Volume(gal/L):								
Start Purge (hrs): 1042								
End Purge (hrs): 1103								
Total Purge Time (min): 21								
Total Vol. Purged (gal/L): 4.8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Quickturn VOC	HCl	40 mL Glass X 3	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 27-31' b/s

Circle if Applicable: MS/MSD Duplicate ID No.: _____ Signature(s):



Project Site Name: NCBC Gulfport - Site 1 Sample ID No.: 01QTO201
 Project No.: 112600700 Sample Location: 01QTO2
 Sampled By: JB/SS
 C.O.C. No.: _____
 Type of Sample:
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
5/6/08	clear	4.90	2.7	21.6	29.4	7.63	0.0	
Time: 1831								
Method: peristaltic								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
5/6/08	4.0 gal	5.08	9.4	21.7	80.4	9.33	0.0	
Method: peristaltic	4.1 gal	4.90	8.8	21.6	52.1	8.16	0.0	
Monitor Reading (ppm):	4.4 gal	4.90	8.7	21.6	29.4	7.63	0.0	
Well Casing Diameter & Material								
Type: 1/8" Steel Screen Point								
Total Well Depth (TD):								
Static Water Level (WL):								
One Casing Volume (gal/L):								
Start Purge (hrs): 1812								
End Purge (hrs): 1830								
Total Purge Time (min): 18								
Total Vol. Purged (gal/L): 4.4								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Quickturn VOC	HCl	40 mL Glass x 3	✓

OBSERVATIONS / NOTES:

Screen set @

Circle if Applicable: MS/MSD Duplicate ID No.: _____ Signature(s):



Project Site Name: NCBC Gulfport - Site 1 Sample ID No.: 01QTO101
 Project No.: 12600700 Sample Location: 01QTO1
 Sampled By: JB/JS
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: Screen Point C.O.C. No.: _____
 QA Sample Type: _____ Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>5/6/08</u>	<u>clear</u>	<u>4.95</u>	<u>10.2</u>	<u>22.5</u>	<u>247</u>	<u>0.76</u>	<u>0.0</u>	
Time: <u>1615</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5-6-08</u>	<u>1 gal</u>	<u>5.40</u>	<u>11.5</u>	<u>23.0</u>	<u>2411</u>	<u>0.67</u>	<u>0.0</u>	
Method: <u>Peristaltic</u>								
Monitor Reading (ppm): <u>0</u>	<u>3 gal</u>	<u>5.00</u>	<u>10.7</u>	<u>22.5</u>	<u>1074</u>	<u>0.51</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>3.25"</u>	<u>4.98</u>	<u>10.6</u>	<u>22.5</u>	<u>925</u>	<u>0.53</u>	<u>0.0</u>	
Type: <u>1/2" Steel Screen Point</u>	<u>3.5"</u>	<u>4.94</u>	<u>10.5</u>	<u>22.5</u>	<u>823</u>	<u>0.55</u>	<u>0.0</u>	
Total Well Depth (TD): <u>27.5</u>	<u>3.75</u>	<u>4.92</u>	<u>10.7</u>	<u>22.5</u>	<u>799</u>	<u>0.55</u>	<u>0.0</u>	
Static Water Level (WL): <u>4.50</u>								
One Casing Volume (gal/L): <u>4.5</u>	<u>4.5</u>	<u>4.95</u>	<u>10.2</u>	<u>22.5</u>	<u>247</u>	<u>0.79</u>	<u>0.0</u>	
Start Purge (hrs): <u>1540</u>								
End Purge (hrs): <u>1615</u>								
Total Purge Time (min): <u>35</u>								
Total Vol. Purged (gal): <u>4.5</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>Quick Turn VOA</u>	<u>HCL</u>	<u>3x40mL Glass</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Well located 75' NW of Parking lot.
 Screen set @ 23.5' - 27.5' Hs

Circle if Applicable: MS/MSD Duplicate ID No.: _____ Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCRC Gulfport - Site 1
Project No.: 112600400

Sample ID No.: 01TW0601

Sample Location: 01SB06

Sampled By: JTB

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample: _____
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>5/11/08</u>								
<u>1715</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/11/08</u>								
Method: <u>peristaltic</u>	<u>4.5 gal</u>	<u>6.44</u>	<u>20.4</u>	<u>22.8</u>	<u>798</u>	<u>1.31</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>4.8 gal</u>	<u>6.43</u>	<u>20.4</u>	<u>22.7</u>	<u>251</u>	<u>1.38</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>6.1 gal</u>	<u>6.42</u>	<u>20.3</u>	<u>22.6</u>	<u>258</u>	<u>1.47</u>	<u>0.0</u>	
Type: <u>8 steel screen</u>	<u>5.5 gal</u>	<u>6.42</u>	<u>20.3</u>	<u>22.6</u>	<u>212</u>	<u>1.48</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7</u>	<u>6.8 gal</u>	<u>6.42</u>	<u>20.2</u>	<u>22.6</u>	<u>166</u>	<u>1.50</u>	<u>0.0</u>	
Static Water Level (WL): <u>—</u>	<u>6.1 gal</u>	<u>6.41</u>	<u>20.2</u>	<u>22.6</u>	<u>125</u>	<u>1.54</u>	<u>0.0</u>	
One Casing Volume (gal/L): <u>—</u>	<u>7 gal</u>	<u>6.40</u>	<u>20.1</u>	<u>22.6</u>	<u>83.7</u>	<u>1.60</u>	<u>0.0</u>	
Start Purge (hrs): <u>1623</u>	<u>9.2 gal</u>	<u>6.39</u>	<u>20.7</u>	<u>22.7</u>	<u>67.9</u>	<u>1.68</u>	<u>0.0</u>	
End Purge (hrs): <u>1712</u>	<u>9.7 gal</u>	<u>6.39</u>	<u>20.1</u>	<u>22.9</u>	<u>620</u>	<u>1.70</u>	<u>0.0</u>	
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40 mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 3-7

Circle if Applicable:

<input type="checkbox"/> MS/MSD	<input type="checkbox"/> Duplicate ID No.:
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Signature(s):



Project Site Name: NCRB Gulfport Site 1
Project No.: 112600760

Sample ID No.: 01TW0501

Sample Location: 01S805

Sampled By: JTS

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>5/11/08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1430</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5/11/08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>2.9 gal</u>	<u>6.68</u>	<u>33.6</u>	<u>24.3</u>	<u>145</u>	<u>0.70</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>3.1 gal</u>	<u>6.70</u>	<u>33.5</u>	<u>24.2</u>	<u>98.5</u>	<u>0.70</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>3.3 gal</u>	<u>6.72</u>	<u>33.7</u>	<u>24.3</u>	<u>90.9</u>	<u>0.71</u>	<u>0.0</u>	
Type: <u>78 steel screen</u>	<u>3.9 gal</u>	<u>6.73</u>	<u>33.7</u>	<u>24.3</u>	<u>82.5</u>	<u>0.71</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7</u>	<u>3.8 gal</u>	<u>6.74</u>	<u>33.8</u>	<u>24.3</u>	<u>70.3</u>	<u>0.72</u>	<u>0.0</u>	
Static Water Level (WL): <u>—</u>	<u>4.0 gal</u>	<u>6.76</u>	<u>33.9</u>	<u>24.3</u>	<u>65.5</u>	<u>0.73</u>	<u>0.0</u>	
One Casing Volume (gal/L): <u>—</u>	<u>4.2 gal</u>	<u>6.76</u>	<u>33.9</u>	<u>24.3</u>	<u>67.7</u>	<u>0.74</u>	<u>0.0</u>	
Start Purge (hrs): <u>1354</u>								
End Purge (hrs): <u>1425</u>								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40 mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 5-7 bls

Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s):



Project Site Name: NCBC Gulfport - Site 1
Project No.: 112606700

Sample ID No.: CITW0401

Sample Location: CLB04

Sampled By: JD

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

Type of Sample: _____

Low Concentration

High Concentration

SAMPLING DATA:

Date: <u>5-11-08</u>	Color (Visual)	pH (S.U.)	S.C. _m (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1040</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5-11-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>1.8 gal</u>	<u>6.81</u>	<u>74.3</u>	<u>23.8</u>	<u>32.0</u>	<u>4.48</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>2.4 gal</u>	<u>6.83</u>	<u>74.0</u>	<u>23.8</u>	<u>17.6</u>	<u>4.72</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>2.4 gal</u>	<u>6.84</u>	<u>73.9</u>	<u>23.8</u>	<u>13.9</u>	<u>4.82</u>	<u>0.0</u>	
Type: <u>1/8" steel screen</u>	<u>2.6 gal</u>	<u>6.84</u>	<u>73.4</u>	<u>23.8</u>	<u>13.9</u>	<u>4.91</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7'</u>	<u>2.8 gal</u>	<u>6.85</u>	<u>73.6</u>	<u>23.9</u>	<u>11.2</u>	<u>4.97</u>	<u>0.0</u>	
Static Water Level (WL): _____	<u>3.0 gal</u>	<u>6.85</u>	<u>73.4</u>	<u>23.8</u>	<u>9.74</u>	<u>5.12</u>	<u>0.0</u>	
One Casing Volume (gal/L): _____	<u>3.2 gal</u>	<u>6.86</u>	<u>73.2</u>	<u>23.8</u>	<u>8.60</u>	<u>5.52</u>	<u>0.0</u>	
Start Purge (hrs): <u>1006</u>	<u>3.4 gal</u>	<u>6.87</u>	<u>72.8</u>	<u>23.8</u>	<u>8.98</u>	<u>5.64</u>	<u>0.0</u>	
End Purge (hrs): <u>1038</u>								
Total Purge Time (min): _____								
Total Vol. Purged (gal/L): _____								

SAMPLE COLLECTION INFORMATION:

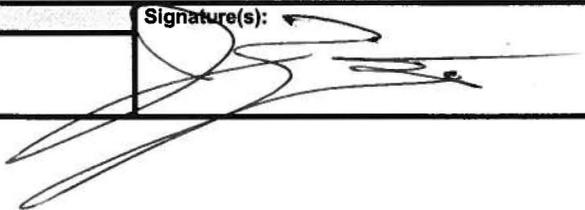
Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 3-7' b/s

Circle if Applicable:

<input type="checkbox"/> MS/MSD	Duplicate ID No.: _____
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Signature(s): 



Project Site Name: NCBC Gulfport Site 1
Project No.: 112G00700

Sample ID No.: 01TW0701

Sample Location: 01SR07

Sampled By: JB

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>5/12/08</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: <u>1105</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5/12/08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>4.9 gal</u>	<u>5.70</u>	<u>17.8</u>	<u>22.2</u>	<u>999</u>	<u>2.06</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>5.1 gal</u>	<u>5.62</u>	<u>17.8</u>	<u>22.1</u>	<u>999</u>	<u>2.19</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>5.3 gal</u>	<u>5.59</u>	<u>17.7</u>	<u>22.0</u>	<u>999</u>	<u>2.48</u>	<u>0.0</u>	
Type: <u>1/8" steel screen</u>	<u>5.5 gal</u>	<u>5.56</u>	<u>17.7</u>	<u>21.9</u>	<u>999</u>	<u>2.54</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7'</u>	<u>5.6 gal</u>	<u>5.55</u>	<u>17.6</u>	<u>21.9</u>	<u>999</u>	<u>2.65</u>	<u>0.0</u>	
Static Water Level (WL): <u>—</u>	<u>5.7 gal</u>	<u>5.54</u>	<u>17.6</u>	<u>21.9</u>	<u>999</u>	<u>2.74</u>	<u>0.0</u>	
One Casing Volume (gal/L): <u>—</u>								
Start Purge (hrs): <u>1010</u>								
End Purge (hrs): <u>1103</u>								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 3-7'

Circle if Applicable:

MS/MSD Duplicate ID No.:

01TW0701MS

01TW0701MSD

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCBC Gulfport - Site 1
Project No.: 112600700

Sample ID No.: 01TW0901
Sample Location: 01S509
Sampled By: JB
C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C. _{in}	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>5/12/08</u>								
<u>1517</u>								
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/12/08</u>								
Method: <u>peristaltic</u>	<u>4.4 gal</u>	<u>5.49</u>	<u>23.5</u>	<u>22.9</u>	<u>461</u>	<u>4.77</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>4.6 gal</u>	<u>5.50</u>	<u>23.3</u>	<u>22.4</u>	<u>240</u>	<u>4.81</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>4.8 gal</u>	<u>5.48</u>	<u>23.2</u>	<u>22.5</u>	<u>160</u>	<u>4.85</u>	<u>0.0</u>	
Type: <u>8 Steel screen</u>	<u>5.0 gal</u>	<u>5.47</u>	<u>23.2</u>	<u>22.5</u>	<u>84.7</u>	<u>4.87</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7</u>	<u>5.2 gal</u>	<u>5.48</u>	<u>23.1</u>	<u>22.5</u>	<u>59.1</u>	<u>4.85</u>	<u>0.0</u>	
Static Water Level (WL): <u>—</u>	<u>5.4 gal</u>	<u>5.47</u>	<u>23.2</u>	<u>22.4</u>	<u>42.8</u>	<u>4.87</u>	<u>0.0</u>	
One Casing Volume (gal/L): <u>—</u>	<u>5.6 gal</u>	<u>5.48</u>	<u>23.1</u>	<u>22.5</u>	<u>45.0</u>	<u>4.86</u>	<u>0.0</u>	
Start Purge (hrs): <u>1417</u>								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40 mL Glass X 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 3-7' b/s

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCRB Gulfport - Site 1
Project No.: 112G00700

Sample ID No.: OITW0801
Sample Location: 015B08

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

Sampled By: JB
C.O.C. No.: _____
Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>5/12/08</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: <u>1340</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Method: <u>peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>5/12/08</u>								
Method: <u>peristaltic</u>	<u>2.4 gal</u>	<u>6.32</u>	<u>40.1</u>	<u>22.6</u>	<u>16.5</u>	<u>1.89</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>0</u>	<u>2.7 gal</u>	<u>6.30</u>	<u>39.1</u>	<u>22.4</u>	<u>71.5</u>	<u>2.40</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>2.8 gal</u>	<u>6.31</u>	<u>39.0</u>	<u>22.4</u>	<u>58.6</u>	<u>2.44</u>	<u>0.0</u>	
Type: <u>7/8 screen point</u>	<u>2.9 gal</u>	<u>6.31</u>	<u>39.0</u>	<u>22.3</u>	<u>44.1</u>	<u>2.52</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7'</u>	<u>4.1 gal</u>	<u>6.32</u>	<u>38.9</u>	<u>22.3</u>	<u>24.9</u>	<u>2.79</u>	<u>0.0</u>	
Static Water Level (WL): _____	<u>4.3 gal</u>	<u>6.33</u>	<u>38.9</u>	<u>22.3</u>	<u>19.5</u>	<u>2.84</u>	<u>0.0</u>	
One Casing Volume (gal/L): _____	<u>4.9 gal</u>	<u>6.33</u>	<u>38.9</u>	<u>22.3</u>	<u>16.3</u>	<u>2.86</u>	<u>0.0</u>	
Start Purge (hrs): <u>1257</u>	<u>4.5 gal</u>	<u>6.33</u>	<u>38.9</u>	<u>22.3</u>	<u>23.2</u>	<u>2.88</u>	<u>0.0</u>	
End Purge (hrs): <u>1338</u>								
Total Purge Time (min): _____								
Total Vol. Purged (gal/L): _____								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40mL Glass x 3</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen set @ 3-7' b/s.

Circle if Applicable:

MS/MSD

Duplicate ID No.:

FDO5120801

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NCBC Golfport - Site 1
Project No.: 12600701

Sample ID No.: 01TW1001

Sample Location: 01SB10

Sampled By: J.B.

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: Screen Point
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>05/12/08</u>	Color	pH	S.C. ^m	Temp.	Turbidity	DO	Salinity	Other
Time: <u>1705</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Method: <u>peristaltic</u>								

PURGE DATA:

Date: <u>5/12/08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>peristaltic</u>	<u>2.8 gal</u>	<u>5.95</u>	<u>15.5</u>	<u>24.1</u>	<u>925</u>	<u>2.99</u>	<u>0.0</u>	
Monitor Reading (ppm): <u>Ø</u>	<u>3.1 gal</u>	<u>6.02</u>	<u>15.4</u>	<u>24.0</u>	<u>965</u>	<u>2.21</u>	<u>0.0</u>	
Well Casing Diameter & Material	<u>3.3 gal</u>	<u>6.03</u>	<u>15.5</u>	<u>23.9</u>	<u>682</u>	<u>2.06</u>	<u>0.0</u>	
Type: <u>1/8 screen point</u>	<u>3.5 gal</u>	<u>6.03</u>	<u>15.6</u>	<u>23.8</u>	<u>603</u>	<u>2.08</u>	<u>0.0</u>	
Total Well Depth (TD): <u>7'</u>	<u>3.1 gal</u>	<u>6.00</u>	<u>15.6</u>	<u>23.5</u>	<u>366</u>	<u>2.06</u>	<u>0.0</u>	
Static Water Level (WL): _____								
One Casing Volume (gal/L): _____								
Start Purge (hrs): <u>1605</u>								
End Purge (hrs): _____								
Total Purge Time (min): _____								
Total Vol. Purged (gal/L): _____								

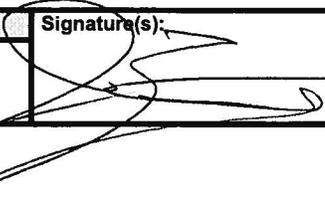
SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>VOC</u>	<u>HCl</u>	<u>40mL Glass XZ</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Screen point set @ 3-7 bls.
* pulled sample at 366 NTUs due to FedEx run.

Circle if Applicable:

MS/MSD	Duplicate ID No.:	Signature(s): 
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Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 016-W-0601
Sample Location: G-PI-L-06
Sampled By: WBO

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

C.O.C. No.: _____
Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: 8-28-08	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 08:15								
Method: low flow								

PURGE DATA:

Date: 8-26-08	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Low Flow	INIT	6.0	0.304	25.87	95.3	8.75	~25	100 uol/m ³
Monitor Reading (ppm):								
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 40								
Static Water Level (WL): 3.92								
One Casing Volume (gal/L): 1.44								
Start Purge (hrs): 12:35								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

36.08
3.61
1.80
0.36
5.77
1
1.44
5.77
4
1.7
1.6
1

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3x4oz	✓
SVOC	HCl	5x16oz	✓
Pest.			
PCB			
Herb.			
TAL Metals +CN	HNO ₃	1x 250 poly	✓
CW	NaOH	1x 250 poly	✓

OBSERVATIONS / NOTES:

1315 - STOPPED PUMP
 1815 - restarted, still 20' of draw down
 Collected sample on 8/28/08 after well recharged

Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):

[Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01Gw0701
 Sample Location: GPR-07-01
 Sampled By: Woolco
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1340</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C. (mS/cm)	Temp.	Turbidity	DO	Salinity	Other
<u>8-26-08</u>								
Method: <u>Low Flow</u>	<u>1WIT</u>	<u>5.23</u>	<u>0.99</u>	<u>26.4</u>	<u>48</u>	<u>2.24</u>	<u>-35</u>	<u>3000/m²</u>
Monitor Reading (ppm): <u>-</u>	<u>1gal</u>	<u>4.64</u>	<u>0.99</u>	<u>25.1</u>	<u>7</u>	<u>0.95</u>	<u>13</u>	<u>DB 3.02</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>2gal</u>	<u>4.58</u>	<u>0.12</u>	<u>24.9</u>	<u>3</u>	<u>0.68</u>	<u>20</u>	
	<u>3gal</u>	<u>4.57</u>	<u>0.11</u>	<u>25.0</u>	<u>0</u>	<u>0.49</u>	<u>20</u>	
Total Well Depth (TD): <u>25</u>	<u>3 1/2 gal</u>	<u>4.59</u>	<u>0.11</u>	<u>24.9</u>	<u>0</u>	<u>0.49</u>	<u>19</u>	
Static Water Level (WL): <u>2.92</u>								
One Casing Volume (gal/L): <u>0.9</u>								
Start Purge (hrs): <u>1300</u>								
End Purge (hrs): <u>1336</u>								
Total Purge Time (min): <u>36</u>								
Total Vol. Purged (gal): <u>3 1/2</u>								

25
22.08
2.21
1.10
0.22
3.53

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x 40ml	X
SVOC			
Pest.	H ₂ O	5x 100ml amber	X
PCB			
Herb.			
TAL Metals + CN ⁻	HNO ₃	1x 250 Poly	X
CW	NaOH	1x 250 Poly	X

13.53
32
33

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD Duplicate ID No.: 01Gw0701 D

Signature(s):

[Handwritten Signature]



Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 01G-0801
Sample Location: GAT-1-08
Sampled By: WAD

- Domestic Well Data
Monitoring Well Data
Other Well Type:
QA Sample Type:

C.O.C. No.:
Type of Sample:
Low Concentration
High Concentration

SAMPLING DATA:

Table with columns: Date, Color (Visual), pH (S.U.), S.C. (mS/cm), Temp. (C), Turbidity (NTU), DO (mg/l), Salinity (%), Other

PURGE DATA:

Table with columns: Date, Volume, pH, S.C., Temp., Turbidity, DO, Salinity, Other. Includes handwritten notes like 'm skin' and 'ORD'.

Handwritten calculations on the left margin: 2.80, 2.77, 10.23, 1.02, .51, .10, 11.63, 0.4

SAMPLE COLLECTION INFORMATION:

Table with columns: Analysis, Preservative, Container Requirements, Collected. Includes entries for VOC, SVOC, Pest, PCB, Herb, and TAL Metals.

OBSERVATIONS / NOTES:

Large empty box for observations and notes.

Circle if Applicable:

MS/MSD Duplicate ID No. field

Signature(s):

Handwritten signature



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: 01GW0901
 Project No.: 112G00700 Sample Location: GAT-1-9
 Sampled By: Wise
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:								
Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>0900</u>								
Method: <u>Low Flow</u>								

PURGE DATA: <u>m slow</u> <u>ORD</u>								
Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>Low Flow</u>	<u>INIT</u>	<u>5.8</u>	<u>0.27</u>	<u>24.38</u>	<u>80</u>	<u>2.19</u>	<u>-103</u>	<u>100ml/min</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2 gal</u>	<u>6.1</u>	<u>0.258</u>	<u>23.72</u>	<u>20.3</u>	<u>0.88</u>	<u>-105</u>	<u>DD24.40</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>								
Total Well Depth (TD): <u>45</u>								
Static Water Level (WL): <u>5.91</u>								
One Casing Volume (gal/L): <u>1.6</u>								
Start Purge (hrs): <u>1650</u>								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

45
5.91
39.09
3.91
1.95
1.39
6.25
1.56
+6.25
4
22
20
25

SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x40ml	✓
SVOC			
Pest.	40C	5x12ml	✓
PCB			
Herb.			
TAL Metals + MS	HNO3	1x250ml	✓
<u>LN</u>	NaOH	1x250ml	✓

OBSERVATIONS / NOTES:
 Slow recharge, well had pressurized yesterday
 WL @ 28'
 D new down to 31.4'
 @ 1gal rem.
 Sampled on 8-29-08
 after recharge

Circle if Applicable: _____ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: 016W1001
 Project No.: 112G00700 Sample Location: 10
 Sampled By: C. Edm
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1550</u>								
Method: <u>low flow/peristaltic</u>								

PURGE DATA:

Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow/peristaltic</u>	<u>1L</u>	<u>4.84</u>	<u>0.42</u>	<u>25.5</u>	<u>17.4</u>	<u>1.03</u>	<u>1.90</u>	<u>32</u>
Monitor Reading (ppm):	<u>2L</u>	<u>4.82</u>	<u>0.29</u>	<u>25.2</u>	<u>14.4</u>	<u>0.73</u>	<u>1.90</u>	<u>27</u>
Well Casing Diameter & Material Type: <u>10" PVC</u>	<u>4L</u>	<u>4.86</u>	<u>3.3</u>	<u>24.9</u>	<u>6.15</u>	<u>0.59</u>	<u>1.90</u>	<u>17</u>
	<u>6L</u>	<u>4.91</u>	<u>3.1</u>	<u>24.5</u>	<u>2.69</u>	<u>0.40</u>	<u>1.92</u>	<u>3</u>
Total Well Depth (TD): <u>24</u>	<u>8L</u>	<u>4.98</u>	<u>3.5</u>	<u>24.4</u>	<u>1.11</u>	<u>0.42</u>	<u>1.92</u>	<u>-2</u>
Static Water Level (WL): <u>1.59</u>	<u>9L</u>	<u>4.83</u>	<u>0.40</u>	<u>24.4</u>	<u>0.68</u>	<u>0.39</u>	<u>1.92</u>	<u>0</u>
One Casing Volume (gal): <u>0.88</u>	<u>10L</u>	<u>4.85</u>	<u>0.38</u>	<u>24.4</u>	<u>0.75</u>	<u>0.38</u>	<u>1.92</u>	<u>-2</u>
Start Purge (hrs): <u>1455</u>	<u>11L</u>	<u>4.83</u>	<u>0.39</u>	<u>24.4</u>	<u>0.56</u>	<u>0.38</u>	<u>1.92</u>	<u>-1</u>
End Purge (hrs): <u>1550</u>								
Total Purge Time (min): <u>55</u>								
Total Vol. Purged (gal): <u>3</u>								

Tile
 1500
 1505
 1515
 1525
 1535
 1540
 1545
 1550

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3 x 40 mL vial	4
SVOC	-	1 x 1L Amber	4
Pest.	-	1 x 1L Amber	4
PCB	-	1 x 1L Amber	4
Herb.	-	1 x 1L Amber	4
TAL Metals CON	HNO ₃	1 x 250 mL poly	4
CW	NaOH	1 x 250 mL poly	4
SVOC	-	1 x 1L Amber	4

OBSERVATIONS / NOTES:

22
~~31.35L~~
04
58 3L = 10.03 L
0

Circle if Applicable: _____ Signature(s): _____
 MS/MSD Duplicate ID No.: _____



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: 02GW1101

Sample Location: GP-1-11

Sampled By: WAO

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1145</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: <u>09-27-08</u>								
Method: <u>Low Flow WIT</u>								
Monitor Reading (ppm): <u>0.0</u>	<u>1.5</u>	<u>4.9</u>	<u>0.101</u>	<u>23.60</u>	<u>284</u>	<u>1.26</u>	<u>31</u>	<u>204.16</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>3</u>	<u>4.9</u>	<u>0.090</u>	<u>23.71</u>	<u>219</u>	<u>0.85</u>	<u>27</u>	<u>204.56</u>
Total Well Depth (TD): <u>40</u>	<u>4.5</u>	<u>4.8</u>	<u>0.084</u>	<u>23.72</u>	<u>141</u>	<u>0.71</u>	<u>15</u>	<u>204.55</u>
Static Water Level (WL): <u>2.16</u>	<u>6</u>	<u>4.8</u>	<u>0.082</u>	<u>24.03</u>	<u>122</u>	<u>0.68</u>	<u>0</u>	<u>204.62</u>
One Casing Volume (gal): <u>1.5</u>	<u>7.5</u>	<u>4.8</u>	<u>0.079</u>	<u>24.31</u>	<u>115</u>	<u>0.64</u>	<u>-14</u>	<u>204.89</u>
Start Purge (hrs): <u>0820</u>	<u>9</u>	<u>4.8</u>	<u>0.078</u>	<u>24.43</u>	<u>106.1</u>	<u>0.57</u>	<u>-22</u>	<u>204.89</u>
End Purge (hrs): <u>1140</u>	<u>10.5</u>	<u>4.8</u>	<u>0.078</u>	<u>24.74</u>	<u>104.1</u>	<u>0.50</u>	<u>-27</u>	
Total Purge Time (min): <u>200</u>	<u>12</u>	<u>4.8</u>	<u>0.078</u>	<u>24.28</u>	<u>100</u>	<u>0.52</u>	<u>-31</u>	
Total Vol. Purged (gal/L): <u>12</u>								

37.84
23.78
1.89
.39
6.06
1.5

Steady
Steady

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3 x 400ml	✓
SVOC			
Pest.			
PCB	HCL	5 x 12 amber	✓
Herb.			
TAL Metals NON	HNO3	1 x 250ml Poly	✓
<u>CW</u>	NaOH	1 x 250ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

WAO



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 016W1201
 Sample Location: GPI-1-12
 Sampled By: C. Odum
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
8/27/08	clear	5.02	0.10	23.9	0.36	0.44		-21

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
8/27/08	1L	5.08	0.9	24.1	10.62	1.17	0.47	-5
Method: low turb. peristaltic	2L	5.09	0.99	24.0	16.5	0.86	0.47	-4
Monitor Reading (ppm): 0.0	3L	5.00	0.99	23.9	9.06	0.66	0.47	0
Well Casing Diameter & Material	4L	5.01	0.9	23.8	5.38	0.61	0.47	-6
Type: 1.0" PVC	5L	5.02	0.9	23.8	6.08	0.58	0.47	-9
Total Well Depth (TD): 25	6L	4.99	0.13	23.8	2.31	0.52	0.48	-7
Static Water Level (WL): 0.45	7L	5.05	0.11	23.9	2.11	0.48	0.48	-14
One Casing Volume (gal/L):	8L	5.04	0.10	23.9	0.82	0.47	0.47	-18
Start Purge (hrs): 0810	9L	5.07	0.10	23.8	0.66	0.48	0.48	-19
End Purge (hrs): 0910	10L	5.05	0.10	23.8	0.71	0.45	0.48	-18
Total Purge Time (min): 60	11L	5.05	0.11	23.9	0.45	0.47	0.48	-20
Total Vol. Purged (gal): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC			
SVOC			
Pest.			
PCB			
Herb.			
TAL Metals + CN ⁻			

OBSERVATIONS / NOTES:

25
 x .004

 .100
 3.8 L casing, volume 10ft casing ≈ 1.9 L

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):

C. Odum



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: 01601301
 Project No.: 112G00700 Sample Location: 13
 Sampled By: C. Edm
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>8/27/08</u>								
Time: <u>1030</u>								
Method: <u>low flow/pistaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other	Tide
<u>8/27/08</u>									
Method: <u>low flow/pistaltic</u>	<u>1.5L</u>	<u>4.66</u>	<u>0.23</u>	<u>24.8</u>	<u>0.28</u>	<u>1.02</u>	<u>0.70</u>	<u>57</u>	<u>1005</u>
Monitor Reading (ppm):	<u>3.0</u>	<u>4.58</u>	<u>0.10</u>	<u>24.8</u>	<u>0.33</u>	<u>0.67</u>	<u>0.70</u>	<u>57</u>	<u>1010</u>
Well Casing Diameter & Material Type: <u>1.0" PVC</u>	<u>4.5</u>	<u>4.55</u>	<u>0.10</u>	<u>24.6</u>	<u>0.22</u>	<u>0.52</u>	<u>0.70</u>	<u>53</u>	<u>1015</u>
	<u>6.0</u>	<u>4.56</u>	<u>0.63</u>	<u>24.6</u>	<u>0.46</u>	<u>0.46</u>	<u>0.70</u>	<u>50</u>	<u>1020</u>
Total Well Depth (TD):	<u>25</u>	<u>4.53</u>	<u>0.65</u>	<u>24.6</u>	<u>0.24</u>	<u>0.49</u>	<u>0.70</u>	<u>49</u>	<u>1025</u>
Static Water Level (WL): <u>0.66</u>	<u>9.0</u>	<u>4.55</u>	<u>0.61</u>	<u>24.7</u>	<u>0.18</u>	<u>0.48</u>	<u>0.70</u>	<u>48</u>	<u>1030</u>
One Casing Volume(gal/L):									
Start Purge (hrs): <u>4:00</u>									
End Purge (hrs): <u>1030</u>									
Total Purge Time (min): <u>30</u>									
Total Vol. Purged (gal/L): <u>2</u>									

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>2 HCl</u>	<u>3x 1.5L 3x 40mL</u>	<u>4</u>
SVOC	<u>-</u>	<u>1x 1.5L</u>	<u>4</u>
Pest.	<u>-</u>	<u>1x 1.0L</u>	<u>4</u>
PCB	<u>-</u>	<u>1x 1.0L</u>	<u>4</u>
Herb.	<u>-</u>	<u>2x 1.0L</u>	<u>4</u>
TAL Metals + <u>CW</u>	<u>HNO3</u> <u>NaOH</u>	<u>1x 250mL</u> <u>1x 250mL</u>	<u>4</u>

OBSERVATIONS / NOTES:

well volume = 0.526 gal = 2 L

Circle if Applicable: MS/MSD Duplicate ID No.: _____ Signature(s): [Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: OLG-W 1401
 Sample Location: GPT-1-14
 Sampled By: Wae
 C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1400</u>								
Method: <u>LOW FLOW</u>								

PURGE DATA:

Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>Low FLOW</u>	<u>1W.1</u>	<u>5.7</u>	<u>0.231</u>	<u>26.13</u>	<u>101</u>	<u>8.90</u>	<u>-74</u>	<u>300 ug/l</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1.2</u>	<u>5.2</u>	<u>0.240</u>	<u>24.95</u>	<u>89.5</u>	<u>0.79</u>	<u>-67</u>	<u>DP 1.05</u>
Well Casing Diameter & Material	<u>2.4</u>	<u>5.2</u>	<u>0.230</u>	<u>24.96</u>	<u>23.6</u>	<u>0.50</u>	<u>-68</u>	<u>DP 1.07</u>
Type: <u>1" PVC</u>	<u>3.6</u>	<u>5.2</u>	<u>0.223</u>	<u>24.79</u>	<u>9.16</u>	<u>0.43</u>	<u>-68</u>	
Total Well Depth (TD): <u>30</u>								
Static Water Level (WL): <u>1.00</u>								
One Casing Volume (gal/L): <u>1.2</u>								
Start Purge (hrs): <u>1315</u>								
End Purge (hrs): <u>1400</u>								
Total Purge Time (min): <u>45</u>								
Total Vol. Purged (gal/L): <u>3.6</u>								

29.06
 2.9
 1.5
 1.3

 4.7
 1.2

 34.7
 2

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3 x 40 ml</u>	<input checked="" type="checkbox"/>
SVOC			
Pest.			
PCB		<u>5 x 12 amber</u>	
Herb.			
TAL Metals + CS	<u>HNO3</u>	<u>1 x 250 ml</u>	<input checked="" type="checkbox"/>
<u>cu</u>	<u>NaOH</u>	<u>1 x 250 ml</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable: MS/MSD Duplicate ID No.: _____ Signature(s): [Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 016W1501
Sample Location: 15
Sampled By: C. Ochi
C.O.C. No.:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>8-27-08</u>								
Time: <u>1350</u>								
Method: <u>low flow / peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>8-27-08</u>								
Method: <u>low flow / peristaltic</u>	<u>1L</u>	<u>5.83</u>	<u>0.50</u>	<u>25.7</u>	<u>9.09</u>	<u>0.79</u>	<u>0.90</u>	<u>-126</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.87</u>	<u>0.46</u>	<u>25.4</u>	<u>1.21</u>	<u>0.48</u>	<u>0.92</u>	<u>-128</u>
Well Casing Diameter & Material	<u>3L</u>	<u>5.85</u>	<u>0.43</u>	<u>25.5</u>	<u>0.93</u>	<u>0.50</u>	<u>0.92</u>	<u>-127</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>5.86</u>	<u>0.44</u>	<u>25.5</u>	<u>0.34</u>	<u>0.45</u>	<u>0.92</u>	<u>-128</u>
Total Well Depth (TD): <u>15</u>	<u>5L</u>	<u>5.85</u>	<u>0.45</u>	<u>25.5</u>	<u>0.22</u>	<u>0.43</u>	<u>0.93</u>	<u>-130</u>
Static Water Level (WL): <u>0.80</u>	<u>6L</u>	<u>5.86</u>	<u>0.44</u>	<u>25.6</u>	<u>0.41</u>	<u>0.42</u>	<u>0.93</u>	<u>-128</u>
One Casing Volume (gal): <u>2</u>								
Start Purge (hrs): <u>1320</u>								
End Purge (hrs): <u>1350</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>1.8</u>								

The
1325
1330
1335
1340
1345
1350

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCl</u>	<u>3 x 40 mL vial</u>	<u>4</u>
SVOC	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
Pest.	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
PCB	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
Herb.	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
TAL Metals 	<u>HNO₃</u>	<u>1 x 250 mL plastic</u>	<u>4</u>
<u>CA-</u>	<u>NaOH</u>	<u>1 x 250 mL plastic</u>	<u>4</u>
	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>

OBSERVATIONS / NOTES:

Well cap = 0.6G = 2L

Circle if Applicable: MS/MSD Duplicate ID No.: Signature(s): C. Ochi



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 01GW1701

Sample Location: GPT-112

Sampled By: WOO

C.O.C. No.:

Type of Sample:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
6-28-08								
Time: 1030								
Method: Low Flow								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
6-28-08								
Method: Low Flow	INIT	4.1	0.16	25.79	35.9	3.40	167	300um/L
Monitor Reading (ppm): 0.0	0.5g	4.0	0.151	25.48	28.8	2.07	152	200.74
Well Casing Diameter & Material Type: 1" PVC	1g	4.0	0.147	25.44	8.66	1.62	150	200.74
	1.5g	4.0	0.152	25.42	4.98	1.44	148	200.74
Total Well Depth (TD): 15	2g	4.0	0.145	25.36	3.78	1.10	146	
Static Water Level (WL): 0.69								
One Casing Volume (gal/L): 0.56								
Start Purge (hrs): 1004								
End Purge (hrs): 1030								
Total Purge Time (min): 26								
Total Vol. Purged (gal/L): 2								

4.31
1.43
0.72
0.14
2.29
0.56
2.29
20
29

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x 40ml	✓
SVOC			
Pest.	40C	5x 120ml	✓
PCB			
Herb.			
TAL Metals + ON	HNO3	1x 250ml Poly	✓
CU	NaOH	1x 250ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
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Signature(s):

[Handwritten Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: OLG-w 1901
 Project No.: 112G00700 Sample Location: GAT-1-19
 Sampled By: Woo
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1350</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: <u>8.23/08</u>								
Method: <u>LOW FLOW</u>	<u>INIT</u>	<u>5.7</u>	<u>0.248</u>	<u>28.34</u>	<u>74.2</u>	<u>2.63</u>	<u>-34</u>	<u>300 ml/min</u>
Monitor Reading (ppm): <u>0.0</u>	<u>0.5</u>	<u>5.5</u>	<u>0.252</u>	<u>28.15</u>	<u>35.4</u>	<u>1.51</u>	<u>-28</u>	<u>DD 1.15</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1</u>	<u>5.1</u>	<u>0.253</u>	<u>28.12</u>	<u>20.1</u>	<u>1.20</u>	<u>-9</u>	<u>DD 1.15</u>
	<u>1.5</u>	<u>4.9</u>	<u>0.252</u>	<u>28.13</u>	<u>8.79</u>	<u>2.51</u>	<u>-5</u>	<u>DD 1.15</u>
Total Well Depth (TD): <u>15</u>	<u>2</u>	<u>4.9</u>	<u>0.253</u>	<u>27.97</u>	<u>5.28</u>	<u>2.87</u>	<u>-9</u>	<u>DD 1.16</u>
Static Water Level (WL): <u>1.10</u>	<u>2.5</u>	<u>4.9</u>	<u>0.253</u>	<u>28.00</u>	<u>3.36</u>	<u>3.32</u>	<u>-13</u>	<u>DD 1.16</u>
One Casing Volume (gal/L): <u>0.56</u>								
Start Purge (hrs): <u>1312</u>								
End Purge (hrs): <u>1350</u>								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

13.90
 1.29
 .70
 .14

 2.23
 .56

 2.23
 .20

 2.23

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3x40ml</u>	<u>✓</u>
SVOC			
Pest.	<u>H₂O</u>	<u>5x1 liter</u>	<u>✓</u>
PCB			
Herb.			
TAL Metals + CN	<u>HNO₃</u>	<u>1x250 ml Poly</u>	<u>✓</u>
<u>CN</u>	<u>NaOH</u>	<u>1x250 ml Poly</u>	<u>✓</u>

OBSERVATIONS / NOTES:

DO malfunction

Circle if Applicable: _____ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 016W2001
Sample Location: 20
Sampled By: C. Oden
C.O.C. No.:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>8-28-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1525</u>								
Method: <u>low flow/pneumatic</u>								

PURGE DATA:

Date: <u>8-28-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow/pneumatic</u>	1L	5.40	0.18	26.7	26.0	1.87	0.82	-49
Monitor Reading (ppm):	2L	5.37	0.19	26.0	32.3	0.13	0.81	-55
Well Casing Diameter & Material	3L	5.34	0.19	25.9	70.7	0.60	0.83	-58
Type: <u>1.0" PVC</u>	4L	5.31	0.21	25.7	11.3	0.50	0.83	-60
Total Well Depth (TD): <u>14.05</u>	5L	5.31	0.22	25.6	6.64	0.48	0.83	-63
Static Water Level (WL): <u>0.81</u>	6L	5.35	0.24	25.6	4.05	0.47	0.83	-65
One Casing Volume (gal/L): <u>0.52</u>								
Start Purge (hrs): <u>1455</u>								
End Purge (hrs): <u>1525</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal/L): <u>1.5</u>								

T.L.C
1500
1505
1510
1515
1520
1525

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3 x 40 mL vial	Y
SVOC	-	1 x 1L Amber	Y
Pest.	-	1 x 1L Amber	Y
PCB	-	1 x 1L Amber	Y
Herb.	-	1 x 1L Amber	Y
TAL Metals (S)	HNO ₃	1 x 250 mL poly	Y
CN ⁻	N ₂ O ₄	1 x 250 mL poly	Y
SVOC	-	1 x 1L Amber	Y

OBSERVATIONS / NOTES:

1.57 x 3 = 6L

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: 01G-02101

Sample Location: GPT-1-21

Sampled By: WAO

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

Low Concentration

High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>8-28-08</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Time: <u>1525</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>8-28-08</u>								
Method: <u>LOW FLOW</u>	<u>INIT</u>	<u>5.5</u>	<u>0.234</u>	<u>26.57</u>	<u>99.6</u>	<u>3.01</u>	<u>1</u>	<u>300 uel/ml</u>
Monitor Reading (ppm): <u>0.0</u>	<u>0.5 g</u>	<u>5.5</u>	<u>0.230</u>	<u>26.09</u>	<u>72.1</u>	<u>1.57</u>	<u>-7</u>	<u>AD 0.85</u>
Well Casing Diameter & Material	<u>1.9</u>	<u>5.4</u>	<u>0.223</u>	<u>25.88</u>	<u>27.6</u>	<u>1.31</u>	<u>-7</u>	<u>AD 0.85</u>
Type: <u>1" PVC</u>	<u>1.5 g</u>	<u>5.4</u>	<u>0.222</u>	<u>25.90</u>	<u>10.46</u>	<u>1.16</u>	<u>-8</u>	<u>AD 0.85</u>
Total Well Depth (TD): <u>15</u>	<u>2 g</u>	<u>5.4</u>	<u>0.221</u>	<u>25.88</u>	<u>4.70</u>	<u>1.08</u>	<u>-6</u>	
Static Water Level (WL): <u>0.80</u>								
One Casing Volume (gal): <u>0.57</u>								
Start Purge (hrs): <u>1452</u>								
End Purge (hrs): <u>1520</u>								
Total Purge Time (min): <u>28</u>								
Total Vol. Purged (gal): <u>2</u>								

4.25
 1.42
 .71
 .14
 2.27
 .52
 2.27
 20
 27

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3 x 40ml</u>	<input checked="" type="checkbox"/>
SVOC			
Pest.			
PCB	<u>40</u>	<u>5 x 125ml</u>	<input checked="" type="checkbox"/>
Herb.			
TAL Metals + ON	<u>HNO3</u>	<u>1 x 250ml poly</u>	<input checked="" type="checkbox"/>
<u>CW</u>	<u>NaOH</u>	<u>1 x 250ml poly</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s): <u>WAO</u>
MS/MSD	Duplicate ID No.:	



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

Sample ID No.: 01662201

Sample Location: 22

Sampled By: C. Odu

C.O.C. No.: _____

Domestic Well Data

Monitoring Well Data

Other Well Type: _____

QA Sample Type: _____

Type of Sample:

Low Concentration

High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>9-9-01</u>								
<u>0830</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other	Time
<u>9-9-01</u>									
Method:	<u>1L</u>	<u>4.98</u>	<u>0.99</u>	<u>25.4</u>	<u>78.4</u>	<u>1.70</u>	<u>4.13</u>	<u>162</u>	<u>0805</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.09</u>	<u>2.1</u>	<u>25.4</u>	<u>63.1</u>	<u>1.05</u>	<u>4.13</u>	<u>123</u>	<u>0805</u>
Well Casing Diameter & Material	<u>3L</u>	<u>5.09</u>	<u>8.7</u>	<u>25.4</u>	<u>26.9</u>	<u>0.68</u>	<u>4.13</u>	<u>102</u>	<u>0810</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>5.11</u>	<u>4.6</u>	<u>25.3</u>	<u>16.8</u>	<u>0.66</u>	<u>4.13</u>	<u>87</u>	<u>0815</u>
Total Well Depth (TD): <u>14.20</u>	<u>5L</u>	<u>5.12</u>	<u>2.9</u>	<u>25.3</u>	<u>13.9</u>	<u>0.65</u>	<u>4.13</u>	<u>81</u>	<u>0820</u>
Static Water Level (WL): <u>4.12</u>	<u>6L</u>	<u>5.11</u>	<u>2.6</u>	<u>25.7</u>	<u>8.34</u>	<u>0.64</u>	<u>4.13</u>	<u>79</u>	<u>0825</u>
One Casing Volume (CV): <u>6.57</u>	<u>7L</u>	<u>5.11</u>	<u>2.7</u>	<u>25.3</u>	<u>5.72</u>	<u>0.63</u>	<u>4.12</u>	<u>77</u>	<u>0830</u>
Start Purge (hrs): <u>0255</u>									
End Purge (hrs): <u>0830</u>									
Total Purge Time (min): <u>35</u>									
Total Vol. Purged (gal): <u>7</u>									

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>SVOC</u>	<u>-</u>	<u>2 x 1L Amber</u>	<u>Y</u>
<u>Pest</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>PCB</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>HCB</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>metals</u>	<u>HNO3</u>	<u>1 x 250mL PE</u>	<u>Y</u>
<u>cyanide</u>	<u>NaOH</u>	<u>1 x 250mL PE</u>	<u>Y</u>
<u>VOC</u>	<u>HCl</u>	<u>3 40mL vial</u>	<u>Y</u>

OBSERVATIONS / NOTES:

34 well volume = 4.60 L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Project Site Name: GPT LRI
 Project No.: 11260070c

Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01G-2301
 Sample Location: GPT-1-23
 Sampled By: war
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(mV)	
<u>9-9-08</u>								
<u>0845</u>								
Method: <u>Low Flow</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Method:								
<u>9-9-08</u>								
<u>Low Flow</u>	<u>1W 1T</u>	<u>4.6</u>	<u>0.172</u>	<u>27.22</u>	<u>20.5</u>	<u>5.41</u>	<u>133</u>	<u>200 uol/l</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2</u>	<u>4.6</u>	<u>0.161</u>	<u>27.12</u>	<u>13.1</u>	<u>5.20</u>	<u>111</u>	<u>DP 3.92</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1</u>	<u>4.7</u>	<u>0.156</u>	<u>27.13</u>	<u>3.62</u>	<u>3.60</u>	<u>99</u>	<u>DP 3.91</u>
	<u>1 1/2</u>	<u>4.7</u>	<u>0.150</u>	<u>27.12</u>	<u>0.98</u>	<u>3.99</u>	<u>89</u>	<u>DP 3.92</u>
Total Well Depth (TD): <u>15</u>	<u>13/4</u>	<u>4.7</u>	<u>0.149</u>	<u>27.17</u>	<u>0.42</u>	<u>3.73</u>	<u>84</u>	
Static Water Level (WL): <u>3.90</u>	<u>2</u>	<u>4.7</u>	<u>0.148</u>	<u>27.24</u>	<u>0.85</u>	<u>3.67</u>	<u>82</u>	<u>DP 3.91</u>
One Casing Volume (gal): <u>177</u>								
Start Purge (hrs): <u>0805</u>								
End Purge (hrs): <u>0845</u>								
Total Purge Time (min): <u>46</u>								
Total Vol. Purged (gal): <u>2</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>TCL VOC</u>	<u>HCL</u>	<u>3 x 40ml</u>	<u>✓</u>
<u>TCL SVOC/PEST/PCB/Herb</u>	<u>H²O</u>	<u>5 x 12 amber</u>	<u>✓</u>
<u>TAL metals</u>	<u>HNO₃</u>	<u>1 x 250 ml poly</u>	<u>✓</u>
<u>CW</u>	<u>NaOH</u>	<u>1 x 250 ml poly</u>	<u>✓</u>

OBSERVATIONS / NOTES:

D.O. High but stable

Circle if Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s):

War

11.10
 1.11
 .55
 .11
 1.77
 .44
 1.11.77
 16



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

Sample ID No.: 01GW2401

Sample Location: 24

Sampled By: C. Odon

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1025</u>								
Method: <u>low flow peristaltic</u>								

PURGE DATA:

Date: <u>7-9-07</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow peristaltic</u>	1L	5.95	1.5	25.7	30.6	0.75	1.72	-83
Monitor Reading (ppm):	2L	5.96	1.2	25.6	23.6	0.66	1.72	-93
Well Casing Diameter & Material	3L	6.01	1.1	25.6	16.5	0.52	1.72	-101
Type: <u>1.0" PVC</u>	4L	6.01	1.3	25.6	8.18	0.44	1.72	-106
Total Well Depth (TD): <u>14.18</u>	5L	5.99	1.2	25.5	6.50	0.44	1.72	-109
Static Water Level (WL): <u>1.70</u>	6L	5.98	1.1	25.5	4.79	0.44	1.72	-107
One Casing Volume (gal): <u>1.90</u>								
Start Purge (hrs): <u>0955</u>								
End Purge (hrs): <u>1025</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>6</u>								

Tie
1002
1005
1010
1015
1020
1025

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
SvOC	-	2x 1L Amber	4
Pest	-	1x 1L Amber	4
PCB	-	1x 1L Amber	4
Herb	-	1x 1L Amber	4
metals	HNO ₃	1x 250 mL PE	4
cyanide	N ₂ O ₄	1x 250 mL PE	4
VOC	HCl	3x 40 mL vial	4

OBSERVATIONS / NOTES:

3x WV = 5.70

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Project Site Name: GPT LRI
Project No.: 1126-00700

Sample ID No.: OLGW 2501

Sample Location: GPT-1-25

Sampled By: WAO

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
<u>9.9.08</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(mV)	
Time: <u>1030</u>								
Method: <u>LOW FLOW</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
<u>9.9.08</u>								
Method: <u>Low Flow</u>	<u>INIT</u>	<u>4.3</u>	<u>0.077</u>	<u>25.76</u>	<u>3.17</u>	<u>4.89</u>	<u>85</u>	<u>6.90 AD</u>
Monitor Reading (ppm): <u>0.0</u>	<u>12.9m</u>	<u>4.2</u>	<u>0.076</u>	<u>25.68</u>	<u>0.69</u>	<u>4.14</u>	<u>84</u>	<u>200mL</u>
Well Casing Diameter & Material	<u>1 gal</u>	<u>4.1</u>	<u>0.076</u>	<u>25.67</u>	<u>0.48</u>	<u>3.96</u>	<u>86</u>	<u>6.92 AD</u>
Type: <u>1" PVC</u>	<u>1 1/2 gal</u>	<u>4.0</u>	<u>0.077</u>	<u>25.65</u>	<u>0.13</u>	<u>3.79</u>	<u>91</u>	<u>6.91 AD</u>
Total Well Depth (TD): <u>15'</u>								
Static Water Level (WL): <u>6.82</u>								
One Casing Volume (gal/L): <u>0.33</u>								
Start Purge (hrs): <u>1000</u>								
End Purge (hrs): <u>1030</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal/L): <u>1 1/2</u>								

4.86
 5.86
 6.82

 0.18
 82
 41
 08

 131
 33
 +1.31
 12

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>TCL VOC</u>	<u>HCL</u>	<u>3x 40ml</u>	<input checked="" type="checkbox"/>
<u>TCLSVOC/Pes/PcB/Herb</u>	<u>H2O</u>	<u>5x 12 amber</u>	<input checked="" type="checkbox"/>
<u>TAL Metals</u>	<u>HNO3</u>	<u>1x 250ml poly</u>	<input checked="" type="checkbox"/>
<u>CW</u>	<u>NaOH</u>	<u>1x 250ml poly</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

WAO



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
 Project No.: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01GW2601
 Sample Location: 26
 Sampled By: C. Schem
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1349</u>								
Method: <u>low flow/purged</u>								

PURGE DATA:

Date: <u>9-9-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow purged</u>	<u>1L</u>	<u>4.54</u>	<u>0.9</u>	<u>26.7</u>	<u>46.2</u>	<u>1.24</u>	<u>3.87</u>	<u>50</u>
Monitor Reading (ppm):	<u>2L</u>	<u>4.30</u>	<u>0.21</u>	<u>26.6</u>	<u>8.83</u>	<u>1.22</u>	<u>3.84</u>	<u>47</u>
Well Casing Diameter & Material	<u>3L</u>	<u>4.27</u>	<u>0.17</u>	<u>26.4</u>	<u>7.62</u>	<u>0.98</u>	<u>3.57</u>	<u>49</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>4.29</u>	<u>0.11</u>	<u>26.6</u>	<u>5.11</u>	<u>0.96</u>	<u>3.87</u>	<u>48</u>
Total Well Depth (TD): <u>14.19</u>	<u>5L</u>	<u>4.32</u>	<u>0.11</u>	<u>26.5</u>	<u>4.84</u>	<u>0.97</u>	<u>3.87</u>	<u>49</u>
Static Water Level (WL): <u>3.82</u>	<u>6L</u>	<u>4.30</u>	<u>0.12</u>	<u>26.5</u>	<u>4.09</u>	<u>0.93</u>	<u>3.87</u>	<u>43</u>
One Casing Volume (gal): <u>1.58</u>								
Start Purge (hrs): <u>1310</u>								
End Purge (hrs): <u>1340</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>6</u>								

Tide
 1315
 1320
 1325
 1330
 1335
 1340

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>SDA</u>	<u>-</u>	<u>2x 1L Amber</u>	<u>4</u>
<u>Pest</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>PCB</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>Herb</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>metals</u>	<u>HNO3</u>	<u>1x 250 ml poly</u>	<u>4</u>
<u>cr anide</u>	<u>NaOH</u>	<u>1x 250 ml poly</u>	<u>4</u>
<u>vbc</u>	<u>HCl</u>	<u>3x 40 ml vial</u>	<u>4</u>

OBSERVATIONS / NOTES:

3x WL = 4.75L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

01RB090208



Project Site Name: GPT SITE LRI
 Project No.: 112600700

Domestic Well Data
 Monitoring Well Data
 Other Well Type:
 QA Sample Type:

Sample ID No.: 01 GW 2704
 Sample Location: GPT-1-27
 Sampled By: WJL
 C.O.C. No.:
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	ORP (mV)	Other
Time: <u>1245</u>								
Method: <u>Low Flow</u>								

PURGE DATA:

Date: <u>9-9-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Method: <u>Low Flow</u>	<u>INIT</u>	<u>5.9</u>	<u>0.744</u>	<u>27.16</u>	<u>34.3</u>	<u>5.01</u>	<u>-121</u>	<u>DD 2.20'</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2g</u>	<u>6.0</u>	<u>0.810</u>	<u>26.44</u>	<u>12.6</u>	<u>3.72</u>	<u>-121</u>	
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1g</u>	<u>6.0</u>	<u>0.820</u>	<u>25.93</u>	<u>9.10</u>	<u>3.78</u>	<u>-120</u>	<u>DD 2.19'</u>
	<u>1 1/2g</u>	<u>6.0</u>	<u>0.809</u>	<u>25.85</u>	<u>3.29</u>	<u>3.17</u>	<u>-117</u>	<u>DD 2.19'</u>
Total Well Depth (TD): <u>15'</u>	<u>1 3/4g</u>	<u>5.9</u>	<u>0.808</u>	<u>25.86</u>	<u>1.80</u>	<u>3.09</u>	<u>-11.5</u>	
Static Water Level (WL): <u>2.15</u>								
One Casing Volume (gal): <u>0.52</u>								
Start Purge (hrs): <u>1245</u>								
End Purge (hrs): <u>1245</u>								
Total Purge Time (min): <u>35</u>								
Total Vol. Purged (gal): <u>1.75</u>								

12.85
 1.29
 .65
 .13
 2.07
 0.52
 0.07
 0.07

200001

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOC	HCL	3x 40ml	✓
TCL SVOC / PEST / PCBs / etc	H ₂ O	5 x 10 amber	✓
TAL metals	HNO ₃	1 x 250ml poly	✓
CW	NaOH	1 x 250ml poly	✓

OBSERVATIONS / NOTES:

water very turbid @ start
 CW aliquot developed green tint on contact w/NaOH

Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):

WJL



Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: OLGW0601
Sample Location: G-1-L-06
Sampled By: WBO

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

C.O.C. No.: _____
Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: 8-28-08	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 08:15								
Method: low flow								

PURGE DATA:

Date: 8-26-08	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: Low Flow	INIT	6.0	0.304	25.87	95.3	8.75	~25	100 uol/m ³
Monitor Reading (ppm):	-							
Well Casing Diameter & Material Type: 1" PVC								
Total Well Depth (TD): 40								
Static Water Level (WL): 3.92								
One Casing Volume (gal/L): 1.44								
Start Purge (hrs): 12:35								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

36.08
3.61
1.80
0.36
5.77
1
1.44
5.77
4
1.7
1.6
1

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3x4oz	✓
SVOC	HCl	5x16oz	✓
Pest.			
PCB			
Herb.			
TAL Metals +CN	HNO ₃	1x 250 poly	✓
CW	NaOH	1x 250 poly	✓

OBSERVATIONS / NOTES:

1315 - stopped pump
 1815 - restarted, still 20' of draw down
 Collected sample on 8/28/08 after well recharged

Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01GWO701
 Sample Location: GPR-07-01
 Sampled By: WAO/CO
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1340</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C. (mS/cm)	Temp.	Turbidity	DO	Salinity	Other
<u>8-26-08</u>								
Method: <u>Low Flow</u>	<u>1WIT</u>	<u>5.23</u>	<u>0.99</u>	<u>26.4</u>	<u>48</u>	<u>2.24</u>	<u>-35</u>	<u>3000/m²</u>
Monitor Reading (ppm): <u>-</u>	<u>1gal</u>	<u>4.64</u>	<u>0.99</u>	<u>25.1</u>	<u>7</u>	<u>0.95</u>	<u>13</u>	<u>DB 3.02</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>2gal</u>	<u>4.58</u>	<u>0.12</u>	<u>24.9</u>	<u>3</u>	<u>0.68</u>	<u>20</u>	
	<u>3gal</u>	<u>4.57</u>	<u>0.11</u>	<u>25.0</u>	<u>0</u>	<u>0.49</u>	<u>20</u>	
Total Well Depth (TD): <u>25</u>	<u>3 1/2 gal</u>	<u>4.59</u>	<u>0.11</u>	<u>24.9</u>	<u>0</u>	<u>0.49</u>	<u>19</u>	
Static Water Level (WL): <u>2.92</u>								
One Casing Volume (gal/L): <u>0.9</u>								
Start Purge (hrs): <u>1300</u>								
End Purge (hrs): <u>1336</u>								
Total Purge Time (min): <u>36</u>								
Total Vol. Purged (gal/L): <u>3 1/2</u>								

25
 22.08
 2.21
 1.10
 .22
 3.53
 13.53
 32
 33

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x 40ml	X
SVOC			
Pest.	H ₂ O	5x 100ml amber	X
PCB			
Herb.			
TAL Metals + CN ⁻	HNO ₃	1x 250 Poly	X
CW	NaOH	1x 250 Poly	X

OBSERVATIONS / NOTES:

Circle if Applicable: MS/MSD Duplicate ID No.: 01GWO701 D

Signature(s): [Signature]



Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 01G-0801
Sample Location: CAT-1-08
Sampled By: WAO

- Domestic Well Data
Monitoring Well Data
Other Well Type:
QA Sample Type:

C.O.C. No.:
Type of Sample:
Low Concentration
High Concentration

SAMPLING DATA:

Table with columns: Date, Color (Visual), pH (S.U.), S.C. (mS/cm), Temp. (C), Turbidity (NTU), DO (mg/l), Salinity (%), Other

PURGE DATA:

Table with columns: Date, Volume, pH, S.C., Temp., Turbidity, DO, Salinity, Other. Includes handwritten notes like 'm skin' and 'ORD'.

Handwritten calculations: 2.80, 2.77, 10.23, 1.02, .51, .10, 11.63, 0.4

SAMPLE COLLECTION INFORMATION:

Table with columns: Analysis, Preservative, Container Requirements, Collected. Includes entries for VOC, SVOC, Pest, PCB, Herb, TAL Metals.

OBSERVATIONS / NOTES:

Large empty box for observations and notes.

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

Handwritten signature



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: 01GW0901
 Project No.: 112G00700 Sample Location: GAT-1-9
 Sampled By: Wise
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:								
Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>0900</u>								
Method: <u>Low Flow</u>								

PURGE DATA: <u>m slow</u> <u>ORD</u>								
Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>Low Flow</u>	<u>INIT</u>	<u>5.8</u>	<u>0.27</u>	<u>24.38</u>	<u>80</u>	<u>2.19</u>	<u>-103</u>	<u>100ml/min</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2 gal</u>	<u>6.1</u>	<u>0.258</u>	<u>23.72</u>	<u>20.3</u>	<u>0.88</u>	<u>-105</u>	<u>DD24.40</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>								
Total Well Depth (TD): <u>45</u>								
Static Water Level (WL): <u>5.91</u>								
One Casing Volume (gal/L): <u>1.6</u>								
Start Purge (hrs): <u>1650</u>								
End Purge (hrs):								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

45
5.91
39.09
3.91
1.95
1.39
6.25
1.56
+6.25
4
22
20
25

SAMPLE COLLECTION INFORMATION:			
Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x40ml	✓
SVOC			
Pest.	40C	5x12ml	✓
PCB			
Herb.			
TAL Metals + MS	HNO3	1x250ml	✓
<u>LN</u>	NaOH	1x250ml	✓

OBSERVATIONS / NOTES:
 Slow recharge, well had pressurized yesterday
 WL @ 28'
 D new down to 31.4'
 @ 1gal rem.
 Sampled on 8-29-08
 after recharge

Circle if Applicable: _____ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: 016W1001
 Project No.: 112G00700 Sample Location: 10
 Sampled By: C. Edm
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1550</u>								
Method: <u>low flow/peristaltic</u>								

PURGE DATA:

Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow/peristaltic</u>	<u>1L</u>	<u>4.84</u>	<u>0.44</u>	<u>25.5</u>	<u>17.4</u>	<u>1.03</u>	<u>1.90</u>	<u>32</u>
Monitor Reading (ppm):	<u>2L</u>	<u>4.82</u>	<u>0.29</u>	<u>25.2</u>	<u>14.4</u>	<u>0.73</u>	<u>1.90</u>	<u>27</u>
Well Casing Diameter & Material	<u>4L</u>	<u>4.86</u>	<u>3.3</u>	<u>24.9</u>	<u>6.15</u>	<u>0.59</u>	<u>1.90</u>	<u>17</u>
Type: <u>10" PVC</u>	<u>6L</u>	<u>4.91</u>	<u>3.1</u>	<u>24.5</u>	<u>2.69</u>	<u>0.40</u>	<u>1.92</u>	<u>3</u>
Total Well Depth (TD): <u>24</u>	<u>8L</u>	<u>4.98</u>	<u>3.5</u>	<u>24.4</u>	<u>1.11</u>	<u>0.42</u>	<u>1.92</u>	<u>-2</u>
Static Water Level (WL): <u>1.59</u>	<u>9L</u>	<u>4.83</u>	<u>0.40</u>	<u>24.4</u>	<u>0.68</u>	<u>0.39</u>	<u>1.92</u>	<u>0</u>
One Casing Volume (gal): <u>0.88</u>	<u>10L</u>	<u>4.85</u>	<u>0.38</u>	<u>24.4</u>	<u>0.75</u>	<u>0.38</u>	<u>1.92</u>	<u>-2</u>
Start Purge (hrs): <u>1455</u>	<u>11L</u>	<u>4.83</u>	<u>0.39</u>	<u>24.4</u>	<u>0.56</u>	<u>0.38</u>	<u>1.92</u>	<u>-1</u>
End Purge (hrs): <u>1550</u>								
Total Purge Time (min): <u>55</u>								
Total Vol. Purged (gal): <u>3</u>								

Tile
 1500
 1505
 1515
 1525
 1535
 1540
 1545
 1550

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3 x 40 mL vial	4
SVOC	-	1 x 1L Amber	4
Pest.	-	1 x 1L Amber	4
PCB	-	1 x 1L Amber	4
Herb.	-	1 x 1L Amber	4
TAL Metals CON	HNO ₃	1 x 250 mL poly	4
CW	NaOH	1 x 250 mL poly	4
SVOC	-	1 x 1L Amber	4

OBSERVATIONS / NOTES:

22
~~31.35L~~
04
58 3L = 10.03 L
0

Circle if Applicable: _____ Signature(s): _____
 MS/MSD Duplicate ID No.: _____



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: 02GW1101

Sample Location: GP-1-11

Sampled By: WAO

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1145</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: <u>09-27-08</u>								
Method: <u>Low Flow WIT</u>								
Monitor Reading (ppm): <u>0.0</u>	<u>1.5</u>	<u>4.9</u>	<u>0.101</u>	<u>23.60</u>	<u>284</u>	<u>1.26</u>	<u>31</u>	<u>204.16</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>3</u>	<u>4.9</u>	<u>0.090</u>	<u>23.71</u>	<u>219</u>	<u>0.85</u>	<u>27</u>	<u>204.56</u>
Total Well Depth (TD): <u>40</u>	<u>4.5</u>	<u>4.8</u>	<u>0.084</u>	<u>23.72</u>	<u>141</u>	<u>0.71</u>	<u>15</u>	<u>204.55</u>
Static Water Level (WL): <u>2.16</u>	<u>6</u>	<u>4.8</u>	<u>0.082</u>	<u>24.03</u>	<u>122</u>	<u>0.68</u>	<u>0</u>	<u>204.62</u>
One Casing Volume (gal): <u>1.5</u>	<u>7.5</u>	<u>4.8</u>	<u>0.079</u>	<u>24.31</u>	<u>115</u>	<u>0.64</u>	<u>-14</u>	<u>204.89</u>
Start Purge (hrs): <u>0820</u>	<u>9</u>	<u>4.8</u>	<u>0.078</u>	<u>24.43</u>	<u>106.1</u>	<u>0.57</u>	<u>-22</u>	<u>204.89</u>
End Purge (hrs): <u>1140</u>	<u>10.5</u>	<u>4.8</u>	<u>0.078</u>	<u>24.74</u>	<u>104.1</u>	<u>0.50</u>	<u>-27</u>	
Total Purge Time (min): <u>200</u>	<u>12</u>	<u>4.8</u>	<u>0.078</u>	<u>24.28</u>	<u>100</u>	<u>0.52</u>	<u>-31</u>	
Total Vol. Purged (gal/L): <u>12</u>								

37.84
23.78
1.89
.39
6.06
1.5

Steady
Steady

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3 x 400ml	✓
SVOC			
Pest.			
PCB	HCL	5 x 12 amber	✓
Herb.			
TAL Metals NON	HNO3	1 x 250ml Poly	✓
<u>CW</u>	NaOH	1 x 250ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

WAO



GROUNDWATER SAMPLE LOG SHEET

Page of

Project Site Name:	Site 1 RI - Gulfport	Sample ID No.:	01601301
Project No.:	112G00700	Sample Location:	13
<input type="checkbox"/> Domestic Well Data		Sampled By:	C. Edm
<input checked="" type="checkbox"/> Monitoring Well Data		C.O.C. No.:	
<input type="checkbox"/> Other Well Type:		Type of Sample:	
<input type="checkbox"/> QA Sample Type:		<input type="checkbox"/> Low Concentration	
		<input type="checkbox"/> High Concentration	

SAMPLING DATA:

Date: 8/27/08	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: 1030								
Method: low flow/pistaltic								

PURGE DATA:

Date: 8/27/08	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other	Tide
Method: low flow/pistaltic	1.5L	4.66	0.23	24.8	0.28	1.02	0.70	57	1005
Monitor Reading (ppm):	3.0	4.58	0.10	24.8	0.33	0.67	0.70	57	1010
Well Casing Diameter & Material	4.5	4.55	0.10	24.6	0.22	0.52	0.70	53	1015
Type: 1.0" PVC	6.0	4.56	0.63	24.6	0.46	0.46	0.70	50	1020
Total Well Depth (TD):	25	4.53	0.65	24.6	0.24	0.49	0.70	49	1025
Static Water Level (WL): 0.66	9.0	4.55	0.61	24.7	0.18	0.48	0.70	48	1030
One Casing Volume (gal/L):									
Start Purge (hrs): 4:00									
End Purge (hrs): 1030									
Total Purge Time (min): 30									
Total Vol. Purged (gal/L): 2									

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	2 HCl	3x 40 mL	4
SVOC	-	1x 1.0L	4
Pest.	-	1x 1.0L	4
PCB	-	1x 1.0L	4
Herb.	-	2x 1.0L	4
TAL Metals + CW	HNO ₃ NaOH	1x 250 mL 1x 250 mL	4

OBSERVATIONS / NOTES:

well volume = 0.526 * 2 L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: OLG-W 1401
 Sample Location: GPT-1-14
 Sampled By: Woe
 C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>8-27-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1400</u>								
Method: <u>LOW FLOW</u>								

PURGE DATA:

Date: <u>8-27-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>Low FLOW</u>	<u>1W.1T</u>	<u>5.7</u>	<u>0.231</u>	<u>26.13</u>	<u>101</u>	<u>8.90</u>	<u>-74</u>	<u>300ug/L</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1.2</u>	<u>5.2</u>	<u>0.240</u>	<u>24.95</u>	<u>89.5</u>	<u>0.79</u>	<u>-67</u>	<u>DP1.05</u>
Well Casing Diameter & Material	<u>2.4</u>	<u>5.2</u>	<u>0.230</u>	<u>24.96</u>	<u>23.6</u>	<u>0.50</u>	<u>-68</u>	<u>DP 1.07</u>
Type: <u>1" PVC</u>	<u>3.6</u>	<u>5.2</u>	<u>0.223</u>	<u>24.79</u>	<u>9.16</u>	<u>0.43</u>	<u>-68</u>	
Total Well Depth (TD): <u>30</u>								
Static Water Level (WL): <u>1.00</u>								
One Casing Volume (gal/L): <u>1.2</u>								
Start Purge (hrs): <u>1315</u>								
End Purge (hrs): <u>1400</u>								
Total Purge Time (min): <u>45</u>								
Total Vol. Purged (gal/L): <u>3.6</u>								

29.06
 2.9
 1.5
 1.3

 4.7
 1.2

 34.7
 2

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3x 40 ml</u>	<input checked="" type="checkbox"/>
SVOC			
Pest.			
PCB		<u>5x 12 amber</u>	
Herb.			
TAL Metals + CS	<u>HNO3</u>	<u>1x 250 ml</u>	<input checked="" type="checkbox"/>
<u>cu</u>	<u>NaOH</u>	<u>1x 250 ml</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s): [Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 016W1501
Sample Location: 15
Sampled By: C. Ock
C.O.C. No.:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
<u>8-27-08</u>								
Time: <u>1350</u>								
Method: <u>low flow / peristaltic</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>8-27-08</u>								
Method: <u>low flow / peristaltic</u>	<u>1L</u>	<u>5.83</u>	<u>0.50</u>	<u>25.7</u>	<u>9.09</u>	<u>0.79</u>	<u>0.90</u>	<u>-126</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.87</u>	<u>0.46</u>	<u>25.4</u>	<u>1.21</u>	<u>0.48</u>	<u>0.92</u>	<u>-128</u>
Well Casing Diameter & Material	<u>3L</u>	<u>5.85</u>	<u>0.43</u>	<u>25.5</u>	<u>0.93</u>	<u>0.50</u>	<u>0.92</u>	<u>-127</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>5.86</u>	<u>0.44</u>	<u>25.5</u>	<u>0.34</u>	<u>0.45</u>	<u>0.92</u>	<u>-128</u>
Total Well Depth (TD): <u>15</u>	<u>5L</u>	<u>5.85</u>	<u>0.45</u>	<u>25.5</u>	<u>0.22</u>	<u>0.43</u>	<u>0.93</u>	<u>-130</u>
Static Water Level (WL): <u>0.80</u>	<u>6L</u>	<u>5.86</u>	<u>0.44</u>	<u>25.6</u>	<u>0.41</u>	<u>0.42</u>	<u>0.93</u>	<u>-128</u>
One Casing Volume (gal): <u>2</u>								
Start Purge (hrs): <u>1320</u>								
End Purge (hrs): <u>1350</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>1.8</u>								

The
1325
1330
1335
1340
1345
1350

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCl</u>	<u>3 x 40 mL vial</u>	<u>4</u>
SVOC	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
Pest.	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
PCB	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
Herb.	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>
TAL Metals 	<u>HNO₃</u>	<u>1 x 250 mL plastic</u>	<u>4</u>
<u>CA-</u>	<u>NaOH</u>	<u>1 x 250 mL plastic</u>	<u>4</u>
	<u>-</u>	<u>1 x 1 L Amber</u>	<u>4</u>

OBSERVATIONS / NOTES:

Well cap = 0.6G = 2L

Circle if Applicable: MS/MSD Duplicate ID No.: Signature(s): *C. Ock*



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: 01GW1601

Sample Location: 16

Sampled By: C. Colon

C.O.C. No.:

Type of Sample:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
8-28-08								
Time: 1100								
Method: low flow/pistat								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
8-28-08								
Method: low flow/pistat	1L	4.77	0.21	24.6	77.7	1.14	0.56	39
Monitor Reading (ppm):	2L	4.69	0.63	24.4	39.4	0.65	0.56	40
Well Casing Diameter & Material	4.25L	4.49	0.9	24.3	33.2	0.55	0.57	45
Type: 1.0" PVC	4L	4.48	0.9	24.3	29.6	0.52	0.57	45
Total Well Depth (TD): 14.25	5L	4.41	0.9	24.3	13.6	0.52	0.57	50
Static Water Level (WL): 0.53	6L	4.40	0.99	24.4	5.51	0.50	0.57	50
One Casing Volume (gal/L): 0.52	7L	4.43	0.99	24.3	3.67	0.49	0.57	47
Start Purge (hrs): 1025								
End Purge (hrs): 1100								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 2								

Time
1030
1035
1040
1045
1050
1055
1100

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3x40 mL vial	4
SVOC	-	1x1L Amber	4
Pest.	-	1x1L Amber	4
PCB	-	1x1L Amber	4
Herb.	-	1x1L Amber	4
TAL Metals 250	HNO ₃	1x250 mL poly	4
CN	H ₂ O ₂	1x250 mL poly	4
SWC	-	1x1L Amber	4

OBSERVATIONS / NOTES:

$0.57 \times 7.8 = 2.16 \times 3 = 6.48$

Circle if Applicable:

MS/MSD

Duplicate ID No.:

01GW1601-D

Signature(s):



Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 01GW1701

Sample Location: GPT-112

Sampled By: WOO

C.O.C. No.:

Type of Sample:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
6-28-08								
Time: 1030								
Method: Low Flow								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
6-28-08								
Method: Low Flow	INIT	4.1	0.16	25.79	35.9	3.40	167	300um/L
Monitor Reading (ppm): 0.0	0.5g	4.0	0.151	25.48	28.8	2.07	152	200.74
Well Casing Diameter & Material Type: 1" PVC	1g	4.0	0.147	25.44	8.66	1.62	150	200.74
	1.5g	4.0	0.152	25.42	4.98	1.44	148	200.74
Total Well Depth (TD): 15	2g	4.0	0.145	25.36	3.78	1.10	146	
Static Water Level (WL): 0.69								
One Casing Volume (gal/L): 0.56								
Start Purge (hrs): 1004								
End Purge (hrs): 1030								
Total Purge Time (min): 26								
Total Vol. Purged (gal/L): 2								

4.31
1.43
0.72
0.14
2.29
0.56
2.29
20
29

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCL	3x 40ml	✓
SVOC			
Pest.	40C	5x 120ml	✓
PCB			
Herb.			
TAL Metals + ON	HNO3	1x 250ml Poly	✓
CU	NaOH	1x 250ml Poly	✓

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):

[Handwritten Signature]



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: DIGW1801

Sample Location: 18

Sampled By: C. Olson

C.O.C. No.:

Type of Sample:

Domestic Well Data

Monitoring Well Data

Other Well Type:

QA Sample Type:

Low Concentration

High Concentration

SAMPLING DATA:

Date: <u>8-28-08</u>	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: <u>1:45</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
Method: <u>low flow/puristaltic</u>								

PURGE DATA:

Date: <u>8-28-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow/puristaltic</u>	<u>1L</u>	<u>5.74</u>	<u>0.29</u>	<u>28.4</u>	<u>77.1</u>	<u>0.22</u>	<u>0.98</u>	<u>-102</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.77</u>	<u>0.23</u>	<u>28.1</u>	<u>57.9</u>	<u>0.65</u>	<u>0.99</u>	<u>-115</u>
Well Casing Diameter & Material Type: <u>1.0" PVC</u>	<u>3L</u>	<u>5.69</u>	<u>0.17</u>	<u>28.2</u>	<u>40.3</u>	<u>0.61</u>	<u>0.99</u>	<u>-116</u>
	<u>4L</u>	<u>5.65</u>	<u>0.17</u>	<u>28.1</u>	<u>24.3</u>	<u>0.56</u>	<u>0.99</u>	<u>-118</u>
Total Well Depth (TD): <u>14.05</u>	<u>5L</u>	<u>5.78</u>	<u>0.17</u>	<u>28.1</u>	<u>15.3</u>	<u>0.55</u>	<u>0.99</u>	<u>-121</u>
Static Water Level (WL): <u>0.85</u>	<u>6L</u>	<u>5.77</u>	<u>0.17</u>	<u>28.0</u>	<u>12.3</u>	<u>0.55</u>	<u>0.99</u>	<u>-122</u>
One Casing Volume (gal): <u>0.52</u>	<u>7L</u>	<u>5.78</u>	<u>0.17</u>	<u>28.0</u>	<u>10.48</u>	<u>0.53</u>	<u>0.99</u>	<u>-122</u>
Start Purge (hrs): <u>1:30</u>								
End Purge (hrs): <u>1:45</u>								
Total Purge Time (min): <u>35</u>								
Total Vol. Purged (gal): <u>2</u>								

1015
1020
1025
1030
1035
1040
1045

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCl</u>	<u>240 mL vial</u>	<u>✓</u>
SVOC	<u>-</u>	<u>1 x 1L Amber</u>	<u>✓</u>
Pest.	<u>-</u>	<u>1 x 1L Amber</u>	<u>✓</u>
PCB	<u>-</u>	<u>1 x 1L Amber</u>	<u>✓</u>
Herb.	<u>-</u>	<u>1 x 1L Amber</u>	<u>✓</u>
TAL Metals ✓	<u>HNO₃</u>	<u>1 x 250 mL poly</u>	<u>✓</u>
<u>CW</u>	<u>NaOH</u>	<u>1 x 250 mL poly</u>	<u>✓</u>
<u>SVOC</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>✓</u>

OBSERVATIONS / NOTES:

Case well volume = 1.57 L x 3 = 6L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport Sample ID No.: OLG-w 1901
 Project No.: 112G00700 Sample Location: GAT-1-19
 Sampled By: Woo
 C.O.C. No.: _____
 Type of Sample: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1350</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: <u>8-23-08</u>								
Method: <u>LOW FLOW</u>	<u>INIT</u>	<u>5.7</u>	<u>0.248</u>	<u>28.34</u>	<u>74.2</u>	<u>2.63</u>	<u>-34</u>	<u>300 ml/min</u>
Monitor Reading (ppm): <u>0.0</u>	<u>0.5</u>	<u>5.5</u>	<u>0.252</u>	<u>28.15</u>	<u>35.4</u>	<u>1.51</u>	<u>-28</u>	<u>DD 1.15</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1</u>	<u>5.1</u>	<u>0.253</u>	<u>28.12</u>	<u>20.1</u>	<u>1.20</u>	<u>-9</u>	<u>DD 1.15</u>
	<u>1.5</u>	<u>4.9</u>	<u>0.252</u>	<u>28.13</u>	<u>8.79</u>	<u>2.51</u>	<u>-5</u>	<u>DD 1.15</u>
Total Well Depth (TD): <u>15</u>	<u>2</u>	<u>4.9</u>	<u>0.253</u>	<u>27.97</u>	<u>5.28</u>	<u>2.87</u>	<u>-9</u>	<u>DD 1.16</u>
Static Water Level (WL): <u>1.10</u>	<u>2.5</u>	<u>4.9</u>	<u>0.253</u>	<u>28.00</u>	<u>3.36</u>	<u>3.32</u>	<u>-13</u>	<u>DD 1.16</u>
One Casing Volume (gal/L): <u>0.56</u>								
Start Purge (hrs): <u>1312</u>								
End Purge (hrs): <u>1350</u>								
Total Purge Time (min):								
Total Vol. Purged (gal/L):								

13.90
 1.29
 .70
 .14

 2.23
 .56

 2.23
 .20

 2.23

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3x40ml</u>	<u>✓</u>
SVOC			
Pest.	<u>H₂O₂</u>	<u>5x1 liter</u>	<u>✓</u>
PCB			
Herb.			
TAL Metals + CN	<u>HNO₃</u>	<u>1x250 ml Poly</u>	<u>✓</u>
<u>CN</u>	<u>NaOH</u>	<u>1x250 ml Poly</u>	<u>✓</u>

OBSERVATIONS / NOTES:

DO malfunction

Circle if Applicable: _____ Signature(s): [Signature]

MS/MSD	Duplicate ID No.:
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GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
Project No.: 112G00700

Sample ID No.: 016W2001
Sample Location: 20
Sampled By: C. Oden
C.O.C. No.:

- Domestic Well Data
- Monitoring Well Data
- Other Well Type:
- QA Sample Type:

- Type of Sample:
- Low Concentration
- High Concentration

SAMPLING DATA:

Date: <u>8-28-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1525</u>								
Method: <u>low flow/pneumatic</u>								

PURGE DATA:

Date: <u>8-28-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow/pneumatic</u>	<u>1L</u>	<u>5.40</u>	<u>0.18</u>	<u>26.7</u>	<u>26.0</u>	<u>1.87</u>	<u>0.82</u>	<u>-49</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.37</u>	<u>0.19</u>	<u>26.0</u>	<u>32.3</u>	<u>0.13</u>	<u>0.81</u>	<u>-55</u>
Well Casing Diameter & Material Type: <u>1.0" PVC</u>	<u>3L</u>	<u>5.34</u>	<u>0.19</u>	<u>25.9</u>	<u>70.7</u>	<u>0.60</u>	<u>0.83</u>	<u>-58</u>
	<u>4L</u>	<u>5.31</u>	<u>0.21</u>	<u>25.7</u>	<u>11.3</u>	<u>0.50</u>	<u>0.83</u>	<u>-60</u>
Total Well Depth (TD): <u>14.05</u>	<u>5L</u>	<u>5.31</u>	<u>0.22</u>	<u>25.6</u>	<u>6.64</u>	<u>0.48</u>	<u>0.83</u>	<u>-63</u>
Static Water Level (WL): <u>0.81</u>	<u>6L</u>	<u>5.35</u>	<u>0.24</u>	<u>25.6</u>	<u>4.05</u>	<u>0.47</u>	<u>0.83</u>	<u>-65</u>
One Casing Volume (gal/L): <u>0.52</u>								
Start Purge (hrs): <u>1455</u>								
End Purge (hrs): <u>1525</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal/L): <u>1.5</u>								

T.L.C
1500
1505
1510
1515
1520
1525

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	HCl	3x40 mL vial	Y
SVOC	-	1x1L Amber	Y
Pest.	-	1x1L Amber	Y
PCB	-	1x1L Amber	Y
Herb.	-	1x1L Amber	Y
TAL Metals (S)	HNO ₃	1x250 mL poly 1x250 mL poly	Y
CN ⁻	N ₂ O ₄	1x250 mL poly 1x250 mL poly	Y
SVOC	-	1x1L Amber	Y

OBSERVATIONS / NOTES:

1.57 x 3 = 6L

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: Site 1 RI - Gulfport
 Project No.: 112G00700

Sample ID No.: 01G-02101

Sample Location: GPT-1-21

Sampled By: WAO

C.O.C. No.: _____

Type of Sample: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

Low Concentration

High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>8-28-08</u>								
<u>1525</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
<u>8-28-08</u>								
Method: <u>LOW FLOW</u>	<u>INIT</u>	<u>5.5</u>	<u>0.234</u>	<u>26.57</u>	<u>99.6</u>	<u>3.01</u>	<u>1</u>	<u>300 uel/ml</u>
Monitor Reading (ppm): <u>0.0</u>	<u>0.5 g</u>	<u>5.5</u>	<u>0.230</u>	<u>26.09</u>	<u>72.1</u>	<u>1.57</u>	<u>-7</u>	<u>AD 0.85</u>
Well Casing Diameter & Material	<u>1.9</u>	<u>5.4</u>	<u>0.223</u>	<u>25.88</u>	<u>27.6</u>	<u>1.31</u>	<u>-7</u>	<u>AD 0.85</u>
Type: <u>1" PVC</u>	<u>1.5 g</u>	<u>5.4</u>	<u>0.222</u>	<u>25.90</u>	<u>10.46</u>	<u>1.16</u>	<u>-8</u>	<u>AD 0.85</u>
Total Well Depth (TD): <u>15</u>	<u>2 g</u>	<u>5.4</u>	<u>0.221</u>	<u>25.88</u>	<u>4.70</u>	<u>1.08</u>	<u>-6</u>	
Static Water Level (WL): <u>0.80</u>								
One Casing Volume (gal): <u>0.57</u>								
Start Purge (hrs): <u>1452</u>								
End Purge (hrs): <u>1520</u>								
Total Purge Time (min): <u>28</u>								
Total Vol. Purged (gal): <u>2</u>								

4.25
1.42
.71
.14
2.27
0.52
2.27
20
27

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOC	<u>HCL</u>	<u>3 x 40ml</u>	<input checked="" type="checkbox"/>
SVOC			
Pest.			
PCB	<u>H₂O</u>	<u>5 x 125ml</u>	<input checked="" type="checkbox"/>
Herb.			
TAL Metals + ON	<u>HNO₃</u>	<u>1 x 250ml poly</u>	<input checked="" type="checkbox"/>
<u>CW</u>	<u>NaOH</u>	<u>1 x 250ml poly</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s): <u>WAO</u>
MS/MSD	Duplicate ID No.:	



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

Sample ID No.: 01662201

Sample Location: 22

Sampled By: C. Odu

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(%)	
<u>9-9-01</u>								
<u>0830</u>								
Method:								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other	Time
<u>9-9-01</u>									
Method:	<u>1L</u>	<u>4.98</u>	<u>0.99</u>	<u>25.4</u>	<u>78.4</u>	<u>1.70</u>	<u>4.13</u>	<u>162</u>	<u>0805</u>
Monitor Reading (ppm):	<u>2L</u>	<u>5.09</u>	<u>2.1</u>	<u>25.4</u>	<u>63.1</u>	<u>1.05</u>	<u>4.13</u>	<u>123</u>	<u>0805</u>
Well Casing Diameter & Material	<u>3L</u>	<u>5.09</u>	<u>8.7</u>	<u>25.4</u>	<u>26.9</u>	<u>0.68</u>	<u>4.13</u>	<u>102</u>	<u>0810</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>5.11</u>	<u>4.6</u>	<u>25.3</u>	<u>16.8</u>	<u>0.66</u>	<u>4.13</u>	<u>87</u>	<u>0815</u>
Total Well Depth (TD): <u>14.20</u>	<u>5L</u>	<u>5.12</u>	<u>2.9</u>	<u>25.3</u>	<u>12.9</u>	<u>0.65</u>	<u>4.13</u>	<u>81</u>	<u>0820</u>
Static Water Level (WL): <u>4.12</u>	<u>6L</u>	<u>5.11</u>	<u>2.6</u>	<u>25.7</u>	<u>8.34</u>	<u>0.64</u>	<u>4.13</u>	<u>79</u>	<u>0825</u>
One Casing Volume (CV): <u>6.54</u>	<u>7L</u>	<u>5.11</u>	<u>2.7</u>	<u>25.3</u>	<u>5.72</u>	<u>0.63</u>	<u>4.12</u>	<u>77</u>	<u>0830</u>
Start Purge (hrs): <u>0255</u>									
End Purge (hrs): <u>0830</u>									
Total Purge Time (min): <u>35</u>									
Total Vol. Purged (gal): <u>7</u>									

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>SVOC</u>	<u>-</u>	<u>2 x 1L Amber</u>	<u>Y</u>
<u>Pest</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>PCB</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>HCB</u>	<u>-</u>	<u>1 x 1L Amber</u>	<u>Y</u>
<u>metals</u>	<u>HNO3</u>	<u>1 x 250mL PE</u>	<u>Y</u>
<u>cyanide</u>	<u>NaOH</u>	<u>1 x 250mL PE</u>	<u>Y</u>
<u>VOC</u>	<u>HCl</u>	<u>3 40mL vial</u>	<u>Y</u>

OBSERVATIONS / NOTES:

34 well volume = 4.60 L

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Project Site Name: GPT LRI
 Project No.: 11260070c
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01G-2301
 Sample Location: GPT-1-23
 Sampled By: Wor
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Time:	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(mV)	
<u>9-9-08</u>								
<u>0845</u>								
Method: <u>Low Flow</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Method:								
<u>9-9-08</u>								
<u>Low Flow</u>	<u>1W 1T</u>	<u>4.6</u>	<u>0.172</u>	<u>27.22</u>	<u>20.5</u>	<u>5.41</u>	<u>133</u>	<u>200 uol/l</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2</u>	<u>4.6</u>	<u>0.161</u>	<u>27.12</u>	<u>13.1</u>	<u>5.20</u>	<u>111</u>	<u>DP 3.92</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1</u>	<u>4.7</u>	<u>0.156</u>	<u>27.13</u>	<u>3.62</u>	<u>3.60</u>	<u>99</u>	<u>DP 3.91</u>
	<u>1 1/2</u>	<u>4.7</u>	<u>0.150</u>	<u>27.12</u>	<u>0.98</u>	<u>3.99</u>	<u>89</u>	<u>DP 3.92</u>
Total Well Depth (TD): <u>15</u>	<u>13/4</u>	<u>4.7</u>	<u>0.149</u>	<u>27.17</u>	<u>0.42</u>	<u>3.73</u>	<u>84</u>	
Static Water Level (WL): <u>3.90</u>	<u>2</u>	<u>4.7</u>	<u>0.148</u>	<u>27.24</u>	<u>0.85</u>	<u>3.67</u>	<u>82</u>	<u>DP 3.91</u>
One Casing Volume (gal): <u>177</u>								
Start Purge (hrs): <u>0805</u>								
End Purge (hrs): <u>0845</u>								
Total Purge Time (min): <u>46</u>								
Total Vol. Purged (gal): <u>2</u>								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>TCL VOC</u>	<u>HCL</u>	<u>3 x 40ml</u>	<u>✓</u>
<u>TCL SVOC/PEST/PCB/Herb</u>	<u>H²O</u>	<u>5 x 12 amber</u>	<u>✓</u>
<u>TAL metals</u>	<u>HNO₃</u>	<u>1 x 250 ml poly</u>	<u>✓</u>
<u>CW</u>	<u>NaOH</u>	<u>1 x 250 ml poly</u>	<u>✓</u>

OBSERVATIONS / NOTES:

D.O. High but stable

Circle if Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s):

W.A. Ol

11.10
 1.11
 .55
 .11
 1.77
 .44
 1.11.77
 16



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
Project No.: _____

Sample ID No.: 01GW2401

Sample Location: 24

Sampled By: C. Odon

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1025</u>								
Method: <u>low flow peristaltic</u>								

PURGE DATA:

Date: <u>7-9-07</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow peristaltic</u>	1L	5.95	1.5	25.7	30.6	0.75	1.72	-83
Monitor Reading (ppm):	2L	5.96	1.2	25.6	23.6	0.66	1.72	-93
Well Casing Diameter & Material	3L	6.01	1.1	25.6	16.5	0.52	1.72	-101
Type: <u>1.0" PVC</u>	4L	6.01	1.3	25.6	8.18	0.44	1.72	-106
Total Well Depth (TD): <u>14.18</u>	5L	5.99	1.2	25.5	6.50	0.44	1.72	-109
Static Water Level (WL): <u>1.70</u>	6L	5.98	1.1	25.5	4.79	0.44	1.72	-107
One Casing Volume (gal): <u>1.90</u>								
Start Purge (hrs): <u>0955</u>								
End Purge (hrs): <u>1025</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>6</u>								

T. 2
 1002
 1005
 1010
 1015
 1020
 1025

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
SvOC	-	2x 1L Amber	4
Pest	-	1x 1L Amber	4
PCB	-	1x 1L Amber	4
Herb	-	1x 1L Amber	4
metals	HNO ₃	1x 250 mL PE	4
cyanide	N ₂ O ₄	1x 250 mL PE	4
VOC	HCl	3x 40 mL vial	4

OBSERVATIONS / NOTES:

3x WV = 5.70

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Project Site Name: GPT LRI
Project No.: 1126-00700

Sample ID No.: OLGW 2501

Sample Location: GPT-1-25

Sampled By: WAO

C.O.C. No.: _____

- Domestic Well Data
- Monitoring Well Data
- Other Well Type: _____
- QA Sample Type: _____

- Type of Sample: _____
- Low Concentration
- High Concentration

SAMPLING DATA:

Date:	Color	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
<u>09/08</u>	(Visual)	(S.U.)	(mS/cm)	(°C)	(NTU)	(mg/l)	(mV)	
Time: <u>1030</u>								
Method: <u>LOW FLOW</u>								

PURGE DATA:

Date:	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
<u>09/08</u>	<u>INIT</u>	<u>4.3</u>	<u>0.077</u>	<u>25.76</u>	<u>3.17</u>	<u>4.89</u>	<u>85</u>	<u>6.90 AD</u>
Method: <u>Low Flow</u>	<u>12 gal</u>	<u>4.2</u>	<u>0.076</u>	<u>25.68</u>	<u>0.69</u>	<u>4.14</u>	<u>84</u>	<u>2000 AD</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1 gal</u>	<u>4.1</u>	<u>0.076</u>	<u>25.67</u>	<u>0.48</u>	<u>3.96</u>	<u>86</u>	<u>6.92 AD</u>
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1/2 gal</u>	<u>4.0</u>	<u>0.077</u>	<u>25.65</u>	<u>0.13</u>	<u>3.79</u>	<u>91</u>	<u>6.91 AD</u>
Total Well Depth (TD): <u>15'</u>								
Static Water Level (WL): <u>6.82</u>								
One Casing Volume (gal/L): <u>0.33</u>								
Start Purge (hrs): <u>1000</u>								
End Purge (hrs): <u>1030</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal/L): <u>1 1/2</u>								

4.86
 5.66
 6.82

 0.18
 82
 41
 08

 131
 33
 +1.31
 12

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>TCL VOC</u>	<u>HCL</u>	<u>3x 40ml</u>	<input checked="" type="checkbox"/>
<u>TCLSVOC/Pes/PcB/Herb</u>	<u>H₂O</u>	<u>5x 12 amber</u>	<input checked="" type="checkbox"/>
<u>TAL Metals</u>	<u>HNO₃</u>	<u>1x 250ml poly</u>	<input checked="" type="checkbox"/>
<u>CW</u>	<u>NaOH</u>	<u>1x 250ml poly</u>	<input checked="" type="checkbox"/>

OBSERVATIONS / NOTES:

Circle if Applicable:		Signature(s): <u>WAO</u>
MS/MSD	Duplicate ID No.:	



GROUNDWATER SAMPLE LOG SHEET

Project Site Name: _____
 Project No.: _____
 Domestic Well Data
 Monitoring Well Data
 Other Well Type: _____
 QA Sample Type: _____

Sample ID No.: 01GW2601
 Sample Location: 26
 Sampled By: C. Schem
 C.O.C. No.: _____
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	Salinity (%)	Other
Time: <u>1349</u>								
Method: <u>low flow/purged</u>								

PURGE DATA:

Date: <u>9-9-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Method: <u>low flow purged</u>	<u>1L</u>	<u>4.54</u>	<u>0.9</u>	<u>26.7</u>	<u>46.2</u>	<u>1.24</u>	<u>3.87</u>	<u>50</u>
Monitor Reading (ppm):	<u>2L</u>	<u>4.30</u>	<u>0.21</u>	<u>26.6</u>	<u>8.83</u>	<u>1.22</u>	<u>3.84</u>	<u>47</u>
Well Casing Diameter & Material	<u>3L</u>	<u>4.27</u>	<u>0.17</u>	<u>26.4</u>	<u>7.62</u>	<u>0.98</u>	<u>3.57</u>	<u>49</u>
Type: <u>1.0" PVC</u>	<u>4L</u>	<u>4.29</u>	<u>0.11</u>	<u>26.6</u>	<u>5.11</u>	<u>0.96</u>	<u>3.87</u>	<u>48</u>
Total Well Depth (TD): <u>14.19</u>	<u>5L</u>	<u>4.32</u>	<u>0.11</u>	<u>26.5</u>	<u>4.84</u>	<u>0.97</u>	<u>3.87</u>	<u>49</u>
Static Water Level (WL): <u>3.82</u>	<u>6L</u>	<u>4.30</u>	<u>0.12</u>	<u>26.5</u>	<u>4.09</u>	<u>0.93</u>	<u>3.87</u>	<u>43</u>
One Casing Volume (gal): <u>1.58</u>								
Start Purge (hrs): <u>1310</u>								
End Purge (hrs): <u>1340</u>								
Total Purge Time (min): <u>30</u>								
Total Vol. Purged (gal): <u>6</u>								

Tide
 1315
 1320
 1325
 1330
 1335
 1340

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
<u>SDA</u>	<u>-</u>	<u>2x 1L Amber</u>	<u>4</u>
<u>Pest</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>PCB</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>Hex</u>	<u>-</u>	<u>1x 1L Amber</u>	<u>4</u>
<u>metals</u>	<u>HNO3</u>	<u>1x 250 ml poly</u>	<u>4</u>
<u>cr anide</u>	<u>NaOH</u>	<u>1x 250 ml poly</u>	<u>4</u>
<u>vbc</u>	<u>HCl</u>	<u>3x 40 ml vial</u>	<u>4</u>

OBSERVATIONS / NOTES:

3x WL = 4.75L

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):

01RB090208



Project Site Name: GPT SITE LRI
 Project No.: 112600700

Domestic Well Data
 Monitoring Well Data
 Other Well Type:
 QA Sample Type:

Sample ID No.: 01 GW 2704
 Sample Location: GPT-1-27
 Sampled By: WJL
 C.O.C. No.:
 Type of Sample:
 Low Concentration
 High Concentration

SAMPLING DATA:

Date: <u>9-9-08</u>	Color (Visual)	pH (S.U.)	S.C. (mS/cm)	Temp. (°C)	Turbidity (NTU)	DO (mg/l)	ORP (mV)	Other
Time: <u>1245</u>								
Method: <u>Low Flow</u>								

PURGE DATA:

Date: <u>9-9-08</u>	Volume	pH	S.C.	Temp.	Turbidity	DO	ORP	Other
Method: <u>Low Flow</u>	<u>1.75</u>	<u>5.9</u>	<u>0.744</u>	<u>27.16</u>	<u>34.3</u>	<u>5.01</u>	<u>-121</u>	<u>DD 2.20'</u>
Monitor Reading (ppm): <u>0.0</u>	<u>1/2g</u>	<u>6.0</u>	<u>0.810</u>	<u>26.44</u>	<u>12.6</u>	<u>3.72</u>	<u>-121</u>	
Well Casing Diameter & Material Type: <u>1" PVC</u>	<u>1g</u>	<u>6.0</u>	<u>0.820</u>	<u>25.93</u>	<u>9.10</u>	<u>3.78</u>	<u>-120</u>	<u>DD 2.19'</u>
	<u>1 1/2g</u>	<u>6.0</u>	<u>0.809</u>	<u>25.85</u>	<u>3.29</u>	<u>3.17</u>	<u>-117</u>	<u>DD 2.19'</u>
Total Well Depth (TD): <u>15'</u>	<u>1 3/4g</u>	<u>5.9</u>	<u>0.808</u>	<u>25.86</u>	<u>1.80</u>	<u>3.09</u>	<u>-11.5</u>	
Static Water Level (WL): <u>2.15</u>								
One Casing Volume (gal): <u>0.52</u>								
Start Purge (hrs): <u>1245</u>								
End Purge (hrs): <u>1245</u>								
Total Purge Time (min): <u>35</u>								
Total Vol. Purged (gal): <u>1.75</u>								

12.85
 1.29
 .65
 .13
 2.07
 0.52
 0.07
 0.07

200001

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
TCL VOC	HCL	3x 40ml	✓
TCL SVOC / PEST / PCB/PAH	H ₂ O	5 x 10 amber	✓
TAL metals	HNO ₃	1 x 250ml poly	✓
CW	NaOH	1 x 250ml poly	✓

OBSERVATIONS / NOTES:

water very turbid @ start
 CW aliquot developed green tint on contact w/NaOH

Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):



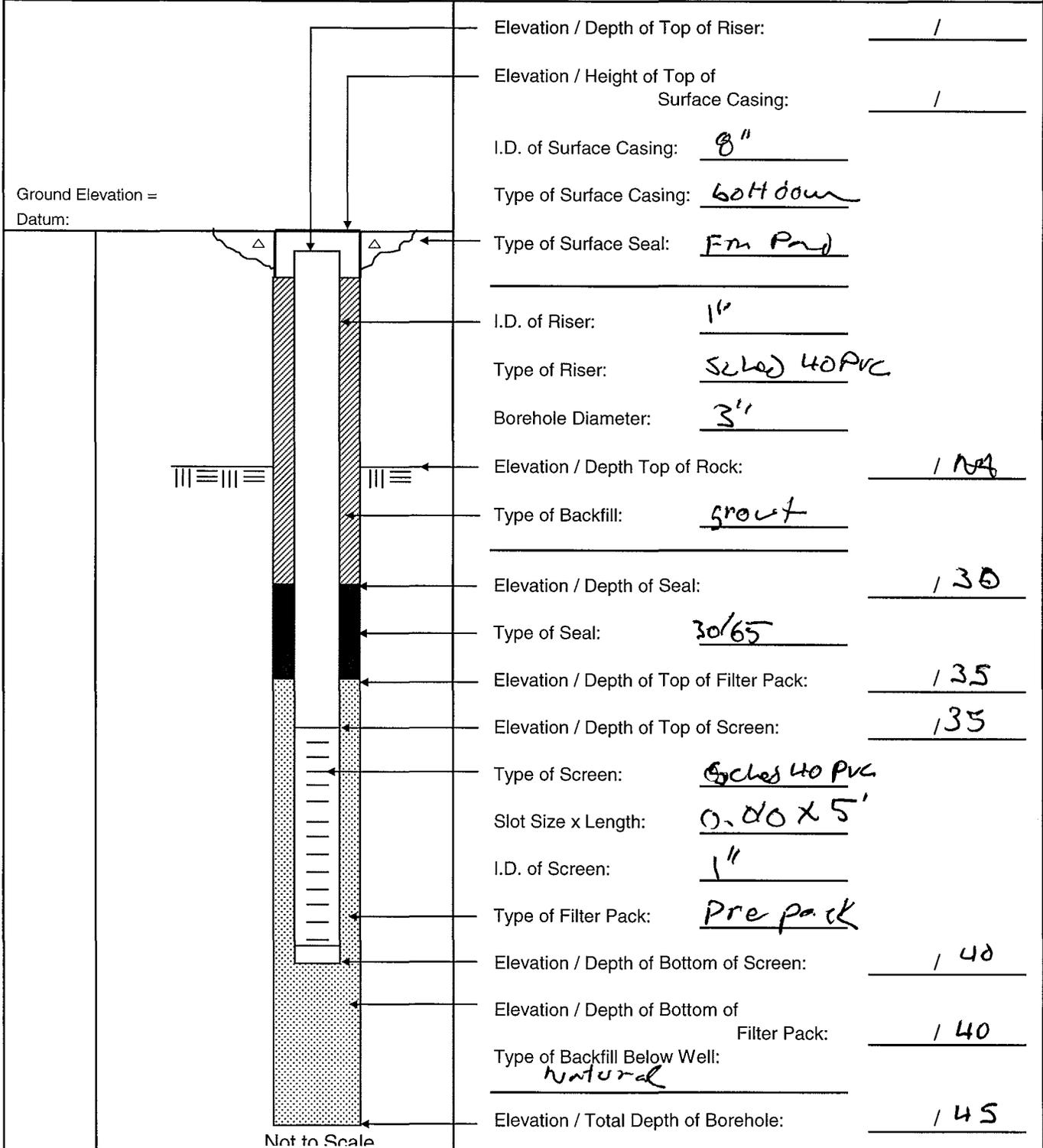
Tetra Tech NUS, Inc.

WELL No.:

GPT-0406

MONITORING WELL SHEET

PROJECT: GPT LRI DRILLING Co.: G-PT BORING No.: _____
 PROJECT No.: 112600700 DRILLER: R. LeBrow DATE COMPLETED: 8-12-08
 SITE: Site L DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W.D. Olson DEV. METHOD: _____ EASTING: _____





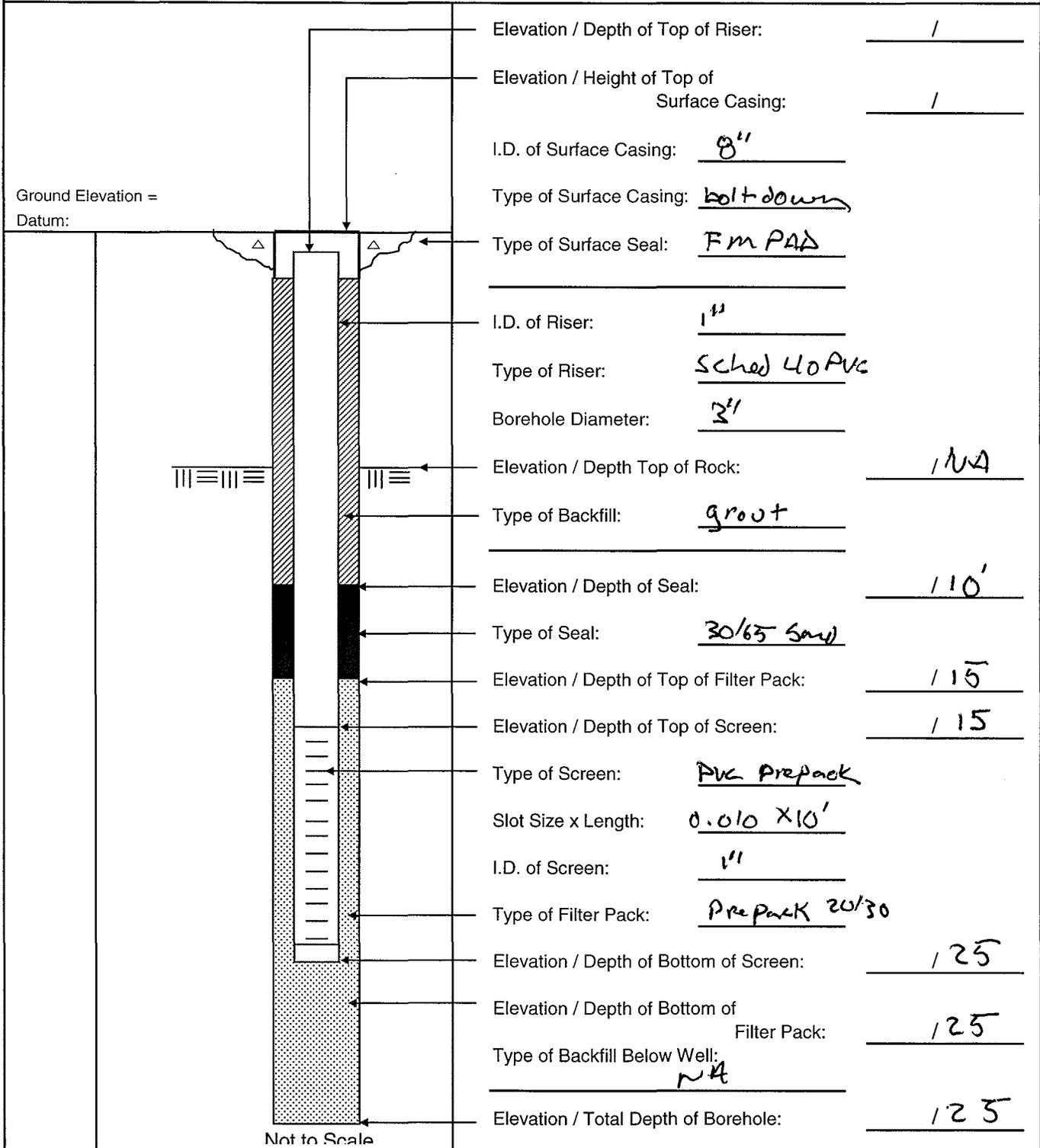
Tetra Tech NUS, Inc.

WELL No.:

GPT-0407

MONITORING WELL SHEET

PROJECT: R-PT RI DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 1126-00700 DRILLER: R. Lebron DATE COMPLETED: 8-12-08
 SITE: J DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W.D. OLSOU DEV. METHOD: _____ EASTING: _____





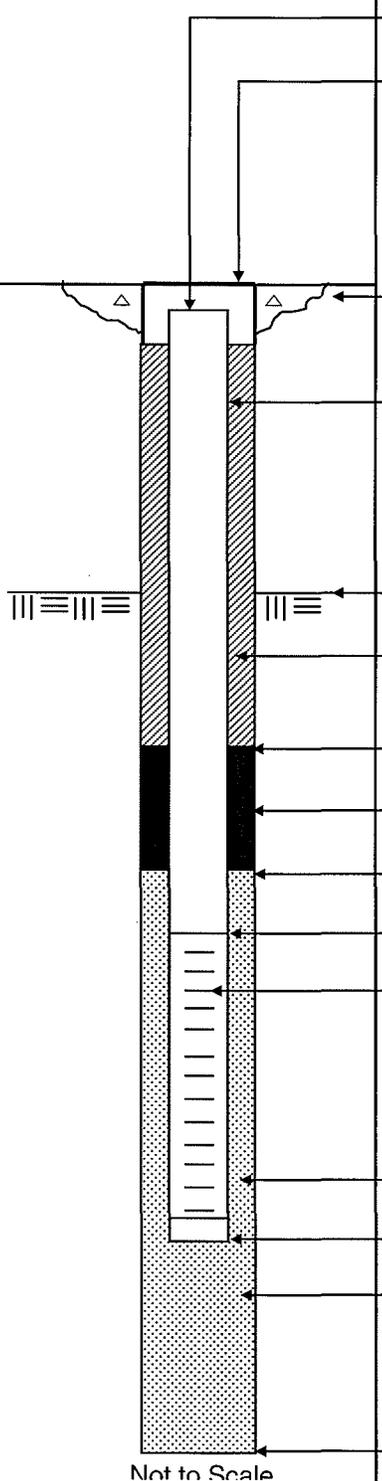
Tetra Tech NUS, Inc.

WELL No.: GPT-01-08

MONITORING WELL SHEET

PROJECT: GPT R1 DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 112605700 DRILLER: R. LeBrou DATE COMPLETED: 8-12-08
 SITE: ↓ DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: Wib. Olson DEV. METHOD: _____ EASTING: _____

Ground Elevation = Datum:



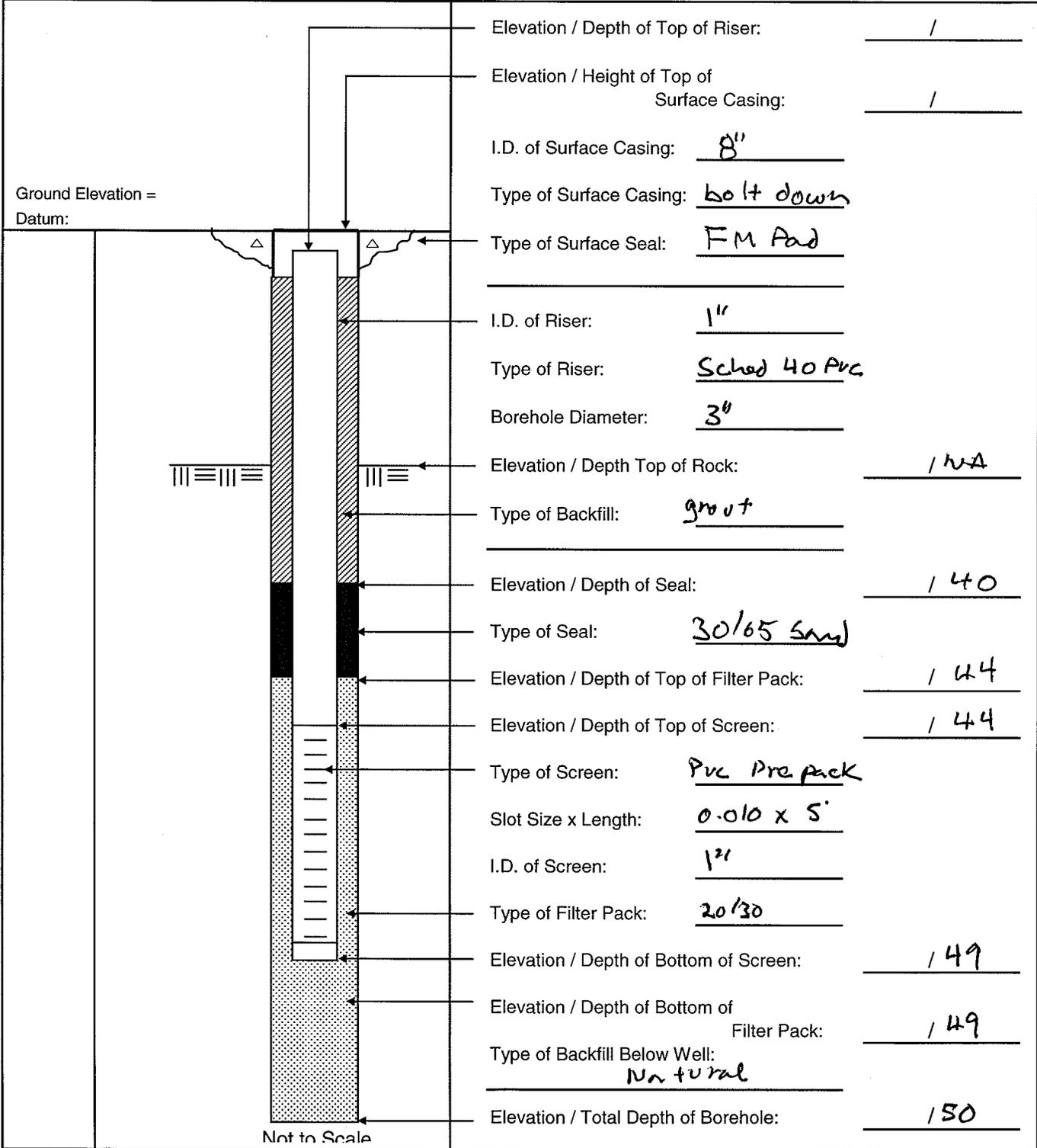
Elevation / Depth of Top of Riser: 1
 Elevation / Height of Top of Surface Casing: 1
 I.D. of Surface Casing: 8"
 Type of Surface Casing: bolt down
 Type of Surface Seal: FM PAD
 I.D. of Riser: 1"
 Type of Riser: Sched 40 PVC
 Borehole Diameter: 3"
 Elevation / Depth Top of Rock: 1 WA
 Type of Backfill: grout
 Elevation / Depth of Seal: 12'
 Type of Seal: 30/65 sand
 Elevation / Depth of Top of Filter Pack: 13'
 Elevation / Depth of Top of Screen: 13'
 Type of Screen: Pvc Prefpack
 Slot Size x Length: 0.010 x 10'
 I.D. of Screen: 1"
 Type of Filter Pack: 20/30
 Elevation / Depth of Bottom of Screen: 113
 Elevation / Depth of Bottom of Filter Pack: 113
 Type of Backfill Below Well: _____
 Elevation / Total Depth of Borehole: 113

Not to Scale



MONITORING WELL SHEET

PROJECT: GPT RI DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 1121-00700 DRILLER: R. Lebron DATE COMPLETED: 8-13-08
 SITE: L DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W. D. Olson DEV. METHOD: _____ EASTING: _____



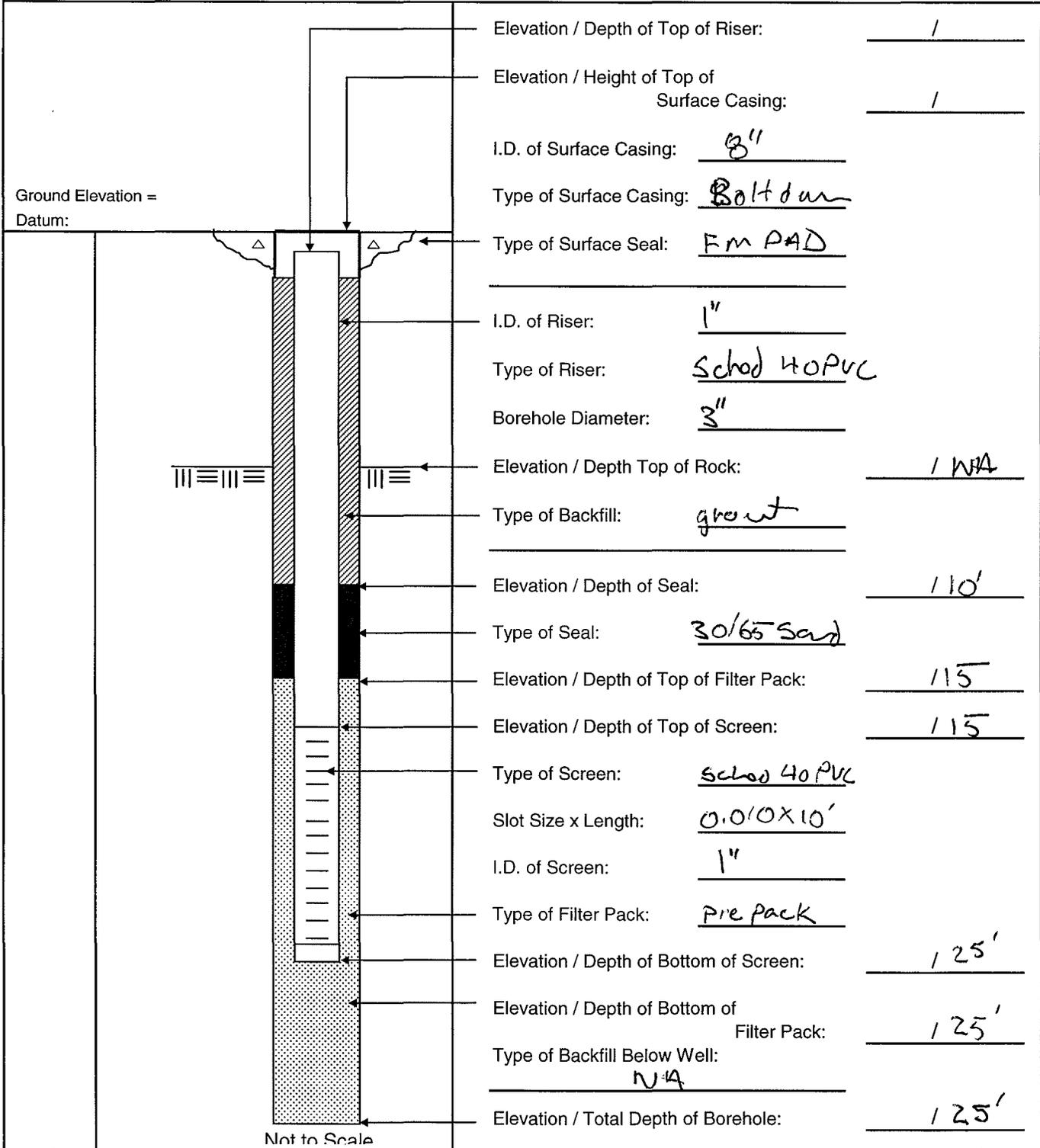


Tetra Tech NUS, Inc.

WELL No.: GPT-1-10

MONITORING WELL SHEET

PROJECT: GPT R1 DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 112600700 DRILLER: R. LeBron DATE COMPLETED: 8-14/09
 SITE: L DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W.D. Olson DEV. METHOD: _____ EASTING: _____



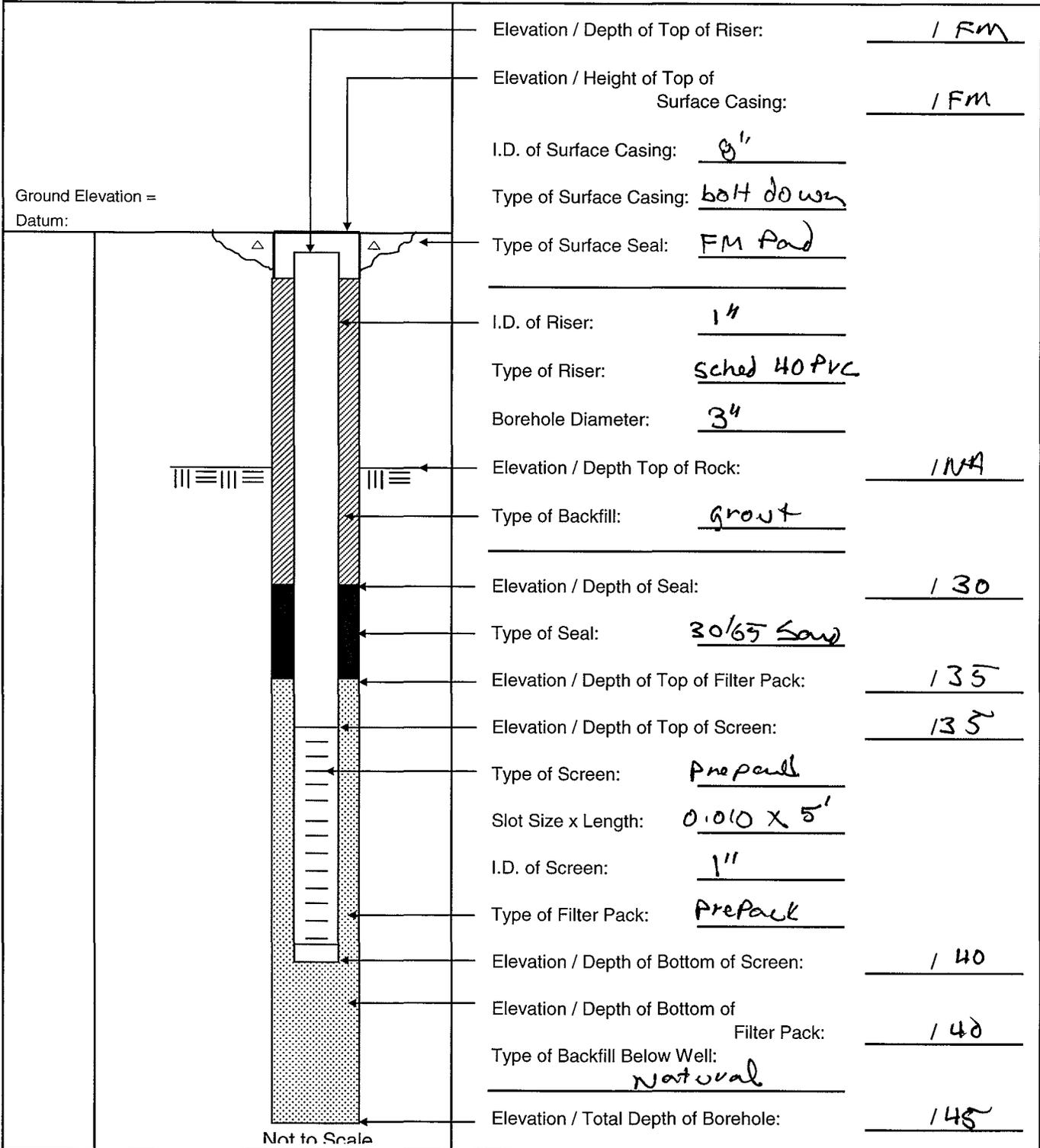


Tetra Tech NUS, Inc.

WELL No.: GPT-1-11

MONITORING WELL SHEET

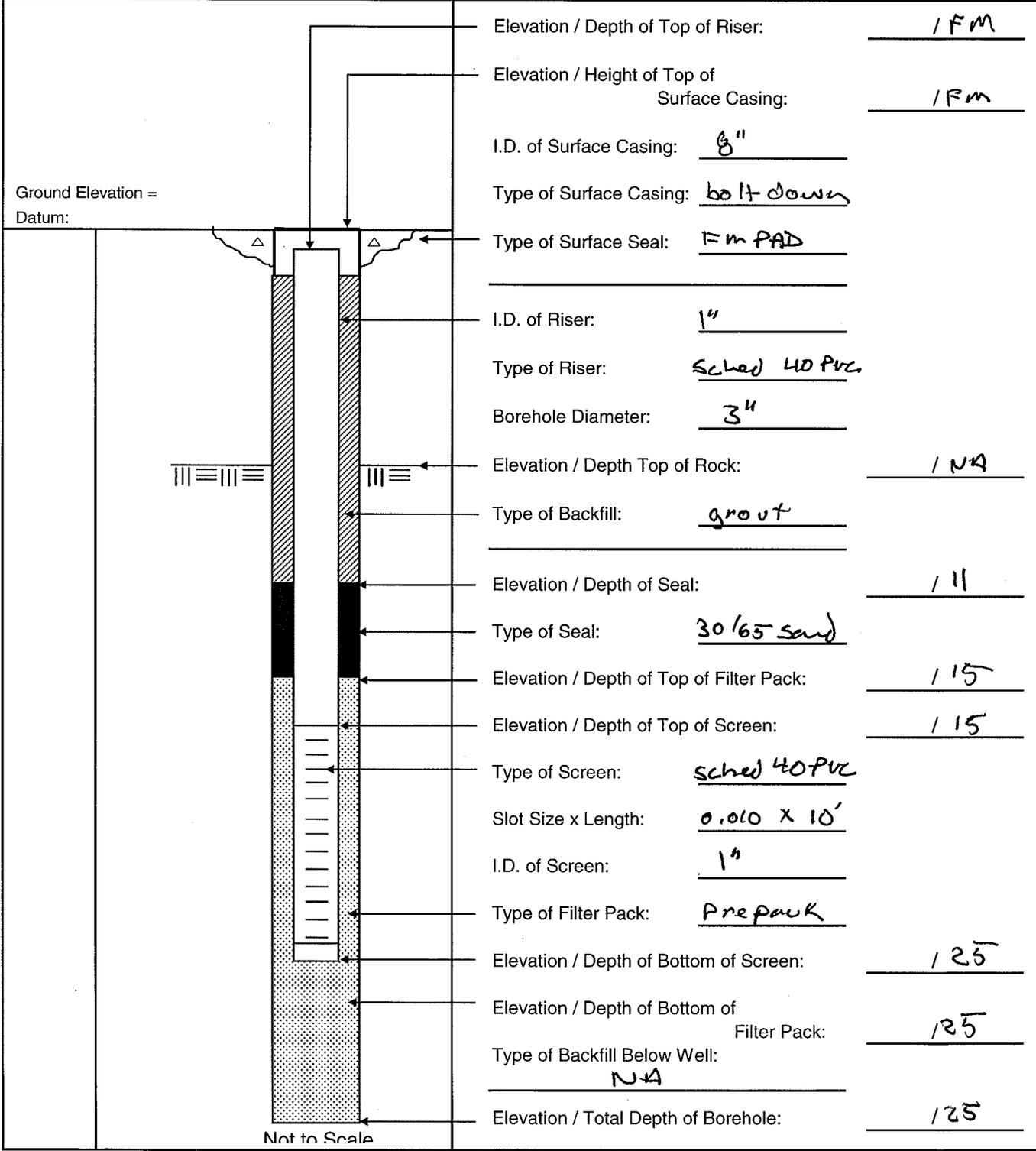
PROJECT: GPT RI DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 1126-00700 DRILLER: R. Lebron DATE COMPLETED: 8-14/08
 SITE: L DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W.D. Okon DEV. METHOD: Sumple/Purge EASTING: _____





MONITORING WELL SHEET

PROJECT: GPT R1 DRILLING Co.: GPI BORING No.: _____
 PROJECT No.: 1126-00700 DRILLER: R. Lebron DATE COMPLETED: 8-14-08
 SITE: L DRILLING METHOD: DPT NORTHING: _____
 GEOLOGIST: W.D. OLSON DEV. METHOD: Surge Pump EASTING: _____





Project Site Name: Site 1 Gulfport
Project No.: 112600700

Sample ID No.: 01-SB-05
Sample Location: 01-SB-05
Sampled By: J.D. Spalding
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date:	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>5-11-08</u>	<u>2-7'</u>	<u>Dark Brown Rusty Brown</u>	<u>Med Fine Sand. \approx 4.5-5'</u>
Time: <u>1336</u>			
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

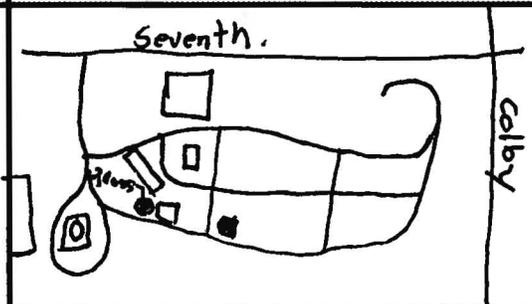
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encores / 1-#oz Glass</u>	<u>X</u>	

OBSERVATIONS / NOTES:

No Detections on PFD Soil Sample Taken To Bridge Vadose Zone & water Table interface. From 2-7'

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



Project Site Name: Site 1 Gulfport
Project No.: 112600700

Sample ID No.: 01-SB-~~08~~¹⁰-02-07
Sample Location: 01-SB-10
Sampled By: J.D. Spalding
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>5-12-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1610</u>	<u>02-07</u>	<u>Tan Brown</u>	<u>Med fine sand ∇@ 5'</u>
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm): <u>0.0</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

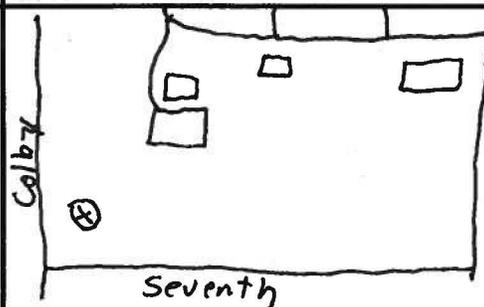
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encore</u>	<u>∇</u>	
<u>VOA moisture</u>	<u>1-2oz Jar</u>	<u>∇</u>	

OBSERVATIONS / NOTES:

Sample Taken To Bridge vadose zone & water Table ∇ @ 5'

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

FD05120802

Signature(s):



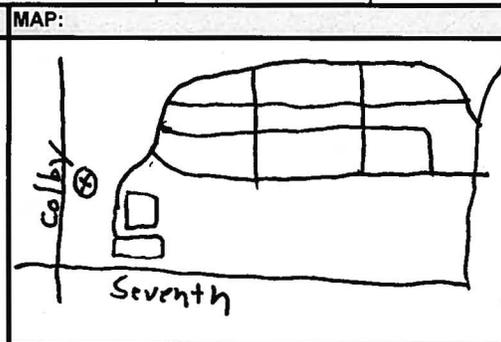
Project Site Name: Site 1 Gulfport Sample ID No.: 01-SB-09-02-07
 Project No.: 112600700 Sample Location: 01-SB-09
 Sampled By: J.D. Spalding
 C.O.C. No.: _____
 Surface Soil
 Subsurface Soil
 Sediment
 Other: _____
 QA Sample Type: _____
 Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>5-12-08</u>			
Time:			
Method: <u>PPT Sampler</u>	<u>02-07</u>	<u>Tan-light Tan</u>	<u>Medfine Sand wet Σ @ 5'</u>
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:				
Analysis	Container Requirements	Collected	Other	
<u>VOA</u>	<u>3-Encore</u>	<u>X</u>		
<u>VOA moisture</u>	<u>1-20Z glass</u>	<u>X</u>		

OBSERVATIONS / NOTES:
Sample Taken To Bridge Vadose Zone
& water Table 2-7'



Circle If Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s):



Project Site Name: Site 1 Gulfport Sample ID No.: 01-SB-08-02-07
 Project No.: 112600700 Sample Location: 01SB-08
 Sampled By: J.D. Spalding
 C.O.C. No.: _____
 Surface Soil
 Subsurface Soil
 Sediment
 Other: _____
 QA Sample Type: _____
 Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>5-12-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:	<u>02-07</u>	<u>Tan-Tan Brown</u>	<u>Med Fine Sand @ 5'</u>
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm):			

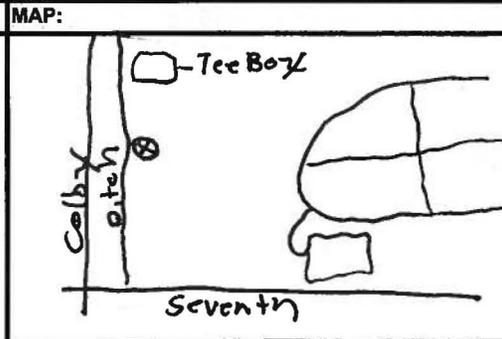
COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other

OBSERVATIONS / NOTES:
 Sample Taken To Bridge Vadose Zone
 & Water Table. 02-07



Circle if Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s):



Project Site Name: Site 1 Gulfport
Project No.: 112600700

Sample ID No.: 01-SB-07-02-07
Sample Location: 01-SB-07
Sampled By: J.D. Spalding
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>5-12-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>0955</u>	<u>02-07'</u>	<u>Tan Brown</u>	<u>Sand Med Fine - Fine</u> <u>4.5-5'</u>
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

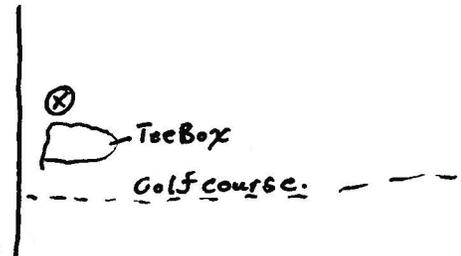
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encores</u>	<u>X</u>	
<u>VOA Moisture</u>	<u>1-202 Glass</u>	<u>X</u>	

OBSERVATIONS / NOTES:

Sample Depth Determined by PID
Screening 0.7 PPM 4-5' interval
Sample Pulled @ 02-07' Feet

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s):



Project Site Name: Site 1 Gulfport
Project No.: 112600700

Sample ID No.: 01-SB-06
Sample Location: 01-SB-06
Sampled By: S.D. Spalding
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>5-11-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:	<u>02-07'</u>	<u>Light Tan</u>	<u>Med Sand wet sample Bridges vadose & water Table.</u>
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

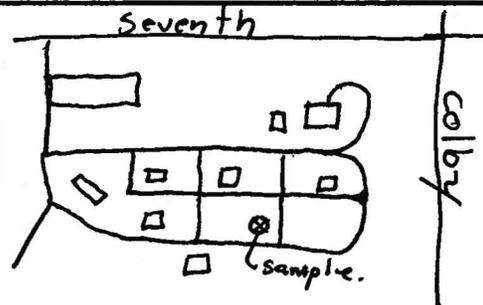
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encore/14oz Glass</u>	<u>X</u>	

OBSERVATIONS / NOTES:

No detection/Hits in soil PID Profile
Sample Taken To Bridge vadose zone
and water Table.

MAP:



Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



Project Site Name: Site 1 Gulfport
Project No.: 112600700

Sample ID No.: 01-SB-04-02-07
Sample Location: 01-SB-04
Sampled By: J.D. Spalding
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date:	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>5-11-08</u>	<u>02-07</u>	<u>Tan Brown</u>	<u>Fine Grained sandw/silt High Porosity, med-Low Perm w/ Discoloration (Red) @ Seasonal High</u>
Time: <u>0950</u>			
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

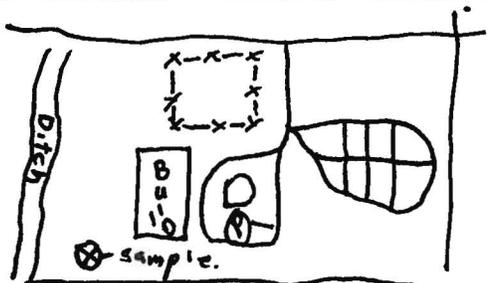
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encore, 1-2oz Glass</u>	<u>X</u>	

OBSERVATIONS / NOTES:

No Hits Detected soil Pulled To Bridge
Vadose Zone and Groundwater interface.

MAP:



Circle if Applicable:

MS/MSD	Duplicate ID No.:
--------	-------------------

Signature(s): Golf Course



Project Site Name: Site 1 Gulfport
 Project No.: 112600700

Surface Soil
 Subsurface Soil
 Sediment
 Other:
 QA Sample Type: _____

Sample ID No.: 01-SB-02-05-08
 Sample Location: 01-SB-02
 Sampled By: J.D. Spalding
 C.O.C. No.: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:			
Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>5-10-08</u>	<u>3-8'</u>	<u>Tan Brown</u>	<u>Med fine sand wet @ 4-5'</u>
Time: <u>1535</u>			
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm): <u>1.3 ppm</u>			

COMPOSITE SAMPLE DATA:				
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:			
Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>1-2oz Glass, 3-Encore.</u>	<u>X</u>	
<u>% Moisture</u>	<u>4oz Glass</u>	<u>✓</u>	

OBSERVATIONS / NOTES:	MAP:
<p>Sample Depth Determined by VOC Screening w/ PID 1.3@4-5'</p> <p>Sample Depth 3-8 to Bracket</p>	
<p>Circle if Applicable:</p> <p>MS/MSD Duplicate ID No.:</p>	<p>Signature(s):</p>



Project Site Name: Site 1 Gulfport
 Project No.: 112600700

Surface Soil
 Subsurface Soil
 Sediment
 Other:
 QA Sample Type:

Sample ID No.: 01-SB-03-21-26
 Sample Location: 01-SB-03
 Sampled By: J. D. Spalding
 C.O.C. No.:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>5-10-08</u>	<u>21-26</u>	<u>White-It Grey</u>	<u>Fine-Med Fine Sand Wet</u> <u>γ ≈ 5'</u>
Time: <u>1825</u>			
Method: <u>DPT Sampler</u>			
Monitor Reading (ppm): <u>7.8 ppm</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

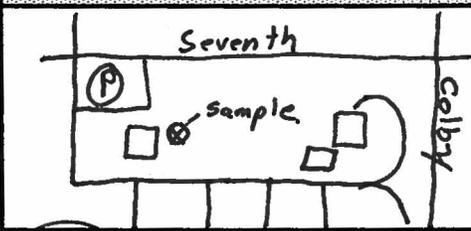
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>VOA</u>	<u>3-Encore/1200ml</u>	<input checked="" type="checkbox"/>	
<u>% Moisture</u>	<u>4oz Glass</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

Sample interval Determined by
 VOC/PID Soil Screening #25-26
 $7.8/22.5 - 25 = 3.5$ Sample Depth
21-26'

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.:

Signature(s): [Handwritten Signature]



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 01SS01QT
Sample Location: SITE 1
Sampled By: RF
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other:
- QA Sample Type: +DUP

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval		Color		Description (Sand, Silt, Clay, Moisture, etc.)
Time:	12:45	0-1	BROWN			FINE SAND AND SILT VERY MOIST
Method:	AUGER					
Monitor Reading (ppm):						

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	ENCORE	✓	
SUOC PEST HERB METALS	8 OZ GLASS	✓	
Hg/Cd	4 OZ GLASS	✓	

OBSERVATIONS / NOTES:

MAP:

For Quick Turn around
3-days except herbs = 7 days

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

01SS01QT DUP



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 01SS02QT
Sample Location: SITE 1
Sampled By: [Signature]
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other:
- QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:	12:50	0-1	BROWN	FINE SAND AND S. It
Method:	AUGER			VERY MOIST
Monitor Reading (ppm):	—			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
UOC	ENCORE	✓	
SUDC PEST HERBS	8oz glass	✓	
TAL Metals + CN ⁻ + Hg	4oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

For quick turn around analysis

[Blank area for map]

Circle if Applicable:

Signature(s):

MS/MSD Duplicate ID No.:

[Signature]



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 015503 QT
Sample Location: SITE 1
Sampled By: DJR
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other:
- QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:	12:40	0-1	TAN	FINE Sand and Silt VERY moist
Method:	AUGER			
Monitor Reading (ppm):				

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	ENCORE	✓	
SUOC herb PCB Pest	8 oz glass	✓	
TAL Metals + CW + HS	4oz glass	✓	

OBSERVATIONS / NOTES:

MAP:

Quick Turn Around

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 015504 QT
Sample Location: SITE 1
Sampled By: LIA
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval		Color		Description (Sand, Silt, Clay, Moisture, etc.)
Time:	12:35	0-1	TAN			FINE sand and silt Wet/saturated
Method:	AUGER					
Monitor Reading (ppm):	---					

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOE	ENCORE	✓	
SVOC Pest + PCB Herb	8.02 glass	✓	
Tot metals + Cu ²⁺ + Hg	4.02 glass	✓	

OBSERVATIONS / NOTES:

MAP:

Quick Turn

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 015505QT
Sample Location: SITE 1
Sampled By: RRF
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other:
- QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time:	12:55	0-1	BROWN	FINE S. H and Sand SATURATED
Method:	AUGER			
Monitor Reading (ppm):	—			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	ENCORE	✓	
SVOL PEST PCB HCBs	COOL GLASS	✓	
TAL METALS TCN + Hg	4-COOL GLASS	✓	

OBSERVATIONS / NOTES:

MAP:

Quick Tow

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: Site 1 Landfill
Project No.: 112G00700

Sample ID No.: 015506
Sample Location: SITE 1
Sampled By: RLF
C.O.C. No.: 41347

- Surface Soil
- Subsurface Soil
- Sediment
- Other:
- QA Sample Type:

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	8/14/2008	Depth Interval		Color		Description (Sand, Silt, Clay, Moisture, etc.)
Time:	13:00	0-1	BROWN			FINE SAND and silt SATURATED
Method:	AUGER					
Monitor Reading (ppm):						

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
VOC	ENCORE	✓	
SVOC HEAD PEST PCB	802 GLASS	✓	
TRACE METALS + CU + HG	402 GLASS	✓	

OBSERVATIONS / NOTES:

MAP:

TB-8-14-08-01
VOC TRIP BLANK
Quick Turn

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s):



Project Site Name: GPT LRI
Project No.: 112600700

Sample ID No.: 01550701
Sample Location: 015507
Sampled By: CO
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9-11-09</u>	Depth: <u>0-1</u>	Color: <u>Lt brown</u>	Description (Sand, Silt, Clay, Moisture, etc.): <u>Silty sand w/ trace clay slight plasticity dry</u>
Time: <u>08:20</u>			
Method: <u>RIA</u>			
Monitor Reading (ppm): <u>-</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

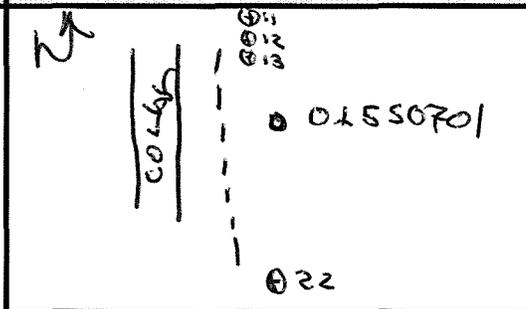
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOC</u>	<u>3 x 200ml</u>	<input checked="" type="checkbox"/>	
<u>TCL SVOC/PEST/PCB/HCB</u>	<u>3 x 800ml</u>	<input checked="" type="checkbox"/>	
<u>Tal metals/CN</u>	<u>3 x 400ml</u>	<input checked="" type="checkbox"/>	

OBSERVATIONS / NOTES:

MAP:

Possible Fill from utility install



Circle if Applicable:

Signature(s):

MS/MSD
yes

Duplicate ID No.: _____

[Signature]



Project Site Name: GPT LRI
Project No.: 1126-00700

Sample ID No.: 01550801
Sample Location: 015508
Sampled By: WDB
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>9-11-08</u>	<u>0-1'</u>	<u>0-4"</u>	<u>lt grey silty FS</u>
Time: <u>0900</u>		<u>4"-1'</u>	<u>TAWFS</u>
Method: <u>H1A</u>			
Monitor Reading (ppm): <u>0</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

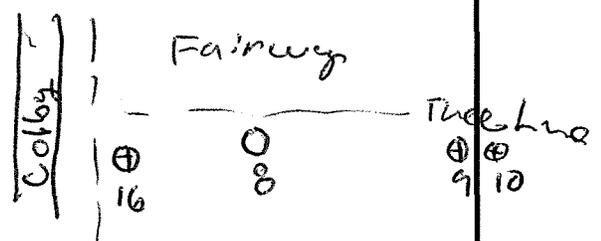
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOC</u>	<u>3x encove</u>	<u>✓</u>	
<u>TCL SVOC/PEST/PCB/HERA</u>	<u>1x 80Z</u>	<u>✓</u>	
<u>Tot metals / Cd</u>	<u>1x 40Z</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

LOOKS like native soil

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):



Project Site Name: GPT L R1
Project No.: 112600700

Sample ID No.: 0L550901
Sample Location: 0L5509
Sampled By: WAB
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9-11-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>0920</u>	<u>0-1</u>	<u>dk brown</u>	<u>Fine silty sand trace clay damp</u>
Method: <u>MA</u>			
Monitor Reading (ppm): <u>—</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

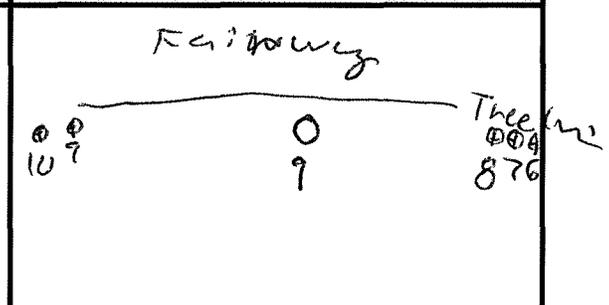
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOC</u>	<u>3X ENCORE</u>	<u>✓</u>	
<u>TCL SVOC/PEST/PCB/HERB</u>	<u>1X 80Z</u>	<u>✓</u>	
<u>TAL metals / CW</u>	<u>1X 40Z</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

Stand of pine trees area shows signs of flooding, surface dry @ this time

MAP:



Circle if Applicable:

MS/MSD Duplicate ID No.: _____

Signature(s):

WAB



Project Site Name: GPT LRT
Project No.: 1126-00700

Sample ID No.: 04551001
Sample Location: 045510
Sampled By: WKS
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>9-11-08</u>	Depth: <u>0-1'</u>	Color: <u>brn</u>	Description (Sand, Silt, Clay, Moisture, etc.): <u>FS and silt, some gravel and silt dry</u>
Time: <u>0940</u>			
Method: <u>NA</u>			
Monitor Reading (ppm): <u>—</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

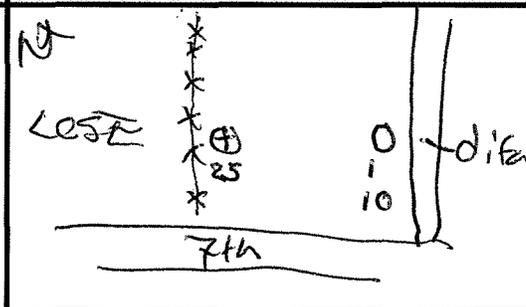
SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOC</u>	<u>3X ENCORE</u>	<u>✓</u>	
<u>TCL SVOC/PEST/PCB/HERB</u>	<u>1x80Z</u>	<u>✓</u>	
<u>TAL metals/LW</u>	<u>1x40Z</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

MAP:

Blank area for observations and notes.



Circle if Applicable:

Signature(s):

MS/MSD Duplicate ID No.: _____

WKS



Project Site Name: GPT LRI
Project No.: 1126-00700

Sample ID No.: 01551101
Sample Location: 015511
Sampled By: WAD
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>9-11-08</u>	Depth: <u>0-1</u>	Color: <u>Tan</u>	Description (Sand, Silt, Clay, Moisture, etc.): <u>FS w/ shell, some wood debris, moist</u>
Time: <u>1000</u>			
Method: <u>N4</u>			
Monitor Reading (ppm): <u>~</u>			

COMPOSITE SAMPLE DATA:

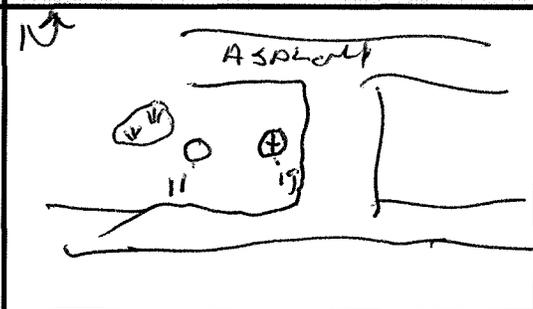
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOC</u>	<u>3 X ENCORE</u>	<u>✓</u>	
<u>TCL SVOC / PEST / PCB / HCB</u>	<u>1 X 80Z</u>	<u>✓</u>	
<u>TAL Metals / CW</u>	<u>1 X 40Z</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: GPTI LRI
Project No.: 112600700

Sample ID No.: 0551201
Sample Location: 05512
Sampled By: CO
C.O.C. No.: _____

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9-11-08</u>	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>1025</u>	<u>0-1'</u>	<u>gray/brown</u>	<u>FS and silt, trace clay grades to orange @ 1'</u>
Method: <u>HN</u>			
Monitor Reading (ppm): <u>~</u>			

COMPOSITE SAMPLE DATA:

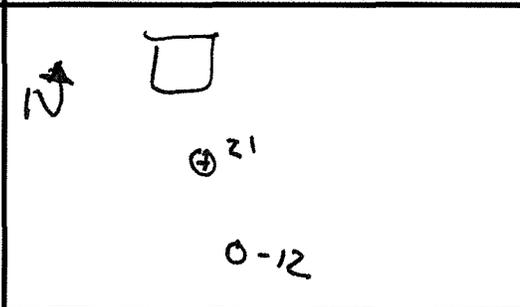
Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
<u>TCL VOL</u>	<u>3 x 200ml</u>	<u>✓</u>	
<u>TCL SOL / PEST / PCB / HERB</u>	<u>1 x 800</u>	<u>✓</u>	
<u>TAL metals / CN</u>	<u>1 x 402</u>	<u>✓</u>	

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD Duplicate ID No.: _____

ruw Aobe



125

SITE 1 AERIAL MAP
NCBC, GULFPORT



DRAWN BY	DATE
S. STROZ	7/18/07
CHECKED BY	DATE
J. BOURGEOIS	9/18/07

CONTRACT: HFLA06A





Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: 015501701
Sample Location: 61217
Sampled By: RF
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>10:35</u>	<u>0-1</u>	<u>BROWN</u>	<u>Sand w/ silt & clay</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm): <u>---</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 ENDORE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>X</u>		
TAL Metals(SW-846 6010B/7000A)	<u>X</u>		
Pest/PCBs(CLP OLM04.3)	<u>X</u> } <u>18-02</u>		
Herb(SW-846 8151A)	<u>X</u>		
Asbestos(PLM)	<u>1 GAL Pkg</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: SITE 1 R1
Project No.: _____

Sample ID No.: 015542001
Sample Location: SITE 1 BLD 420
Sampled By: ROJ
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>10/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>11:05</u>	<u>0-1</u>	<u>BROWN</u>	<u>Silt + Sand; fill</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 UDL ENCOR</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>803</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>1 gal Bag</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: SITE 1 R1
Project No.: 00200

Sample ID No.: 01SSD1401
Sample Location: A1414
Sampled By: [Signature]
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/09</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>11:30</u>	<u>0-1'</u>	<u>TAN</u>	<u>Silt + Sand; F.U</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm): <u>—</u>			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 Lr CORE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>803</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>1 gal bag</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

01SSD1401 DUP

[Signature]



Project Site Name: SITE 1 R1
Project No.: 0700

Sample ID No.: 01SS01501
Sample Location: Bldg 15
Sampled By: [Signature]
C.O.C. No.: 4207

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>11:40</u>	<u>0-1'</u>	<u>TAN</u>	<u>Silt/Sand: fill</u>
Method: <u>GPRB</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 encore</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>202</u>		
TAL Metals(SW-846 6010B/7000A)	<u>402</u>		
Pest/PCBs(CLP OLM04.3)	<u>802</u>		
Herb(SW-846 8151A)	<u>802</u>		
Asbestos(PLM)	<u>1 gal bag</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

[Signature]



Project Site Name: SITE 1 R1
Project No.: 0700

Sample ID No.: 015502401
Sample Location: SITE 1 BLD 24
Sampled By: RL
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>14:20</u>	<u>0-1'</u>	<u>BROWN/TAN</u>	<u>SILT + SAND: FINE</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 ENCORE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>803</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>1 gal bag</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: 015502501
Sample Location: Bld 25/SITE 1
Sampled By: PPP
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>14:40</u>	<u>0-1</u>	<u>TAN/BRN</u>	<u>Silt and SAND</u>
Method: <u>GRAB</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3-ENCLOSURE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>503</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>1 GAL BAG</u>		

OBSERVATIONS / NOTES:

MAP:

0155025 MS
0155025 MSD

Circle if Applicable:

MS/MSD

Duplicate ID No.: _____

Signature(s):



Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: 015513701
Sample Location: SITE 1 Bld 137
Sampled By: PO2
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>9/30/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>15:20</u>	<u>0-1</u>	<u>Tan/Brown</u>	<u>silt and sand fill</u>
Method: <u>GRAB / AUGER</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>2 encore</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>803</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>1 GAL BOTTLE</u>		

OBSERVATIONS / NOTES:

MAP:

Observations / Notes area (empty)

MAP area (empty)

Circle if Applicable:

Signature(s)

MS/MSD Duplicate ID No.:

PO2



Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: 015513801
Sample Location: bid 138/SITE 1
Sampled By: QAR
C.O.C. No.: 42079

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>9/30/08</u>	<u>0-2'</u>	<u>0 to 1 Brown</u>	<u>Silt and sand. 0-1 fill.</u>
<u>15.40</u>		<u>1 to 2 Gray</u>	<u>1-2' Gray, moist; NOT fill</u>
Method: <u>AUGER</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 ENCORE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>803</u>		
TAL Metals(SW-846 6010B/7000A)	<u>403</u>		
Pest/PCBs(CLP OLM04.3)	<u>803</u>		
Herb(SW-846 8151A)	<u>803</u>		
Asbestos(PLM)	<u>803</u>		
	<u>1 GAL BAG</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:



Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: D15513901
Sample Location: Bld 139/SITE 1
Sampled By: RPN
C.O.C. No.: 42076

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date:	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
<u>9/30/08</u>	<u>0 - 2'</u>	<u>Brown/gray</u>	<u>Silt & sand fill → 1'</u> <u>Gray s. ft/sand 1'-2' (not fill)</u>
Time: <u>16:00</u>			
Method: <u>AUGER</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 ENCORE</u>	|	
TCL SVOCs(CLP OLM04.3)	<u>8oz</u>		
TAL Metals(SW-846 6010B/7000A)	<u>4oz</u>		
Pest/PCBs(CLP OLM04.3)	<u>8oz</u>		
Herb(SW-846 8151A)	<u>8oz</u>		
Asbestos(PLM)	<u>1 Gal bag</u>		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

015513901dup



Project Site Name: SITE 1 R1
Project No.: 00700

Sample ID No.: 015BDIT01
Sample Location: SITE 1 E. 01701
Sampled By: PP
C.O.C. No.: 42274

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

- Type of Sample:
- Low Concentration
 - High Concentration

GRAB SAMPLE DATA:

Date: <u>10/1/08</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>10:00</u>	<u>2.5' - 3.5'</u>	<u>Brown</u>	<u>fine sand & s. lt (loam)</u>
Method: <u>AUGER</u>			
Monitor Reading (ppm): _____			

COMPOSITE SAMPLE DATA:

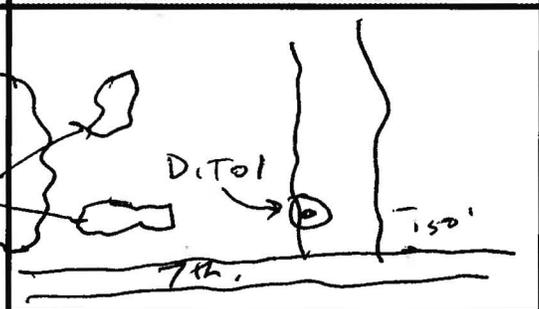
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 cano</u>	<input checked="" type="checkbox"/>	
TCL SVOCs(CLP OLM04.3)	<u>803</u>	<input checked="" type="checkbox"/>	
TAL Metals(SW-846 6010B/7000A)	<u>403</u>	<input checked="" type="checkbox"/>	
Pest/PCBs(CLP OLM04.3)	<u>803</u>	<input checked="" type="checkbox"/>	
Herb(SW-846 8151A)	<u>803</u>	<input checked="" type="checkbox"/>	
Asbestos(PLM)			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD _____ Duplicate ID No.: _____

PP



Project Site Name: SITE 1 R1
Project No.: _____

Sample ID No.: DISBDIT03
Sample Location: SITE 1: EAST OF TECH
Sampled By: RP
C.O.C. No.: 42274

- Surface Soil
- Subsurface Soil
- Sediment
- Other: _____
- QA Sample Type: _____

Type of Sample:
 Low Concentration
 High Concentration

GRAB SAMPLE DATA:

Date: <u>10/01/03</u>	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: <u>11:00</u>	<u>2.5' - 3.5'</u>	<u>BROWN</u>	<u>SILT & SAND (FINE) - LOAM</u>
Method: <u>AUGER</u>			
Monitor Reading (ppm): <u>—</u>			

COMPOSITE SAMPLE DATA:

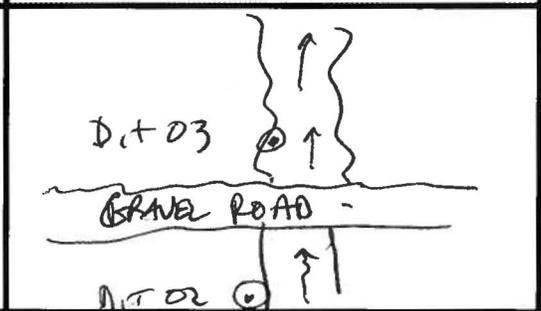
Date:	Time	Depth Interval	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs(CLP 5035/OLM04.3)	<u>3 ENCORE</u>	<input checked="" type="checkbox"/>	
TCL SVOCs(CLP OLM04.3)	<u>803</u>	<input checked="" type="checkbox"/>	
TAL Metals(SW-846 6010B/7000A)	<u>403</u>	<input checked="" type="checkbox"/>	
Pest/PCBs(CLP OLM04.3)	<u>803</u>	<input checked="" type="checkbox"/>	
Herb(SW-846 8151A)	<u>803</u>	<input checked="" type="checkbox"/>	
Asbestos(PLM)			

OBSERVATIONS / NOTES:

MAP:



Circle if Applicable:

Signature(s):

MS/MSD

Duplicate ID No.:

RP

APPENDIX D

VALIDATED LABORATORY DATA



TO: R. FISHER **DATE:** JANUARY 6, 2009
FROM: JOSEPH KALINYAK **COPIES:** DV FILE
SUBJECT: ORGANIC DATA VALIDATION – VOC/SVOC/PEST/PCB/HERB
NCBC GULFPORT CTO 0065
SAMPLE DELIVERY GROUP (SDG) GULFPORT – 012
SAMPLES: 14/Aqueous/VOC/SVOC/PEST/PCB/HERB

01SBDIT01	01SBDIT02	01SBDIT03
01SS01401	01SS01401DUP	01SS01501
01SS01701	01SS02401	01SS02501
01SS13701	01SS13801	01SS13901
01SS13901DUP	01SS42001	

Overview

The sample set for CTO 0065, NCBC Gulfport, SDG Gulfport-012, consists of fourteen (14) soil environmental samples including two (2) field duplicate pairs, 01SS01401/01SS01401DUP and 01SS13901/ 01SS13901DUP, included in this sample delivery group.

All samples were analyzed for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), organochloride pesticides (PEST), polychlorinated biphenyls (PCB), and herbicides (HERB). The samples were collected by Tetra Tech NUS on September 30 and October 1, 2008 and analyzed by Empirical Laboratories, LLC. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using USEPA SW-846 Methods 8260B, 8270C, 8081A, 8082 and 8151A analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

- * ● Data completeness
- * ● Hold times
- * ● GC/MS Tuning
- Initial/continuing calibrations
- Laboratory method blank results
- Surrogate Recoveries
- Blank Spike/Blank Spike Duplicate Results
- Matrix Spike/Matrix Spike Duplicate Results
- * ● Internal Standards
- * ● Field Duplicate Precision
- * ● Compound Quantitation
- * ● Compound Identification
- * ● Detection Limits

The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

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Volatiles - VOC

The following compounds were detected in the laboratory method blanks for the associated samples in SDG Gulfport-012:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Blank Action Level</u>
Acetone ⁽¹⁾	2.9 µg/kg	29.0 µg/kg
Toluene ⁽¹⁾	0.64 µg/kg	3.20 µg/kg
1,2,3-Trichlorobenzene ⁽¹⁾	0.36 µg/kg	1.80 µg/kg
1,2,4-Trichlorobenzene ⁽¹⁾	0.31 µg/kg	1.55 µg/kg
Methylene chloride ⁽²⁾	4.8 µg/kg	48.0 µg/kg

⁽¹⁾ Maximum concentration present in the laboratory method preparation blank V4BLK1002 affecting all SDG samples.

⁽²⁾ Maximum concentration present in the laboratory method preparation blank V4BLK1003 affecting all SDG samples.

An action level of 10X the maximum contaminant concentration for the common laboratory contaminants acetone and methylene chloride and 5X the maximum contaminant concentration for all other contaminants was established to evaluate laboratory contamination. Dilution factors, sample aliquots and percent solids for soils were taken into consideration during the application of all action levels. Only the maximum method blank result for the VOC contaminants was used for this evaluation. The positive results for the contaminants below the blank action level were qualified as non-detected, (U).

The continuing calibration %D was greater than 25% the quality control limit for acetone for instrument VOA4 on 10/02/08 @ 12:00 affecting samples 01SS01701, 01SS42001, 01SS01401, 01SS01401DUP, 01SS01501, 01SS02401, 01SS02501, 01SS13701, 01SS13801, and 01SS13901DUP. The non-detected results reported for acetone for the associated samples were qualified as estimated, (UJ), except for those samples previously qualified due to laboratory blank contamination.

The continuing calibration %D was greater than 25% the quality control limit for acetone and 1,2-dichloroethane for instrument VOA4 on 10/03/08 @ 10:28 affecting samples 01SS13901, 01SBDIT01, 01SBDIT02, and 01SBDIT03. The non-detected results reported for acetone and 1,2-dichloroethane for the associated samples were qualified as estimated, (UJ), except for acetone results for those samples previously qualified for acetone due to laboratory blank contamination.

A laboratory control sample duplicate (LCS/D) had a % recovery above the QC limits for 1,2-dichloroethane. No action was taken because the laboratory control sample (LCS) % recovery for 1,2-dichloroethane was within the quality control limits and all samples results were non-detected.

The matrix spike (MS) /matrix spike duplicate (MSD) pair associated with sample 01SS02501 had % recoveries below the quality control limit for the MS 1,2,4-trichlorobenzene result and also the MSD chlorobenzene result. The MSD 1,2,4-trichlorobenzene and MS chlorobenzene results were within the quality control limits as were the %RPDs for these two compounds. On this basis no action was taken.

Semi-Volatiles - SVOC

The following compounds were detected in the laboratory method blanks for the associated soil samples in SDG Gulfport-012:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Blank Action Level</u>
Bis(2-ethylhexyl)phthalate ⁽¹⁾	60 µg/kg	600 µg/kg
Bis(2-ethylhexyl)phthalate ⁽²⁾	50 µg/kg	500 µg/kg

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(1) Maximum concentration present in the laboratory method preparation blank SBLK1003BS1 affecting SDG samples 01SS01701, 01SS042001, 01SS01401, 01SS01401DUP, 01SS01501, 01SS02401, 01SS02501, 01SS13701, 01SS13801, 01SS13901, and 01SS13901DUP.

(2) Maximum concentration present in the laboratory method preparation blank SBLK1007BS1 affecting SDG samples 01SBDIT01, 01SBDIT02, and 01SBDIT03.

An action level of 10X the maximum contaminant concentration for the common laboratory contaminant phthalates was established to evaluate laboratory contamination. Dilution factors, sample aliquots, and % solids were taken into consideration during the application of all action levels. The positive results for bis(2-ethylhexyl)phthalate below the blank action level were qualified as non-detected, (U).

The calibration verification %D was greater than the 25% quality control limit for bis(2-ethylhexyl)phthalate, butylbenzylphthalate, caprolactam, and 2,4-dimethylphenol for instrument BNA1 on 10/07/08 @ 09:08. The affected SDG samples 01SS01701, 01SS042001, 01SS01401, 01SS01401DUP, 01SS01501, 01SS02401, 01SS02501, 01SS13701, 01SS13801, 01SS13901, and 01SS13901DUP non-detected results for butylbenzylphthalate, caprolactam, and 2,4-dimethylphenol were qualified estimated, (UJ). The associated sample bis(2-ethylhexyl)phthalate results were previously qualified as non-detected, (U), due to blank contamination so no further action was necessary.

The calibration verification %D was greater than the 25% quality control limit for bis(2-ethylhexyl)phthalate and butylbenzylphthalate for instrument BNA1 on 10/08/08 @ 10:01. The affected SDG samples 01SBDIT01, 01SBDIT02, and 01SBDIT03 non-detected results for butylbenzylphthalate were qualified estimated, (UJ). The associated sample bis(2-ethylhexyl)phthalate results were previously qualified as non-detected, (U), due to blank contamination so no further action was necessary.

The matrix spike duplicate (MSD) performed on sample 01SS02501 had a % recovery greater than the quality control limit for di-n-octylphthalate. The sample di-n-octylphthalate MS result was within the QC limits and the % RPD for the MS/MSD was within the QC limits. Therefore, no data qualification was necessary for the associated sample non-detected di-n-octylphthalate result.

The MS/MSD performed on sample 01SS02501 had a % RPD greater than the quality control limit for hexachlorocyclopentadiene. The associated sample non-detected result for hexachlorocyclopentadiene was not qualified as both the MS and MSD % recoveries were within the quality control limits.

Pesticides/PCBs

The higher PEST result from either GC column is generally reported but due to matrix interferences (caused by a significant PCB concentration for one sample), some PEST results were reported from the GC column which had the lesser PCB interference regardless if the concentration was lower.

The continuing calibration average %Ds for 4,4'-DDT, methoxychlor, and endrin ketone were greater than 15% the quality control limit for the primary GC column MR-1 on instrument ECD3 on 10/10/08 @ 15:59 affecting all SDG primary GC column PEST sample results. The continuing calibration average %D for 4,4'-DDT was greater than 15% the quality control limit for the secondary GC column MR-2 on instrument ECD3 on 10/10/08 @ 15:59 affecting all SDG secondary GC column PEST sample results. All positive and non-detected SDG sample results for 4,4'-DDT were qualified estimated, (J) and (UJ), respectively. The SDG non-detected sample results for methoxychlor and endrin ketone were not qualified since the secondary GC column continuing calibration %Ds were within the quality control limits. The positive methoxychlor result for sample 01SS01701 was qualified estimated, (J), as it was reported from the primary GC column. The positive endrin ketone result for sample 01SBDIT02 was more severely qualified due to %D primary and secondary GC column difference and no further action was necessary.

The continuing calibration average %Ds for 4,4'-DDE, 4,4'-DDT, methoxychlor, and endrin ketone were greater than 15% the quality control limit for the primary GC column MR-1 on instrument ECD3 on 10/10/08 @ 19:22 affecting SDG primary GC column PEST sample results for samples 01SS13701, 01SS13801, 01SS13901, 01SS13901DUP, 01SBDIT01, 01SBDIT02, and 01SBDIT03. The continuing calibration average %D for 4,4'-DDT and methoxychlor was greater than 15% the quality control limit for the secondary GC column MR-2 on instrument ECD3 on 10/10/08 @ 19:22 affecting SDG secondary GC column PEST sample results for the aforementioned samples. All positive and non-detected SDG sample results for 4,4'-DDT and methoxychlor were qualified estimated, (J) and (UJ), respectively, for affected samples 01SS13701, 01SS13801, 01SS13901, 01SS13901DUP, 01SBDIT01, 01SBDIT02, and 01SBDIT03. No 4,4'-DDE and endrin ketone associated sample results were qualified since the within the QC limit secondary GC column results were reported.

The PEST surrogate % recovery for tetrachloro-m-xylene (TCMX) for both the primary and secondary GC columns exceeded the quality control limits for sample 01SBDIT02. Non-detected PEST sample results were not qualified. Positive PEST sample results were qualified estimated, (J), except where more severely qualified due to other issues.

The PEST MS/MSD % recovery and the %RPD was greater than the quality control limit for dieldrin for sample 01SS02501. The positive sample result for dieldrin was qualified estimated, (J). No other sample was qualified due to this issue as it appears to be a matrix effect confined to this sample.

The PEST/PCB %D between the primary and secondary GC columns exceeded 25% for the analytes as listed below. Associated sample positive detections for single component compounds >100% D were qualified rejected, (R), and detects >25% and <100% D were qualified estimated, (J). The higher result of the two GC columns was used in the final report except as where noted.

<u>Sample</u>	<u>Analyte</u>	<u>%D</u>	<u>Qualification</u>
01SBDIT01	Beta-BHC	90.8	J*
	Gamma-chlordane	34.9	J
01SBDIT02	Aldrin	151.0	R*
	Alpha-BHC	39.3	J
	Beta-BHC	55.4	J
	4,4'-DDD	136.9	R*
	4,4'-DDT	90.8	J*
	Dieldrin	172.2	R*
	Endrin aldehyde	40.2	J
	Endrin ketone	106.2	R*
	Gamma-BHC	135.0	R*
	Gamma-chlordane	189.2	R*
	Heptachlor	130.0	R*
	Heptachlor epoxide	95.5	J*
PCB-1242	44.7	J	
01SBDIT03	Aldrin-chlordane	150.7	R*
	Beta-BHC	118.8	R*
	Gamma-chlordane	127.6	R*
01SS01401	Delta-BHC	76.4	J*
	Dieldrin	62.0	J*
	Endosulfan II	76.8	J*
	Heptachlor epoxide	30.6	J

01SS01401DUP	Delta-BHC	117.9	R*
	Dieldrin	26.7	J
	Endosulfan sulfate	34.0	J
	Heptachlor epoxide	67.8	J*
01SS01501	4,4'-DDE	37.9	J
	4,4'-DDT	84.5	J*
	Methoxychlor	40.4	J
01SS01701	Aldrin	40.2	J
	Methoxychlor	27.4	J
01SS02401	Alpha-chlordane	26.7	J
	Beta-BHC	106.9	R*
	4,4'-DDE	28.5	J
	Gamma-chlordane	46.1	J
	Heptachlor epoxide	26.3	J
01SS02501	4,4'-DDT	163.5	R
	Heptachlor epoxide	61.5	J*
01SS13701	Dieldrin	33.1	J
	Endosulfan II	42.3	J
01SS13901DUP	Beta-BHC	84.7	J*
	Gamma-BHC	42.7	J
01SS42001	Aldrin	98.3	J*
	4,4'-DDT	29.1	J
	Gamma-chlordane	99.6	J*
	Methoxychlor	76.4	J*

*Lower result used due to matrix interference.

Herbicides

The continuing calibration %D was greater than the 15% quality control limit for a variety of herbicides on the secondary GC column RTX-CLP2 for instrument ECD2 on 10/09/08 @ 23:36, 10/10/08 @ 08:01, @ 10:38, and @ 18:59. No action was taken since the primary GC column RTX-CLP had %Ds within the quality control limits and all SDG samples had non-detected results for herbicides 2,4,5-T, 2,4,5-TP(SILVEX), and 2,4-D.

The HERB % recovery was greater than the quality control limit for the surrogate DCAA for soil samples 01SS13801, 01SS13901, 01SS13901DUP, 01SBDIT01, 01SBDIT02, and 01SBDIT03 as well as the MS/MSD for sample 01SS02501 on the secondary GC column RTX-CLP2 for instrument ECD2. These quality control exceedances were attributed to matrix effects caused by the soil samples. No action was taken due to these QC limit exceedances since the primary GC column RTX-CLP had satisfactory quality control surrogate DCAA performance and all herbicides sample results were non-detected.

The HERB MS % recovery was greater than the quality control limits for 2,4-D, 2,4,5-TP(SILVEX), and 2,4,5-T for the secondary HERB GC column and the HERB MSD % recovery was greater than the quality control limit for 2,4,5-TP(SILVEX) for the secondary GC column. No action was taken for these QC limit

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exceedances since the sample had all non-detected herbicide results and the primary GC column appeared to have satisfactory QC limit % recoveries.

Notes

Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, J.

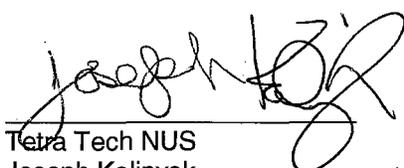
Executive Summary

Laboratory Performance: Methylene chloride, toluene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene and acetone were detected in the VOC laboratory method blank. Continuing calibration %Ds affected sample data qualifications in the VOC fraction. Bis(2-ethylhexyl)phthalate was detected in the SVOC laboratory method blank. Continuing calibration %Ds exceeded the QC limits in the SVOC fraction. Some PEST results had matrix interferences which resulted in the alternate GC column sample data being reported. The pesticide fraction had continuing calibration %Ds which exceeded the quality control limits. There was a PEST surrogate recovery problem with one sample. There was a PEST MS/MSD % recovery QC limit exceedance resulting in data qualification. There were PEST % differences between GC column results which exceeded the quality control limits for a number of samples.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD Guidelines."



Tetra Tech NUS
Joseph Kalinyak
Chemist/Data Validator



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	UJ	C
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	10	UJ	C
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	U	
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	5.2	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	12	U	
1,1,2,2-TETRACHLOROETHANE	12	U	
1,1,2-TRICHLOROETHANE	12	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	12	U	
1,1-DICHLOROETHANE	12	U	
1,1-DICHLOROETHENE	12	U	
1,2,3-TRICHLOROBENZENE	12	U	
1,2,4-TRICHLOROBENZENE	12	U	
1,2-DIBROMOETHANE	12	U	
1,2-DICHLOROETHANE	12	UJ	C
1,2-DICHLOROPROPANE	12	U	
2-BUTANONE	12	U	
2-HEXANONE	12	U	
4-METHYL-2-PENTANONE	1.7	J	P
ACETONE	12	UJ	C
BENZENE	12	U	
BROMOCHLOROMETHANE	12	U	
BROMODICHLOROMETHANE	12	U	
BROMOFORM	12	U	
BROMOMETHANE	12	U	
CARBON DISULFIDE	12	U	
CARBON TETRACHLORIDE	12	U	
CHLOROBENZENE	12	U	
CHLORODIBROMOMETHANE	12	U	
CHLOROETHANE	12	U	
CHLOROFORM	12	U	
CHLOROMETHANE	12	U	
CIS-1,2-DICHLOROETHENE	12	U	
CIS-1,3-DICHLOROPROPENE	12	U	
CYCLOHEXANE	12	U	
ETHYLBENZENE	12	U	
ISOPROPYLBENZENE	12	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	12	U	
METHYL CYCLOHEXANE	12	U	
METHYL TERT-BUTYL ETHER	12	U	
METHYLENE CHLORIDE	7.3	U	A
STYRENE	12	U	
TETRACHLOROETHENE	12	U	
TOLUENE	12	U	
TOTAL 1,2-DICHLOROETHENE	12	U	
TOTAL XYLENES	12	U	
TRANS-1,2-DICHLOROETHENE	12	U	
TRANS-1,3-DICHLOROPROPENE	12	U	
TRICHLOROETHENE	12	U	
VINYL CHLORIDE	12	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	15	U	
1,1,2,2-TETRACHLOROETHANE	15	U	
1,1,2-TRICHLOROETHANE	15	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	15	U	
1,1-DICHLOROETHANE	15	U	
1,1-DICHLOROETHENE	15	U	
1,2,3-TRICHLOROBENZENE	15	U	
1,2,4-TRICHLOROBENZENE	15	U	
1,2-DIBROMOETHANE	15	U	
1,2-DICHLOROETHANE	15	UJ	C
1,2-DICHLOROPROPANE	15	U	
2-BUTANONE	15	U	
2-HEXANONE	15	U	
4-METHYL-2-PENTANONE	15	U	
ACETONE	4.4	U	A
BENZENE	15	U	
BROMOCHLOROMETHANE	15	U	
BROMODICHLOROMETHANE	15	U	
BROMOFORM	15	U	
BROMOMETHANE	15	U	
CARBON DISULFIDE	15	U	
CARBON TETRACHLORIDE	15	U	
CHLORO BENZENE	15	U	
CHLORODIBROMOMETHANE	15	U	
CHLOROETHANE	15	U	
CHLOROFORM	15	U	
CHLOROMETHANE	15	U	
CIS-1,2-DICHLOROETHENE	15	U	
CIS-1,3-DICHLOROPROPENE	15	U	
CYCLOHEXANE	15	U	
ETHYLBENZENE	15	U	
ISOPROPYLBENZENE	15	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	15	U	
METHYL CYCLOHEXANE	15	U	
METHYL TERT-BUTYL ETHER	15	U	
METHYLENE CHLORIDE	9.5	U	A
STYRENE	15	U	
TETRACHLOROETHENE	15	U	
TOLUENE	15	U	
TOTAL 1,2-DICHLOROETHENE	15	U	
TOTAL XYLENES	15	U	
TRANS-1,2-DICHLOROETHENE	15	U	
TRANS-1,3-DICHLOROPROPENE	15	U	
TRICHLOROETHENE	15	U	
VINYL CHLORIDE	15	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	5.3	U	A
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	U	
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	U	
METHYLENE CHLORIDE	6.1	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	3.7	U	A
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	U	
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	4.1	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.9	U	
1,1,2,2-TETRACHLOROETHANE	9.9	U	
1,1,2-TRICHLOROETHANE	9.9	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.9	U	
1,1-DICHLOROETHANE	9.9	U	
1,1-DICHLOROETHENE	9.9	U	
1,2,3-TRICHLOROENZENE	9.9	U	
1,2,4-TRICHLOROENZENE	9.9	U	
1,2-DIBROMOETHANE	9.9	U	
1,2-DICHLOROETHANE	9.9	U	
1,2-DICHLOROPROPANE	9.9	U	
2-BUTANONE	9.9	U	
2-HEXANONE	9.9	U	
4-METHYL-2-PENTANONE	1.2	J	P
ACETONE	2.5	U	A
BENZENE	9.9	U	
BROMOCHLOROMETHANE	9.9	U	
BROMODICHLOROMETHANE	9.9	U	
BROMOFORM	9.9	U	
BROMOMETHANE	9.9	U	
CARBON DISULFIDE	9.9	U	
CARBON TETRACHLORIDE	9.9	U	
CHLOROENZENE	9.9	U	
CHLORODIBROMOMETHANE	9.9	U	
CHLOROETHANE	9.9	U	
CHLOROFORM	9.9	U	
CHLOROMETHANE	9.9	U	
CIS-1,2-DICHLOROETHENE	9.9	U	
CIS-1,3-DICHLOROPROPENE	9.9	U	
CYCLOHEXANE	9.9	U	
ETHYLBENZENE	9.9	U	
ISOPROPYLBENZENE	9.9	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.9	U	
METHYL CYCLOHEXANE	9.9	U	
METHYL TERT-BUTYL ETHER	9.9	U	
METHYLENE CHLORIDE	4.3	U	A
STYRENE	9.9	U	
TETRACHLOROETHENE	9.9	U	
TOLUENE	9.9	U	
TOTAL 1,2-DICHLOROETHENE	9.9	U	
TOTAL XYLENES	9.9	U	
TRANS-1,2-DICHLOROETHENE	9.9	U	
TRANS-1,3-DICHLOROPROPENE	9.9	U	
TRICHLOROETHENE	9.9	U	
VINYL CHLORIDE	9.9	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.8	U	
1,1,2,2-TETRACHLOROETHANE	9.8	U	
1,1,2-TRICHLOROETHANE	9.8	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.8	U	
1,1-DICHLOROETHANE	9.8	U	
1,1-DICHLOROETHENE	9.8	U	
1,2,3-TRICHLOROBENZENE	9.8	U	
1,2,4-TRICHLOROBENZENE	9.8	U	
1,2-DIBROMOETHANE	9.8	U	
1,2-DICHLOROETHANE	9.8	U	
1,2-DICHLOROPROPANE	9.8	U	
2-BUTANONE	9.8	U	
2-HEXANONE	9.8	U	
4-METHYL-2-PENTANONE	9.8	U	
ACETONE	6	U	A
BENZENE	9.8	U	
BROMOCHLOROMETHANE	9.8	U	
BROMODICHLOROMETHANE	9.8	U	
BROMOFORM	9.8	U	
BROMOMETHANE	9.8	U	
CARBON DISULFIDE	9.8	U	
CARBON TETRACHLORIDE	9.8	U	
CHLOROBENZENE	9.8	U	
CHLORODIBROMOMETHANE	9.8	U	
CHLOROETHANE	9.8	U	
CHLOROFORM	9.8	U	
CHLOROMETHANE	9.8	U	
CIS-1,2-DICHLOROETHENE	9.8	U	
CIS-1,3-DICHLOROPROPENE	9.8	U	
CYCLOHEXANE	9.8	U	
ETHYLBENZENE	9.8	U	
ISOPROPYLBENZENE	9.8	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.8	U	
METHYL CYCLOHEXANE	9.8	U	
METHYL TERT-BUTYL ETHER	9.8	U	
METHYLENE CHLORIDE	6.2	U	A
STYRENE	9.8	U	
TETRACHLOROETHENE	9.8	U	
TOLUENE	9.8	U	
TOTAL 1,2-DICHLOROETHENE	9.8	U	
TOTAL XYLENES	9.8	U	
TRANS-1,2-DICHLOROETHENE	9.8	U	
TRANS-1,3-DICHLOROPROPENE	9.8	U	
TRICHLOROETHENE	9.8	U	
VINYL CHLORIDE	9.8	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	8.2	U	A
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	U	
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	U	
METHYLENE CHLORIDE	6	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	10	UJ	C
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	U	
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	7.3	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.5	U	
1,1,2,2-TETRACHLOROETHANE	9.5	U	
1,1,2-TRICHLOROETHANE	9.5	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.5	U	
1,1-DICHLOROETHANE	9.5	U	
1,1-DICHLOROETHENE	9.5	U	
1,2,3-TRICHLOROBENZENE	9.5	U	
1,2,4-TRICHLOROBENZENE	9.5	U	
1,2-DIBROMOETHANE	9.5	U	
1,2-DICHLOROETHANE	9.5	U	
1,2-DICHLOROPROPANE	9.5	U	
2-BUTANONE	9.5	U	
2-HEXANONE	9.5	U	
4-METHYL-2-PENTANONE	0.72	J	P
ACETONE	3.7	U	A
BENZENE	9.5	U	
BROMOCHLOROMETHANE	9.5	U	
BROMODICHLOROMETHANE	9.5	U	
BROMOFORM	9.5	U	
BROMOMETHANE	9.5	U	
CARBON DISULFIDE	9.5	U	
CARBON TETRACHLORIDE	9.5	U	
CHLOROBENZENE	9.5	U	
CHLORODIBROMOMETHANE	9.5	U	
CHLOROETHANE	9.5	U	
CHLOROFORM	9.5	U	
CHLOROMETHANE	9.5	U	
CIS-1,2-DICHLOROETHENE	9.5	U	
CIS-1,3-DICHLOROPROPENE	9.5	U	
CYCLOHEXANE	9.5	U	
ETHYLBENZENE	9.5	U	
ISOPROPYLBENZENE	9.5	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.5	U	
METHYL CYCLOHEXANE	9.5	U	
METHYL TERT-BUTYL ETHER	9.5	U	
METHYLENE CHLORIDE	5.4	U	A
STYRENE	9.5	U	
TETRACHLOROETHENE	0.28	J	P
TOLUENE	9.5	U	
TOTAL 1,2-DICHLOROETHENE	9.5	U	
TOTAL XYLENES	9.5	U	
TRANS-1,2-DICHLOROETHENE	9.5	U	
TRANS-1,3-DICHLOROPROPENE	9.5	U	
TRICHLOROETHENE	9.5	U	
VINYL CHLORIDE	9.5	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	0.71	J	P
ACETONE	3.8	U	A
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	U	
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	5.2	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	UJ	C
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	2.7	U	A
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	U	
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	U	
METHYLENE CHLORIDE	6.9	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	11	UJ	C
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	U	
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	U	
METHYLENE CHLORIDE	6.5	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.7	U	
1,1,2,2-TETRACHLOROETHANE	9.7	U	
1,1,2-TRICHLOROETHANE	9.7	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.7	U	
1,1-DICHLOROETHANE	9.7	U	
1,1-DICHLOROETHENE	9.7	U	
1,2,3-TRICHLOROBENZENE	9.7	U	
1,2,4-TRICHLOROBENZENE	9.7	U	
1,2-DIBROMOETHANE	9.7	U	
1,2-DICHLOROETHANE	9.7	U	
1,2-DICHLOROPROPANE	9.7	U	
2-BUTANONE	9.7	U	
2-HEXANONE	9.7	U	
4-METHYL-2-PENTANONE	0.9	J	P
ACETONE	5.2	U	A
BENZENE	9.7	U	
BROMOCHLOROMETHANE	9.7	U	
BROMODICHLOROMETHANE	9.7	U	
BROMOFORM	9.7	U	
BROMOMETHANE	9.7	U	
CARBON DISULFIDE	9.7	U	
CARBON TETRACHLORIDE	9.7	U	
CHLOROBENZENE	9.7	U	
CHLORODIBROMOMETHANE	9.7	U	
CHLOROETHANE	9.7	U	
CHLOROFORM	9.7	U	
CHLOROMETHANE	9.7	U	
CIS-1,2-DICHLOROETHENE	9.7	U	
CIS-1,3-DICHLOROPROPENE	9.7	U	
CYCLOHEXANE	9.7	U	
ETHYLBENZENE	9.7	U	
ISOPROPYLBENZENE	9.7	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS42001
samp_date 9/30/2008
lab_id 0810010-02
qc_type NM
units UG/KG
Pct_Solids 90.6
DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.7	U	
METHYL CYCLOHEXANE	9.7	U	
METHYL TERT-BUTYL ETHER	9.7	U	
METHYLENE CHLORIDE	4	U	A
STYRENE	9.7	U	
TETRACHLOROETHENE	0.22	J	P
TOLUENE	9.7	U	
TOTAL 1,2-DICHLOROETHENE	9.7	U	
TOTAL XYLENES	9.7	U	
TRANS-1,2-DICHLOROETHENE	9.7	U	
TRANS-1,3-DICHLOROPROPENE	9.7	U	
TRICHLOROETHENE	9.7	U	
VINYL CHLORIDE	9.7	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	360	U	
1,2,4,5-TETRACHLOROENZENE	360	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	360	U	
2,4,5-TRICHLOROPHENOL	910	U	
2,4,6-TRICHLOROPHENOL	360	U	
2,4-DICHLOROPHENOL	360	U	
2,4-DIMETHYLPHENOL	360	U	
2,4-DINITROPHENOL	910	U	
2,4-DINITROTOLUENE	360	U	
2,6-DINITROTOLUENE	360	U	
2-CHLORONAPHTHALENE	360	U	
2-CHLOROPHENOL	360	U	
2-METHYLNAPHTHALENE	360	U	
2-METHYLPHENOL	360	U	
2-NITROANILINE	360	U	
2-NITROPHENOL	360	U	
3,3'-DICHLOROENZIDINE	360	U	
3-NITROANILINE	910	U	
4,6-DINITRO-2-METHYLPHENOL	910	U	
4-BROMOPHENYL PHENYL ETHER	360	U	
4-CHLORO-3-METHYLPHENOL	360	U	
4-CHLOROANILINE	360	U	
4-CHLOROPHENYL PHENYL ETHER	360	U	
4-METHYLPHENOL	360	U	
4-NITROANILINE	910	U	
4-NITROPHENOL	910	U	
ACENAPHTHENE	360	U	
ACENAPHTHYLENE	360	U	
ACETOPHENONE	360	U	
ANTHRACENE	360	U	
ATRAZINE	360	U	
BENZALDEHYDE	360	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	360	U	
BENZO(A)PYRENE	360	U	
BENZO(B)FLUORANTHENE	360	U	
BENZO(G,H,I)PERYLENE	360	U	
BENZO(K)FLUORANTHENE	360	U	
BIS(2-CHLOROETHOXY)METHANE	360	U	
BIS(2-CHLOROETHYL)ETHER	360	U	
BIS(2-ETHYLHEXYL)PHTHALATE	49	U	A
BUTYL BENZYL PHTHALATE	360	UJ	C
CAPROLACTAM	360	U	
CARBAZOLE	360	U	
CHRYSENE	360	U	
DIBENZO(A,H)ANTHRACENE	360	U	
DIBENZOFURAN	360	U	
DIETHYL PHTHALATE	360	U	
DIMETHYL PHTHALATE	360	U	
DI-N-BUTYL PHTHALATE	360	U	
DI-N-OCTYL PHTHALATE	360	U	
FLUORANTHENE	360	U	
FLUORENE	360	U	
HEXACHLOROENZENE	360	U	
HEXACHLOROBUTADIENE	360	U	
HEXACHLOROCYCLOPENTADIENE	360	U	
HEXACHLOROETHANE	360	U	
INDENO(1,2,3-CD)PYRENE	360	U	
ISOPHORONE	360	U	
NAPHTHALENE	360	U	
NITROENZENE	360	U	
N-NITROSO-DI-N-PROPYLAMINE	360	U	
N-NITROSODIPHENYLAMINE	360	U	
PENTACHLOROPHENOL	910	U	
PHENANTHRENE	360	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	360	U	
PYRENE	360	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	420	U	
1,2,4,5-TETRACHLOROBENZENE	420	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	420	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	420	U	
2,4-DICHLOROPHENOL	420	U	
2,4-DIMETHYLPHENOL	420	U	
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	420	U	
2,6-DINITROTOLUENE	420	U	
2-CHLORONAPHTHALENE	420	U	
2-CHLOROPHENOL	420	U	
2-METHYLNAPHTHALENE	420	U	
2-METHYLPHENOL	420	U	
2-NITROANILINE	420	U	
2-NITROPHENOL	420	U	
3,3'-DICHLOROBENZIDINE	420	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	420	U	
4-CHLORO-3-METHYLPHENOL	420	U	
4-CHLOROANILINE	420	U	
4-CHLOROPHENYL PHENYL ETHER	420	U	
4-METHYLPHENOL	420	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	420	U	
ACENAPHTHYLENE	420	U	
ACETOPHENONE	420	U	
ANTHRACENE	420	U	
ATRAZINE	420	U	
BENZALDEHYDE	420	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	420	U	
BENZO(A)PYRENE	420	U	
BENZO(B)FLUORANTHENE	420	U	
BENZO(G,H,I)PERYLENE	420	U	
BENZO(K)FLUORANTHENE	420	U	
BIS(2-CHLOROETHOXY)METHANE	420	U	
BIS(2-CHLOROETHYL)ETHER	420	U	
BIS(2-ETHYLHEXYL)PHTHALATE	58	U	A
BUTYL BENZYL PHTHALATE	420	UJ	C
CAPROLACTAM	420	U	
CARBAZOLE	420	U	
CHRYSENE	420	U	
DIBENZO(A,H)ANTHRACENE	420	U	
DIBENZOFURAN	420	U	
DIETHYL PHTHALATE	420	U	
DIMETHYL PHTHALATE	420	U	
DI-N-BUTYL PHTHALATE	420	U	
DI-N-OCTYL PHTHALATE	420	U	
FLUORANTHENE	420	U	
FLUORENE	420	U	
HEXACHLOROBENZENE	420	U	
HEXACHLOROBUTADIENE	420	U	
HEXACHLOROCYCLOPENTADIENE	420	U	
HEXACHLOROETHANE	420	U	
INDENO(1,2,3-CD)PYRENE	420	U	
ISOPHORONE	420	U	
NAPHTHALENE	420	U	
NITROBENZENE	420	U	
N-NITROSO-DI-N-PROPYLAMINE	420	U	
N-NITROSODIPHENYLAMINE	420	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	420	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	420	U	
PYRENE	420	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	470	U	
1,2,4,5-TETRACHLOROENZENE	470	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	470	U	
2,4,5-TRICHLOROPHENOL	1200	U	
2,4,6-TRICHLOROPHENOL	470	U	
2,4-DICHLOROPHENOL	470	U	
2,4-DIMETHYLPHENOL	470	U	
2,4-DINITROPHENOL	1200	U	
2,4-DINITROTOLUENE	470	U	
2,6-DINITROTOLUENE	470	U	
2-CHLORONAPHTHALENE	470	U	
2-CHLOROPHENOL	470	U	
2-METHYLNAPHTHALENE	470	U	
2-METHYLPHENOL	470	U	
2-NITROANILINE	470	U	
2-NITROPHENOL	470	U	
3,3'-DICHLOROBENZIDINE	470	U	
3-NITROANILINE	1200	U	
4,6-DINITRO-2-METHYLPHENOL	1200	U	
4-BROMOPHENYL PHENYL ETHER	470	U	
4-CHLORO-3-METHYLPHENOL	470	U	
4-CHLOROANILINE	470	U	
4-CHLOROPHENYL PHENYL ETHER	470	U	
4-METHYLPHENOL	470	U	
4-NITROANILINE	1200	U	
4-NITROPHENOL	1200	U	
ACENAPHTHENE	470	U	
ACENAPHTHYLENE	470	U	
ACETOPHENONE	470	U	
ANTHRACENE	470	U	
ATRAZINE	470	U	
BENZALDEHYDE	470	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	470	U	
BENZO(A)PYRENE	470	U	
BENZO(B)FLUORANTHENE	470	U	
BENZO(G,H,I)PERYLENE	470	U	
BENZO(K)FLUORANTHENE	470	U	
BIS(2-CHLOROETHOXY)METHANE	470	U	
BIS(2-CHLOROETHYL)ETHER	470	U	
BIS(2-ETHYLHEXYL)PHTHALATE	71	U	A
BUTYL BENZYL PHTHALATE	470	UJ	C
CAPROLACTAM	470	U	
CARBAZOLE	470	U	
CHRYSENE	470	U	
DIBENZO(A,H)ANTHRACENE	470	U	
DIBENZOFURAN	470	U	
DIETHYL PHTHALATE	470	U	
DIMETHYL PHTHALATE	470	U	
DI-N-BUTYL PHTHALATE	470	U	
DI-N-OCTYL PHTHALATE	470	U	
FLUORANTHENE	470	U	
FLUORENE	470	U	
HEXACHLOROENZENE	470	U	
HEXACHLOROBUTADIENE	470	U	
HEXACHLOROCYCLOPENTADIENE	470	U	
HEXACHLOROETHANE	470	U	
INDENO(1,2,3-CD)PYRENE	470	U	
ISOPHORONE	470	U	
NAPHTHALENE	470	U	
NITROBENZENE	470	U	
N-NITROSO-DI-N-PROPYLAMINE	470	U	
N-NITROSODIPHENYLAMINE	470	U	
PENTACHLOROPHENOL	1200	U	
PHENANTHRENE	470	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	470	U	
PYRENE	470	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	380	U	
1,2,4,5-TETRACHLORO BENZENE	380	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	380	U	
2,4,5-TRICHLOROPHENOL	960	U	
2,4,6-TRICHLOROPHENOL	380	U	
2,4-DICHLOROPHENOL	380	U	
2,4-DIMETHYLPHENOL	380	UJ	C
2,4-DINITROPHENOL	960	U	
2,4-DINITROTOLUENE	380	U	
2,6-DINITROTOLUENE	380	U	
2-CHLORONAPHTHALENE	380	U	
2-CHLOROPHENOL	380	U	
2-METHYLNAPHTHALENE	380	U	
2-METHYLPHENOL	380	U	
2-NITROANILINE	380	U	
2-NITROPHENOL	380	U	
3,3'-DICHLORO BENZIDINE	380	U	
3-NITROANILINE	960	U	
4,6-DINITRO-2-METHYLPHENOL	960	U	
4-BROMOPHENYL PHENYL ETHER	380	U	
4-CHLORO-3-METHYLPHENOL	380	U	
4-CHLOROANILINE	380	U	
4-CHLOROPHENYL PHENYL ETHER	380	U	
4-METHYLPHENOL	380	U	
4-NITROANILINE	960	U	
4-NITROPHENOL	960	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ACETOPHENONE	380	U	
ANTHRACENE	380	U	
ATRAZINE	380	U	
BENZALDEHYDE	380	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
BIS(2-CHLOROETHOXY)METHANE	380	U	
BIS(2-CHLOROETHYL)ETHER	380	U	
BIS(2-ETHYLHEXYL)PHTHALATE	53	U	A
BUTYL BENZYL PHTHALATE	380	UJ	C
CAPROLACTAM	380	UJ	C
CARBAZOLE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
DIBENZOFURAN	380	U	
DIETHYL PHTHALATE	380	U	
DIMETHYL PHTHALATE	380	U	
DI-N-BUTYL PHTHALATE	380	U	
DI-N-OCTYL PHTHALATE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
HEXACHLORO BENZENE	380	U	
HEXACHLOROBUTADIENE	380	U	
HEXACHLOROCYCLOPENTADIENE	380	U	
HEXACHLOROETHANE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
ISOPHORONE	380	U	
NAPHTHALENE	380	U	
NITROBENZENE	380	U	
N-NITROSO-DI-N-PROPYLAMINE	380	U	
N-NITROSODIPHENYLAMINE	380	U	
PENTACHLOROPHENOL	960	U	
PHENANTHRENE	380	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	380	U	
PYRENE	380	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	380	U	
1,2,4,5-TETRACHLOROBENZENE	380	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	380	U	
2,4,5-TRICHLOROPHENOL	960	U	
2,4,6-TRICHLOROPHENOL	380	U	
2,4-DICHLOROPHENOL	380	U	
2,4-DIMETHYLPHENOL	380	UJ	C
2,4-DINITROPHENOL	960	U	
2,4-DINITROTOLUENE	380	U	
2,6-DINITROTOLUENE	380	U	
2-CHLORONAPHTHALENE	380	U	
2-CHLOROPHENOL	380	U	
2-METHYLNAPHTHALENE	380	U	
2-METHYLPHENOL	380	U	
2-NITROANILINE	380	U	
2-NITROPHENOL	380	U	
3,3'-DICHLOROBENZIDINE	380	U	
3-NITROANILINE	960	U	
4,6-DINITRO-2-METHYLPHENOL	960	U	
4-BROMOPHENYL PHENYL ETHER	380	U	
4-CHLORO-3-METHYLPHENOL	380	U	
4-CHLOROANILINE	380	U	
4-CHLOROPHENYL PHENYL ETHER	380	U	
4-METHYLPHENOL	380	U	
4-NITROANILINE	960	U	
4-NITROPHENOL	960	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ACETOPHENONE	380	U	
ANTHRACENE	380	U	
ATRAZINE	380	U	
BENZALDEHYDE	380	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
BIS(2-CHLOROETHOXY)METHANE	380	U	
BIS(2-CHLOROETHYL)ETHER	380	U	
BIS(2-ETHYLHEXYL)PHTHALATE	54	U	A
BUTYL BENZYL PHTHALATE	380	UJ	C
CAPROLACTAM	380	UJ	C
CARBAZOLE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
DIBENZOFURAN	380	U	
DIETHYL PHTHALATE	380	U	
DIMETHYL PHTHALATE	380	U	
DI-N-BUTYL PHTHALATE	380	U	
DI-N-OCTYL PHTHALATE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
HEXACHLOROBENZENE	380	U	
HEXACHLOROBUTADIENE	380	U	
HEXACHLOROCYCLOPENTADIENE	380	U	
HEXACHLOROETHANE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
ISOPHORONE	380	U	
NAPHTHALENE	380	U	
NITROBENZENE	380	U	
N-NITROSO-DI-N-PROPYLAMINE	380	U	
N-NITROSODIPHENYLAMINE	380	U	
PENTACHLOROPHENOL	960	U	
PHENANTHRENE	380	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	380	U	
PYRENE	380	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLOROBENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	930	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	UJ	C
2,4-DINITROPHENOL	930	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLORO BENZIDINE	370	U	
3-NITROANILINE	930	U	
4,6-DINITRO-2-METHYLPHENOL	930	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	930	U	
4-NITROPHENOL	930	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	48	U	A
BUTYL BENZYL PHTHALATE	370	UJ	C
CAPROLACTAM	370	UJ	C
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	60	J	P
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLOROBENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	930	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLORO BENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	920	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	UJ	C
2,4-DINITROPHENOL	920	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLORO BENZIDINE	370	U	
3-NITROANILINE	920	U	
4,6-DINITRO-2-METHYLPHENOL	920	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	920	U	
4-NITROPHENOL	920	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	63	U	A
BUTYL BENZYL PHTHALATE	370	UJ	C
CAPROLACTAM	370	UJ	C
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	370	U	
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLORO BENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	920	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	410	U	
1,2,4,5-TETRACHLORO BENZENE	410	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	410	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	410	U	
2,4-DICHLOROPHENOL	410	U	
2,4-DIMETHYLPHENOL	410	UJ	C
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	410	U	
2,6-DINITROTOLUENE	410	U	
2-CHLORONAPHTHALENE	410	U	
2-CHLOROPHENOL	410	U	
2-METHYLNAPHTHALENE	410	U	
2-METHYLPHENOL	410	U	
2-NITROANILINE	410	U	
2-NITROPHENOL	410	U	
3,3'-DICHLORO BENZIDINE	410	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	410	U	
4-CHLORO-3-METHYLPHENOL	410	U	
4-CHLOROANILINE	410	U	
4-CHLOROPHENYL PHENYL ETHER	410	U	
4-METHYLPHENOL	410	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	410	U	
ACENAPHTHYLENE	410	U	
ACETOPHENONE	410	U	
ANTHRACENE	410	U	
ATRAZINE	410	U	
BENZALDEHYDE	410	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	410	U	
BENZO(A)PYRENE	410	U	
BENZO(B)FLUORANTHENE	410	U	
BENZO(G,H,I)PERYLENE	410	U	
BENZO(K)FLUORANTHENE	410	U	
BIS(2-CHLOROETHOXY)METHANE	410	U	
BIS(2-CHLOROETHYL)ETHER	410	U	
BIS(2-ETHYLHEXYL)PHTHALATE	86	U	A
BUTYL BENZYL PHTHALATE	410	UJ	C
CAPROLACTAM	410	UJ	C
CARBAZOLE	410	U	
CHRYSENE	410	U	
DIBENZO(A,H)ANTHRACENE	410	U	
DIBENZOFURAN	410	U	
DIETHYL PHTHALATE	410	U	
DIMETHYL PHTHALATE	410	U	
DI-N-BUTYL PHTHALATE	410	U	
DI-N-OCTYL PHTHALATE	410	U	
FLUORANTHENE	410	U	
FLUORENE	410	U	
HEXACHLORO BENZENE	410	U	
HEXACHLOROBUTADIENE	410	U	
HEXACHLOROCYCLOPENTADIENE	410	U	
HEXACHLOROETHANE	410	U	
INDENO(1,2,3-CD)PYRENE	410	U	
ISOPHORONE	410	U	
NAPHTHALENE	410	U	
NITROBENZENE	410	U	
N-NITROSO-DI-N-PROPYLAMINE	410	U	
N-NITROSODIPHENYLAMINE	410	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	410	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	410	U	
PYRENE	410	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLOROENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	930	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	UJ	C
2,4-DINITROPHENOL	930	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLOROBENZIDINE	370	U	
3-NITROANILINE	930	U	
4,6-DINITRO-2-METHYLPHENOL	930	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	930	U	
4-NITROPHENOL	930	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	55	U	A
BUTYL BENZYL PHTHALATE	370	UJ	C
CAPROLACTAM	370	UJ	C
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	370	U	
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLOROENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	930	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	360	U	
1,2,4,5-TETRACHLORO BENZENE	360	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	360	U	
2,4,5-TRICHLOROPHENOL	900	U	
2,4,6-TRICHLOROPHENOL	360	U	
2,4-DICHLOROPHENOL	360	U	
2,4-DIMETHYLPHENOL	360	UJ	C
2,4-DINITROPHENOL	900	U	
2,4-DINITROTOLUENE	360	U	
2,6-DINITROTOLUENE	360	U	
2-CHLORONAPHTHALENE	360	U	
2-CHLOROPHENOL	360	U	
2-METHYLNAPHTHALENE	360	U	
2-METHYLPHENOL	360	U	
2-NITROANILINE	360	U	
2-NITROPHENOL	360	U	
3,3'-DICHLOROBENZIDINE	360	U	
3-NITROANILINE	900	U	
4,6-DINITRO-2-METHYLPHENOL	900	U	
4-BROMOPHENYL PHENYL ETHER	360	U	
4-CHLORO-3-METHYLPHENOL	360	U	
4-CHLOROANILINE	360	U	
4-CHLOROPHENYL PHENYL ETHER	360	U	
4-METHYLPHENOL	360	U	
4-NITROANILINE	900	U	
4-NITROPHENOL	900	U	
ACENAPHTHENE	360	U	
ACENAPHTHYLENE	360	U	
ACETOPHENONE	360	U	
ANTHRACENE	360	U	
ATRAZINE	360	U	
BENZALDEHYDE	360	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	360	U	
BENZO(A)PYRENE	360	U	
BENZO(B)FLUORANTHENE	360	U	
BENZO(G,H,I)PERYLENE	360	U	
BENZO(K)FLUORANTHENE	360	U	
BIS(2-CHLOROETHOXY)METHANE	360	U	
BIS(2-CHLOROETHYL)ETHER	360	U	
BIS(2-ETHYLHEXYL)PHTHALATE	52	U	A
BUTYL BENZYL PHTHALATE	360	UJ	C
CAPROLACTAM	360	UJ	C
CARBAZOLE	360	U	
CHRYSENE	360	U	
DIBENZO(A,H)ANTHRACENE	360	U	
DIBENZOFURAN	360	U	
DIETHYL PHTHALATE	360	U	
DIMETHYL PHTHALATE	360	U	
DI-N-BUTYL PHTHALATE	360	U	
DI-N-OCTYL PHTHALATE	360	U	
FLUORANTHENE	360	U	
FLUORENE	360	U	
HEXACHLORO BENZENE	360	U	
HEXACHLOROBUTADIENE	360	U	
HEXACHLOROCYCLOPENTADIENE	360	U	
HEXACHLOROETHANE	360	U	
INDENO(1,2,3-CD)PYRENE	360	U	
ISOPHORONE	360	U	
NAPHTHALENE	360	U	
NITROBENZENE	360	U	
N-NITROSO-DI-N-PROPYLAMINE	360	U	
N-NITROSODIPHENYLAMINE	360	U	
PENTACHLOROPHENOL	900	U	
PHENANTHRENE	360	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	360	U	
PYRENE	360	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	380	U	
1,2,4,5-TETRACHLORO BENZENE	380	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	380	U	
2,4,5-TRICHLOROPHENOL	960	U	
2,4,6-TRICHLOROPHENOL	380	U	
2,4-DICHLOROPHENOL	380	U	
2,4-DIMETHYLPHENOL	380	UJ	C
2,4-DINITROPHENOL	960	U	
2,4-DINITROTOLUENE	380	U	
2,6-DINITROTOLUENE	380	U	
2-CHLORONAPHTHALENE	380	U	
2-CHLOROPHENOL	380	U	
2-METHYLNAPHTHALENE	380	U	
2-METHYLPHENOL	380	U	
2-NITROANILINE	380	U	
2-NITROPHENOL	380	U	
3,3'-DICHLORO BENZIDINE	380	U	
3-NITROANILINE	960	U	
4,6-DINITRO-2-METHYLPHENOL	960	U	
4-BROMOPHENYL PHENYL ETHER	380	U	
4-CHLORO-3-METHYLPHENOL	380	U	
4-CHLOROANILINE	380	U	
4-CHLOROPHENYL PHENYL ETHER	380	U	
4-METHYLPHENOL	380	U	
4-NITROANILINE	960	U	
4-NITROPHENOL	960	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ACETOPHENONE	380	U	
ANTHRACENE	380	U	
ATRAZINE	380	U	
BENZALDEHYDE	380	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
BIS(2-CHLOROETHOXY)METHANE	380	U	
BIS(2-CHLOROETHYL)ETHER	380	U	
BIS(2-ETHYLHEXYL)PHTHALATE	53	U	A
BUTYL BENZYL PHTHALATE	380	UJ	C
CAPROLACTAM	380	UJ	C
CARBAZOLE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
DIBENZOFURAN	380	U	
DIETHYL PHTHALATE	380	U	
DIMETHYL PHTHALATE	380	U	
DI-N-BUTYL PHTHALATE	380	U	
DI-N-OCTYL PHTHALATE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
HEXACHLORO BENZENE	380	U	
HEXACHLOROBUTADIENE	380	U	
HEXACHLOROCYCLOPENTADIENE	380	U	
HEXACHLOROETHANE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
ISOPHORONE	380	U	
NAPHTHALENE	380	U	
NITROBENZENE	380	U	
N-NITROSO-DI-N-PROPYLAMINE	380	U	
N-NITROSODIPHENYLAMINE	380	U	
PENTACHLOROPHENOL	960	U	
PHENANTHRENE	380	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	380	U	
PYRENE	380	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLOROBENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	920	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	UJ	C
2,4-DINITROPHENOL	920	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLORO BENZIDINE	370	U	
3-NITROANILINE	920	U	
4,6-DINITRO-2-METHYLPHENOL	920	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	920	U	
4-NITROPHENOL	920	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	75	U	A
BUTYL BENZYL PHTHALATE	370	UJ	C
CAPROLACTAM	370	UJ	C
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	370	U	
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLOROBENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	920	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	400	U	
1,2,4,5-TETRACHLOROBENZENE	400	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	400	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	400	U	
2,4-DICHLOROPHENOL	400	U	
2,4-DIMETHYLPHENOL	400	UJ	C
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	400	U	
2,6-DINITROTOLUENE	400	U	
2-CHLORONAPHTHALENE	400	U	
2-CHLOROPHENOL	400	U	
2-METHYLNAPHTHALENE	400	U	
2-METHYLPHENOL	400	U	
2-NITROANILINE	400	U	
2-NITROPHENOL	400	U	
3,3'-DICHLOROBENZIDINE	400	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	400	U	
4-CHLORO-3-METHYLPHENOL	400	U	
4-CHLOROANILINE	400	U	
4-CHLOROPHENYL PHENYL ETHER	400	U	
4-METHYLPHENOL	400	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	400	U	
ACENAPHTHYLENE	400	U	
ACETOPHENONE	400	U	
ANTHRACENE	400	U	
ATRAZINE	400	U	
BENZALDEHYDE	400	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	400	U	
BENZO(A)PYRENE	400	U	
BENZO(B)FLUORANTHENE	400	U	
BENZO(G,H,I)PERYLENE	400	U	
BENZO(K)FLUORANTHENE	400	U	
BIS(2-CHLOROETHOXY)METHANE	400	U	
BIS(2-CHLOROETHYL)ETHER	400	U	
BIS(2-ETHYLHEXYL)PHTHALATE	110	U	A
BUTYL BENZYL PHTHALATE	400	UJ	C
CAPROLACTAM	400	UJ	C
CARBAZOLE	400	U	
CHRYSENE	400	U	
DIBENZO(A,H)ANTHRACENE	400	U	
DIBENZOFURAN	400	U	
DIETHYL PHTHALATE	400	U	
DIMETHYL PHTHALATE	400	U	
DI-N-BUTYL PHTHALATE	400	U	
DI-N-OCTYL PHTHALATE	400	U	
FLUORANTHENE	400	U	
FLUORENE	400	U	
HEXACHLOROBENZENE	400	U	
HEXACHLOROBUTADIENE	400	U	
HEXACHLOROCYCLOPENTADIENE	400	U	
HEXACHLOROETHANE	400	U	
INDENO(1,2,3-CD)PYRENE	400	U	
ISOPHORONE	400	U	
NAPHTHALENE	400	U	
NITROBENZENE	400	U	
N-NITROSO-DI-N-PROPYLAMINE	400	U	
N-NITROSODIPHENYLAMINE	400	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	400	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	400	U	
PYRENE	400	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLOROBENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	920	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	UJ	C
2,4-DINITROPHENOL	920	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLOROBENZIDINE	370	U	
3-NITROANILINE	920	U	
4,6-DINITRO-2-METHYLPHENOL	920	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	920	U	
4-NITROPHENOL	920	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	84	U	A
BUTYL BENZYL PHTHALATE	370	UJ	C
CAPROLACTAM	370	UJ	C
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	370	U	
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLOROBENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	920	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT02DL
 samp_date 10/1/2008
 lab_id 0810033-02DL
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.73	U	
4,4'-DDE	0.35	J	P
4,4'-DDT	0.73	J	CP
ALDRIN	0.36	U	
ALPHA-BHC	0.36	U	
ALPHA-CHLORDANE	1.6		
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.32	J	PU
DELTA-BHC	0.36	U	
DIELDRIN	0.43	J	P
ENDOSULFAN I	0.36	U	
ENDOSULFAN II	0.51	J	P
ENDOSULFAN SULFATE	0.73	U	
ENDRIN	0.73	U	
ENDRIN ALDEHYDE	0.73	U	
ENDRIN KETONE	0.73	U	
GAMMA-BHC (LINDANE)	0.36	U	
GAMMA-CHLORDANE	0.65	J	U
HEPTACHLOR	0.36	U	
HEPTACHLOR EPOXIDE	0.33	J	CP
METHOXYCHLOR	0.36	UJ	C
TOXAPHENE	36	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	1.5	R	U
4,4'-DDE	0.83	U	
4,4'-DDT	1.4	J	CPRU
ALDRIN	2.9	R	U
ALPHA-BHC	4.2	J	RU
ALPHA-CHLORDANE	0.42	U	
AROCLOR-1016	21	U	
AROCLOR-1221	21	U	
AROCLOR-1232	21	U	
AROCLOR-1248	21	U	
AROCLOR-1254	21	U	
AROCLOR-1260	21	U	
BETA-BHC	63	J	RU
DELTA-BHC	34	J	R
DIELDRIN	0.85	R	U
ENDOSULFAN I	0.42	U	
ENDOSULFAN II	4.4	J	R
ENDOSULFAN SULFATE	1.5	J	R
ENDRIN	7.6	J	R
ENDRIN ALDEHYDE	12	J	RU
ENDRIN KETONE	1.3	R	U
GAMMA-BHC (LINDANE)	10	R	U
GAMMA-CHLORDANE	7.4	R	U
HEPTACHLOR	16	R	U
HEPTACHLOR EPOXIDE	6.2	J	RU
METHOXYCHLOR	0.42	UJ	C
TOXAPHENE	42	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1242	2400	J	U

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units UG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units UG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.95	U	
4,4'-DDE	0.95	U	
4,4'-DDT	0.95	UJ	C
ALDRIN	0.47	U	
ALPHA-BHC	0.47	U	
ALPHA-CHLORDANE	0.18	R	U
AROCLOR-1016	24	U	
AROCLOR-1221	24	U	
AROCLOR-1232	24	U	
AROCLOR-1242	24	U	
AROCLOR-1248	24	U	
AROCLOR-1254	24	U	
AROCLOR-1260	24	U	
BETA-BHC	0.17	R	U
DELTA-BHC	0.47	U	
DIELDRIN	0.95	U	
ENDOSULFAN I	0.47	U	
ENDOSULFAN II	0.95	U	
ENDOSULFAN SULFATE	0.46	J	P
ENDRIN	0.95	U	
ENDRIN ALDEHYDE	0.95	U	
ENDRIN KETONE	0.95	U	
GAMMA-BHC (LINDANE)	0.47	U	
GAMMA-CHLORDANE	0.2	R	U
HEPTACHLOR	0.47	U	
HEPTACHLOR EPOXIDE	0.47	U	
METHOXYCHLOR	0.47	UJ	C
TOXAPHENE	47	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.77	U	
4,4'-DDE	0.77	U	
4,4'-DDT	0.77	UJ	C
ALDRIN	0.38	U	
ALPHA-BHC	0.38	U	
ALPHA-CHLORDANE	0.38	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.38	U	
DELTA-BHC	0.26	J	PU
DIELDRIN	0.55	J	PU
ENDOSULFAN I	0.38	U	
ENDOSULFAN II	1.4	J	U
ENDOSULFAN SULFATE	0.77	U	
ENDRIN	0.77	U	
ENDRIN ALDEHYDE	0.77	U	
ENDRIN KETONE	0.77	U	
GAMMA-BHC (LINDANE)	0.38	U	
GAMMA-CHLORDANE	0.38	U	
HEPTACHLOR	0.38	U	
HEPTACHLOR EPOXIDE	0.56	J	U
METHOXYCHLOR	0.38	U	
TOXAPHENE	38	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.77	U	
4,4'-DDE	0.77	U	
4,4'-DDT	0.32	J	CP
ALDRIN	0.38	U	
ALPHA-BHC	0.38	U	
ALPHA-CHLORDANE	0.38	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.38	U	
DELTA-BHC	0.18	R	U
DIELDRIN	0.7	J	PU
ENDOSULFAN I	0.38	U	
ENDOSULFAN II	0.35	J	P
ENDOSULFAN SULFATE	0.29	J	PU
ENDRIN	0.77	U	
ENDRIN ALDEHYDE	0.77	U	
ENDRIN KETONE	0.77	U	
GAMMA-BHC (LINDANE)	0.38	U	
GAMMA-CHLORDANE	0.38	U	
HEPTACHLOR	0.38	U	
HEPTACHLOR EPOXIDE	0.3	J	PU
METHOXYCHLOR	0.38	U	
TOXAPHENE	38	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units UG/KG
 Pct_Solids 89.8
 DUP_OF:

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS01701DL
 samp_date 9/30/2008
 lab_id 0810010-01DL
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.74	U	
4,4'-DDE	0.86	J	U
4,4'-DDT	0.23	J	CPU
ALDRIN	0.37	U	
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.37	U	
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
DIELDRIN	1.4		
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	0.74	U	
ENDOSULFAN SULFATE	0.74	U	
ENDRIN	0.74	U	
ENDRIN ALDEHYDE	0.74	U	
ENDRIN KETONE	0.74	U	
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.37	U	
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.37	U	
METHOXYCHLOR	0.8	J	U
TOXAPHENE	37	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.73	U	
4,4'-DDE	0.73	U	
4,4'-DDT	0.73	UJ	C
ALDRIN	6.3	J	U
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.37	U	
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
DIELDRIN	0.73	U	
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	0.73	U	
ENDOSULFAN SULFATE	0.73	U	
ENDRIN	0.73	U	
ENDRIN ALDEHYDE	0.73	U	
ENDRIN KETONE	0.73	U	
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.37	U	
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.37	U	
TOXAPHENE	37	U	

Parameter	Result	Val Qual	Qual Code
METHOXYCHLOR	140	J	CU

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

nsample 01SS02501DL
 samp_date 9/30/2008
 lab_id 0810010-07DL
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.81	U	
4,4'-DDE	0.97	J	U
4,4'-DDT	1.5	J	C
ALDRIN	0.41	U	
ALPHA-BHC	0.41	U	
ALPHA-CHLORDANE	4.9	J	U
AROCLOR-1016	20	U	
AROCLOR-1221	20	U	
AROCLOR-1232	20	U	
AROCLOR-1242	20	U	
AROCLOR-1248	20	U	
AROCLOR-1254	20	U	
AROCLOR-1260	20	U	
BETA-BHC	0.19	R	U
DELTA-BHC	0.41	U	
DIELDRIN	0.81	U	
ENDOSULFAN I	0.41	U	
ENDOSULFAN II	0.81	U	
ENDOSULFAN SULFATE	0.81	U	
ENDRIN	0.81	U	
ENDRIN ALDEHYDE	0.81	U	
ENDRIN KETONE	0.81	U	
GAMMA-BHC (LINDANE)	0.41	U	
GAMMA-CHLORDANE	3.4	J	U
HEPTACHLOR	0.41	U	
HEPTACHLOR EPOXIDE	1.2	J	U
METHOXYCHLOR	0.41	U	
TOXAPHENE	41	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.75	U	
4,4'-DDE	0.75	U	
4,4'-DDT	3.4	R	U
ALDRIN	0.29	J	P
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.23	J	P
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	0.75	U	
ENDOSULFAN SULFATE	0.75	U	
ENDRIN	0.75	U	
ENDRIN ALDEHYDE	0.75	U	
ENDRIN KETONE	0.75	U	
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.37	U	
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.25	J	PU
METHOXYCHLOR	0.37	U	
TOXAPHENE	37	U	

Parameter	Result	Val Qual	Qual Code
DIELDRIN	460	J	D

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.72	U	
4,4'-DDE	0.72	U	
4,4'-DDT	0.31	J	CP
ALDRIN	0.36	U	
ALPHA-BHC	0.36	U	
ALPHA-CHLORDANE	0.32	J	P
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.36	U	
DELTA-BHC	0.36	U	
DIELDRIN	0.36	J	PU
ENDOSULFAN I	0.36	U	
ENDOSULFAN II	0.3	J	PU
ENDOSULFAN SULFATE	0.72	U	
ENDRIN	0.72	U	
ENDRIN ALDEHYDE	0.72	U	
ENDRIN KETONE	0.72	U	
GAMMA-BHC (LINDANE)	0.36	U	
GAMMA-CHLORDANE	0.36	U	
HEPTACHLOR	0.36	U	
HEPTACHLOR EPOXIDE	0.36	U	
METHOXYCHLOR	0.36	UJ	C
TOXAPHENE	36	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.76	U	
4,4'-DDE	0.76	U	
4,4'-DDT	0.76	UJ	C
ALDRIN	0.38	U	
ALPHA-BHC	0.38	U	
ALPHA-CHLORDANE	0.38	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.38	U	
DELTA-BHC	0.38	U	
DIELDRIN	0.76	U	
ENDOSULFAN I	0.38	U	
ENDOSULFAN II	0.76	U	
ENDOSULFAN SULFATE	0.76	U	
ENDRIN	0.76	U	
ENDRIN ALDEHYDE	0.76	U	
ENDRIN KETONE	0.76	U	
GAMMA-BHC (LINDANE)	0.38	U	
GAMMA-CHLORDANE	0.38	U	
HEPTACHLOR	0.38	U	
HEPTACHLOR EPOXIDE	0.38	U	
METHOXYCHLOR	0.38	UJ	C
TOXAPHENE	38	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.74	U	
4,4'-DDE	0.74	U	
4,4'-DDT	0.74	UJ	C
ALDRIN	0.37	U	
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.37	U	
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
DIELDRIN	0.74	U	
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	0.74	U	
ENDOSULFAN SULFATE	0.74	U	
ENDRIN	0.74	U	
ENDRIN ALDEHYDE	0.74	U	
ENDRIN KETONE	0.74	U	
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.37	U	
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.37	U	
METHOXYCHLOR	0.37	UJ	C
TOXAPHENE	37	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units UG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.8	U	
4,4'-DDE	0.8	U	
4,4'-DDT	0.8	UJ	C
ALDRIN	0.4	U	
ALPHA-BHC	0.4	U	
ALPHA-CHLORDANE	0.4	U	
AROCLOR-1016	20	U	
AROCLOR-1221	20	U	
AROCLOR-1232	20	U	
AROCLOR-1242	20	U	
AROCLOR-1248	20	U	
AROCLOR-1254	20	U	
AROCLOR-1260	20	U	
BETA-BHC	0.18	J	PU
DELTA-BHC	0.4	U	
DIELDRIN	0.8	U	
ENDOSULFAN I	0.4	U	
ENDOSULFAN II	0.8	U	
ENDOSULFAN SULFATE	0.8	U	
ENDRIN	0.8	U	
ENDRIN ALDEHYDE	0.8	U	
ENDRIN KETONE	0.8	U	
GAMMA-BHC (LINDANE)	0.23	J	PU
GAMMA-CHLORDANE	0.4	U	
HEPTACHLOR	0.4	U	
HEPTACHLOR EPOXIDE	0.4	U	
METHOXYCHLOR	0.4	UJ	C
TOXAPHENE	40	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.74	U	
4,4'-DDE	0.74	U	
4,4'-DDT	0.41	J	CPU
ALDRIN	0.16	J	PU
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.37	U	
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
DIELDRIN	0.74	U	
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	1.6		
ENDOSULFAN SULFATE	0.74	U	
ENDRIN	0.74	U	
ENDRIN ALDEHYDE	0.74	U	
ENDRIN KETONE	0.74	U	
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.23	J	PU
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.37	U	
METHOXYCHLOR	0.29	J	CPU
TOXAPHENE	37	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units UG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units UG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units UG/KG
 Pct_Solids 70.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2.1	U	
2,4,5-TP (SILVEX)	2.1	U	
2,4-D	21	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2.4	U	
2,4,5-TP (SILVEX)	2.4	U	
2,4-D	24	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS01401
samp_date 9/30/2008
lab_id 0810010-03
qc_type NM
units UG/KG
Pct_Solids 86.6
DUP_OF:

nsample 01SS01401 DUP
samp_date 9/30/2008
lab_id 0810010-04
qc_type NM
units UG/KG
Pct_Solids 86.8
DUP_OF: 01SS01401

nsample 01SS01501
samp_date 9/30/2008
lab_id 0810010-05
qc_type NM
units UG/KG
Pct_Solids 89.8
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units UG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units UG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2	U	
2,4,5-TP (SILVEX)	2	U	
2,4-D	20	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units UG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS13901 DUP
samp_date 9/30/2008
lab_id 0810010-11
qc_type NM
units UG/KG
Pct_Solids 82.9
DUP_OF: 01SS13901

nsample 01SS42001
samp_date 9/30/2008
lab_id 0810010-02
qc_type NM
units UG/KG
Pct_Solids 90.6
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2	U	
2,4,5-TP (SILVEX)	2	U	
2,4-D	20	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.8	U	
2,4,5-TP (SILVEX)	1.8	U	
2,4-D	18	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1003301A

Level: (low/med) LOW Date Sampled: 10/01/08 10:00

% Moisture: not dec. 9 Date Analyzed: 10/03/08 14:16

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG			Q
		MDL	RL	CONC	
67-64-1	Acetone	1.6	10		U
71-43-2	Benzene	0.20	10		U
74-97-5	Bromochloromethane	0.37	10		U
75-27-4	Bromodichloromethane	0.23	10		U
75-25-2	Bromoform	0.62	10		U
74-83-9	Bromomethane	0.43	10		U
78-93-3	2-Butanone	2.1	10		U
75-15-0	Carbon disulfide	0.28	10		U
56-23-5	Carbon tetrachloride	0.25	10		U
108-90-7	Chlorobenzene	2.6	10		U
75-00-3	Chloroethane	0.42	10		U
67-66-3	Chloroform	0.45	10		U
74-87-3	Chloromethane	0.38	10		U
110-82-7	Cyclohexane	0.44	10		U
124-48-1	Dibromochloromethane	0.25	10		U
106-93-4	1,2-Dibromoethane	0.59	10		U
75-34-3	1,1-Dichloroethane	0.43	10		U
107-06-2	1,2-Dichloroethane	0.45	10		U
75-35-4	1,1-Dichloroethene	0.34	10		U
156-59-2	cis-1,2-Dichloroethene	0.28	10		U
156-60-5	trans-1,2-Dichloroethene	0.58	10		U
540-59-0	1,2-Dichloroethene (total)	0.58	10		U
78-87-5	1,2-Dichloropropane	0.60	10		U
10061-01-5	cis-1,3-Dichloropropene	0.37	10		U
10061-02-6	trans-1,3-Dichloropropene	0.39	10		U
100-41-4	Ethylbenzene	0.25	10		U
591-78-6	2-Hexanone	0.64	10		U
98-82-8	Isopropylbenzene	0.27	10		U
79-20-9	Methyl acetate	0.60	10		U
108-87-2	Methyl cyclohexane	0.41	10		U
75-09-2	Methylene chloride	1.1	10	5.2	JB
108-10-1	4-Methyl-2-pentanone	0.63	10		U
1634-04-4	Methyl tert-butyl ether	0.60	10		U
100-42-5	Styrene	0.36	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.34	10		U
127-18-4	Tetrachloroethene	0.22	10		U
108-88-3	Toluene	0.40	10		U
87-61-6	1,2,3-Trichlorobenzene	0.20	10		U
120-82-1	1,2,4-Trichlorobenzene	0.33	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01

Sample wt/vol: 5.2 (g/mL) G Lab File ID: 1003301A

Level: (low/med) LOW Date Sampled: 10/01/08 10:00

% Moisture: not dec. 9 Date Analyzed: 10/03/08 14:16

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.36	10		U
79-00-5-----	1,1,2-Trichloroethane	0.52	10		U
79-01-6-----	Trichloroethene	0.43	10		U
76-13-1-----	Trichlorotrifluoroethane	0.38	10		U
75-01-4-----	Vinyl chloride	0.50	10		U
1330-20-7----	Xylene (total)	0.22	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1003302A

Level: (low/med) LOW Date Sampled: 10/01/08 10:30

% Moisture: not dec. 20 Date Analyzed: 10/03/08 14:47

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.9	12		U
71-43-2	Benzene	0.24	12		U
74-97-5	Bromochloromethane	0.44	12		U
75-27-4	Bromodichloromethane	0.27	12		U
75-25-2	Bromoform	0.74	12		U
74-83-9	Bromomethane	0.51	12		U
78-93-3	2-Butanone	2.4	12		U
75-15-0	Carbon disulfide	0.34	12		U
56-23-5	Carbon tetrachloride	0.30	12		U
108-90-7	Chlorobenzene	3.1	12		U
75-00-3	Chloroethane	0.50	12		U
67-66-3	Chloroform	0.54	12		U
74-87-3	Chloromethane	0.45	12		U
110-82-7	Cyclohexane	0.52	12		U
124-48-1	Dibromochloromethane	0.30	12		U
106-93-4	1,2-Dibromoethane	0.70	12		U
75-34-3	1,1-Dichloroethane	0.51	12		U
107-06-2	1,2-Dichloroethane	0.54	12		U
75-35-4	1,1-Dichloroethene	0.40	12		U
156-59-2	cis-1,2-Dichloroethene	0.34	12		U
156-60-5	trans-1,2-Dichloroethene	0.69	12		U
540-59-0	1,2-Dichloroethene (total)	0.69	12		U
78-87-5	1,2-Dichloropropane	0.71	12		U
10061-01-5	cis-1,3-Dichloropropene	0.44	12		U
10061-02-6	trans-1,3-Dichloropropene	0.46	12		U
100-41-4	Ethylbenzene	0.30	12		U
591-78-6	2-Hexanone	0.76	12		U
98-82-8	Isopropylbenzene	0.32	12		U
79-20-9	Methyl acetate	0.71	12		U
108-87-2	Methyl cyclohexane	0.49	12		U
75-09-2	Methylene chloride	1.3	12	7.3	JB
108-10-1	4-Methyl-2-pentanone	0.75	12	1.7	J
1634-04-4	Methyl tert-butyl ether	0.71	12		U
100-42-5	Styrene	0.42	12		U
79-34-5	1,1,2,2-Tetrachloroethane	0.40	12		U
127-18-4	Tetrachloroethene	0.26	12		U
108-88-3	Toluene	0.47	12		U
87-61-6	1,2,3-Trichlorobenzene	0.24	12		U
120-82-1	1,2,4-Trichlorobenzene	0.39	12		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SB DIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 1003302A

Level: (low/med) LOW Date Sampled: 10/01/08 10:30

% Moisture: not dec. 20 Date Analyzed: 10/03/08 14:47

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.42	12		U
79-00-5-----	1,1,2-Trichloroethane	0.61	12		U
79-01-6-----	Trichloroethene	0.51	12		U
76-13-1-----	Trichlorotrifluoroethane	0.45	12		U
75-01-4-----	Vinyl chloride	0.59	12		U
1330-20-7-----	Xylene (total)	0.26	12		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03

Sample wt/vol: 4.8 (g/mL) G Lab File ID: 1003303A

Level: (low/med) LOW Date Sampled: 10/01/08 11:00

% Moisture: not dec. 30 Date Analyzed: 10/03/08 15:18

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	2.3	15	4.4	JB
71-43-2	Benzene	0.28	15		U
74-97-5	Bromochloromethane	0.52	15		U
75-27-4	Bromodichloromethane	0.32	15		U
75-25-2	Bromoform	0.87	15		U
74-83-9	Bromomethane	0.61	15		U
78-93-3	2-Butanone	2.9	15		U
75-15-0	Carbon disulfide	0.40	15		U
56-23-5	Carbon tetrachloride	0.36	15		U
108-90-7	Chlorobenzene	3.7	15		U
75-00-3	Chloroethane	0.59	15		U
67-66-3	Chloroform	0.64	15		U
74-87-3	Chloromethane	0.53	15		U
110-82-7	Cyclohexane	0.62	15		U
124-48-1	Dibromochloromethane	0.36	15		U
106-93-4	1,2-Dibromoethane	0.83	15		U
75-34-3	1,1-Dichloroethane	0.61	15		U
107-06-2	1,2-Dichloroethane	0.64	15		U
75-35-4	1,1-Dichloroethene	0.47	15		U
156-59-2	cis-1,2-Dichloroethene	0.40	15		U
156-60-5	trans-1,2-Dichloroethene	0.81	15		U
540-59-0	1,2-Dichloroethene (total)	0.81	15		U
78-87-5	1,2-Dichloropropane	0.84	15		U
10061-01-5	cis-1,3-Dichloropropene	0.52	15		U
10061-02-6	trans-1,3-Dichloropropene	0.55	15		U
100-41-4	Ethylbenzene	0.36	15		U
591-78-6	2-Hexanone	0.90	15		U
98-82-8	Isopropylbenzene	0.38	15		U
79-20-9	Methyl acetate	0.84	15		U
108-87-2	Methyl cyclohexane	0.58	15		U
75-09-2	Methylene chloride	1.6	15	9.5	JB
108-10-1	4-Methyl-2-pentanone	0.89	15		U
1634-04-4	Methyl tert-butyl ether	0.84	15		U
100-42-5	Styrene	0.50	15		U
79-34-5	1,1,2,2-Tetrachloroethane	0.47	15		U
127-18-4	Tetrachloroethene	0.31	15		U
108-88-3	Toluene	0.56	15		U
87-61-6	1,2,3-Trichlorobenzene	0.28	15		U
120-82-1	1,2,4-Trichlorobenzene	0.46	15		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03

Sample wt/vol: 4.8 (g/mL) G Lab File ID: 1003303A

Level: (low/med) LOW Date Sampled: 10/01/08 11:00

% Moisture: not dec. 30 Date Analyzed: 10/03/08 15:18

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.50	15		U
79-00-5-----	1,1,2-Trichloroethane	0.73	15		U
79-01-6-----	Trichloroethene	0.61	15		U
76-13-1-----	Trichlorotrifluoroethane	0.53	15		U
75-01-4-----	Vinyl chloride	0.70	15		U
1330-20-7----	Xylene(total)	0.31	15		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1001003A

Level: (low/med) LOW Date Sampled: 09/30/08 11:30

% Moisture: not dec. 13 Date Analyzed: 10/02/08 17:04

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	(ug/L or ug/Kg)	UG/KG	
		MDL	RL	CONC	Q

67-64-1-----Acetone	1.7	11	5.3	JB
71-43-2-----Benzene	0.21	11		U
74-97-5-----Bromochloromethane	0.38	11		U
75-27-4-----Bromodichloromethane	0.24	11		U
75-25-2-----Bromoform	0.64	11		U
74-83-9-----Bromomethane	0.45	11		U
78-93-3-----2-Butanone	2.1	11		U
75-15-0-----Carbon disulfide	0.29	11		U
56-23-5-----Carbon tetrachloride	0.26	11		U
108-90-7-----Chlorobenzene	2.7	11		U
75-00-3-----Chloroethane	0.44	11		U
67-66-3-----Chloroform	0.47	11		U
74-87-3-----Chloromethane	0.39	11		U
110-82-7-----Cyclohexane	0.46	11		U
124-48-1-----Dibromochloromethane	0.26	11		U
106-93-4-----1,2-Dibromoethane	0.61	11		U
75-34-3-----1,1-Dichloroethane	0.45	11		U
107-06-2-----1,2-Dichloroethane	0.47	11		U
75-35-4-----1,1-Dichloroethene	0.35	11		U
156-59-2-----cis-1,2-Dichloroethene	0.29	11		U
156-60-5-----trans-1,2-Dichloroethene	0.60	11		U
540-59-0-----1,2-Dichloroethene (total)	0.60	11		U
78-87-5-----1,2-Dichloropropane	0.62	11		U
10061-01-5----cis-1,3-Dichloropropene	0.38	11		U
10061-02-6----trans-1,3-Dichloropropene	0.40	11		U
100-41-4-----Ethylbenzene	0.26	11		U
591-78-6-----2-Hexanone	0.66	11		U
98-82-8-----Isopropylbenzene	0.28	11		U
79-20-9-----Methyl acetate	0.62	11		U
108-87-2-----Methyl cyclohexane	0.42	11		U
75-09-2-----Methylene chloride	1.2	11	6.1	JB
108-10-1-----4-Methyl-2-pentanone	0.65	11		U
1634-04-4----Methyl tert-butyl ether	0.62	11		U
100-42-5-----Styrene	0.37	11		U
79-34-5-----1,1,2,2-Tetrachloroethane	0.35	11		U
127-18-4-----Tetrachloroethene	0.23	11		U
108-88-3-----Toluene	0.41	11		U
87-61-6-----1,2,3-Trichlorobenzene	0.21	11		U
120-82-1-----1,2,4-Trichlorobenzene	0.34	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1001003A

Level: (low/med) LOW Date Sampled: 09/30/08 11:30

% Moisture: not dec. 13 Date Analyzed: 10/02/08 17:04

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.37	11		U
79-00-5-----	1,1,2-Trichloroethane	0.53	11		U
79-01-6-----	Trichloroethene	0.45	11		U
76-13-1-----	Trichlorotrifluoroethane	0.39	11		U
75-01-4-----	Vinyl chloride	0.51	11		U
1330-20-7-----	Xylene (total)	0.23	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001004A

Level: (low/med) LOW Date Sampled: 09/30/08 11:30

% Moisture: not dec. 13 Date Analyzed: 10/02/08 17:35

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

67-64-1-----	Acetone	1.6	10	3.7	JB
71-43-2-----	Benzene	0.19	10		U
74-97-5-----	Bromochloromethane	0.35	10		U
75-27-4-----	Bromodichloromethane	0.22	10		U
75-25-2-----	Bromoform	0.60	10		U
74-83-9-----	Bromomethane	0.41	10		U
78-93-3-----	2-Butanone	2.0	10		U
75-15-0-----	Carbon disulfide	0.27	10		U
56-23-5-----	Carbon tetrachloride	0.24	10		U
108-90-7-----	Chlorobenzene	2.5	10		U
75-00-3-----	Chloroethane	0.40	10		U
67-66-3-----	Chloroform	0.43	10		U
74-87-3-----	Chloromethane	0.36	10		U
110-82-7-----	Cyclohexane	0.42	10		U
124-48-1-----	Dibromochloromethane	0.24	10		U
106-93-4-----	1,2-Dibromoethane	0.56	10		U
75-34-3-----	1,1-Dichloroethane	0.41	10		U
107-06-2-----	1,2-Dichloroethane	0.43	10		U
75-35-4-----	1,1-Dichloroethene	0.32	10		U
156-59-2-----	cis-1,2-Dichloroethene	0.27	10		U
156-60-5-----	trans-1,2-Dichloroethene	0.56	10		U
540-59-0-----	1,2-Dichloroethene (total)	0.56	10		U
78-87-5-----	1,2-Dichloropropane	0.58	10		U
10061-01-5-----	cis-1,3-Dichloropropene	0.35	10		U
10061-02-6-----	trans-1,3-Dichloropropene	0.37	10		U
100-41-4-----	Ethylbenzene	0.24	10		U
591-78-6-----	2-Hexanone	0.62	10		U
98-82-8-----	Isopropylbenzene	0.26	10		U
79-20-9-----	Methyl acetate	0.58	10		U
108-87-2-----	Methyl cyclohexane	0.39	10		U
75-09-2-----	Methylene chloride	1.1	10	4.1	JB
108-10-1-----	4-Methyl-2-pentanone	0.61	10		U
1634-04-4-----	Methyl tert-butyl ether	0.58	10		U
100-42-5-----	Styrene	0.34	10		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.32	10		U
127-18-4-----	Tetrachloroethene	0.21	10		U
108-88-3-----	Toluene	0.38	10		U
87-61-6-----	1,2,3-Trichlorobenzene	0.19	10		U
120-82-1-----	1,2,4-Trichlorobenzene	0.31	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001004A

Level: (low/med) LOW Date Sampled: 09/30/08 11:30

% Moisture: not dec. 13 Date Analyzed: 10/02/08 17:35

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.34	10		U
79-00-5-----	1,1,2-Trichloroethane	0.50	10		U
79-01-6-----	Trichloroethene	0.41	10		U
76-13-1-----	Trichlorotrifluoroethane	0.36	10		U
75-01-4-----	Vinyl chloride	0.47	10		U
1330-20-7-----	Xylene (total)	0.21	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001005A

Level: (low/med) LOW Date Sampled: 09/30/08 11:40

% Moisture: not dec. 10 Date Analyzed: 10/02/08 18:05

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

67-64-1-----Acetone	1.6	9.9	2.5	JB
71-43-2-----Benzene	0.19	9.9		U
74-97-5-----Bromochloromethane	0.35	9.9		U
75-27-4-----Bromodichloromethane	0.22	9.9		U
75-25-2-----Bromoform	0.59	9.9		U
74-83-9-----Bromomethane	0.41	9.9		U
78-93-3-----2-Butanone	1.9	9.9		U
75-15-0-----Carbon disulfide	0.27	9.9		U
56-23-5-----Carbon tetrachloride	0.24	9.9		U
108-90-7-----Chlorobenzene	2.5	9.9		U
75-00-3-----Chloroethane	0.40	9.9		U
67-66-3-----Chloroform	0.43	9.9		U
74-87-3-----Chloromethane	0.36	9.9		U
110-82-7-----Cyclohexane	0.42	9.9		U
124-48-1-----Dibromochloromethane	0.24	9.9		U
106-93-4-----1,2-Dibromoethane	0.56	9.9		U
75-34-3-----1,1-Dichloroethane	0.41	9.9		U
107-06-2-----1,2-Dichloroethane	0.43	9.9		U
75-35-4-----1,1-Dichloroethene	0.32	9.9		U
156-59-2-----cis-1,2-Dichloroethene	0.27	9.9		U
156-60-5-----trans-1,2-Dichloroethene	0.55	9.9		U
540-59-0-----1,2-Dichloroethene (total)	0.55	9.9		U
78-87-5-----1,2-Dichloropropane	0.57	9.9		U
10061-01-5----cis-1,3-Dichloropropene	0.35	9.9		U
10061-02-6----trans-1,3-Dichloropropene	0.37	9.9		U
100-41-4-----Ethylbenzene	0.24	9.9		U
591-78-6-----2-Hexanone	0.61	9.9		U
98-82-8-----Isopropylbenzene	0.26	9.9		U
79-20-9-----Methyl acetate	0.57	9.9		U
108-87-2-----Methyl cyclohexane	0.39	9.9		U
75-09-2-----Methylene chloride	1.1	9.9	4.3	JB
108-10-1-----4-Methyl-2-pentanone	0.60	9.9	1.2	J
1634-04-4-----Methyl tert-butyl ether	0.57	9.9		U
100-42-5-----Styrene	0.34	9.9		U
79-34-5-----1,1,2,2-Tetrachloroethane	0.32	9.9		U
127-18-4-----Tetrachloroethene	0.21	9.9		U
108-88-3-----Toluene	0.38	9.9		U
87-61-6-----1,2,3-Trichlorobenzene	0.19	9.9		U
120-82-1-----1,2,4-Trichlorobenzene	0.31	9.9		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001005A

Level: (low/med) LOW Date Sampled: 09/30/08 11:40

% Moisture: not dec. 10 Date Analyzed: 10/02/08 18:05

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
71-55-6-----	1,1,1-Trichloroethane	0.34	9.9	U
79-00-5-----	1,1,2-Trichloroethane	0.49	9.9	U
79-01-6-----	Trichloroethene	0.41	9.9	U
76-13-1-----	Trichlorotrifluoroethane	0.36	9.9	U
75-01-4-----	Vinyl chloride	0.47	9.9	U
1330-20-7----	Xylene (total)	0.21	9.9	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01
 Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001001A
 Level: (low/med) LOW Date Sampled: 09/30/08 10:35
 % Moisture: not dec. 9 Date Analyzed: 10/02/08 16:03
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.5	9.8	6.0	JB
71-43-2	Benzene	0.19	9.8		U
74-97-5	Bromochloromethane	0.34	9.8		U
75-27-4	Bromodichloromethane	0.22	9.8		U
75-25-2	Bromoform	0.58	9.8		U
74-83-9	Bromomethane	0.40	9.8		U
78-93-3	2-Butanone	1.9	9.8		U
75-15-0	Carbon disulfide	0.26	9.8		U
56-23-5	Carbon tetrachloride	0.24	9.8		U
108-90-7	Chlorobenzene	2.4	9.8		U
75-00-3	Chloroethane	0.39	9.8		U
67-66-3	Chloroform	0.42	9.8		U
74-87-3	Chloromethane	0.35	9.8		U
110-82-7	Cyclohexane	0.41	9.8		U
124-48-1	Dibromochloromethane	0.24	9.8		U
106-93-4	1,2-Dibromoethane	0.55	9.8		U
75-34-3	1,1-Dichloroethane	0.40	9.8		U
107-06-2	1,2-Dichloroethane	0.42	9.8		U
75-35-4	1,1-Dichloroethene	0.31	9.8		U
156-59-2	cis-1,2-Dichloroethene	0.26	9.8		U
156-60-5	trans-1,2-Dichloroethene	0.54	9.8		U
540-59-0	1,2-Dichloroethene (total)	0.54	9.8		U
78-87-5	1,2-Dichloropropane	0.56	9.8		U
10061-01-5	cis-1,3-Dichloropropene	0.34	9.8		U
10061-02-6	trans-1,3-Dichloropropene	0.36	9.8		U
100-41-4	Ethylbenzene	0.24	9.8		U
591-78-6	2-Hexanone	0.60	9.8		U
98-82-8	Isopropylbenzene	0.26	9.8		U
79-20-9	Methyl acetate	0.56	9.8		U
108-87-2	Methyl cyclohexane	0.38	9.8		U
75-09-2	Methylene chloride	1.1	9.8	6.2	JB
108-10-1	4-Methyl-2-pentanone	0.59	9.8		U
1634-04-4	Methyl tert-butyl ether	0.56	9.8		U
100-42-5	Styrene	0.33	9.8		U
79-34-5	1,1,2,2-Tetrachloroethane	0.31	9.8		U
127-18-4	Tetrachloroethene	0.21	9.8		U
108-88-3	Toluene	0.37	9.8		U
87-61-6	1,2,3-Trichlorobenzene	0.19	9.8		U
120-82-1	1,2,4-Trichlorobenzene	0.30	9.8		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001001A

Level: (low/med) LOW Date Sampled: 09/30/08 10:35

% Moisture: not dec. 9 Date Analyzed: 10/02/08 16:03

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.33	9.8		U
79-00-5-----	1,1,2-Trichloroethane	0.48	9.8		U
79-01-6-----	Trichloroethene	0.40	9.8		U
76-13-1-----	Trichlorotrifluoroethane	0.35	9.8		U
75-01-4-----	Vinyl chloride	0.46	9.8		U
1330-20-7-----	Xylene (total)	0.21	9.8		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1001006A

Level: (low/med) LOW Date Sampled: 09/30/08 14:20

% Moisture: not dec. 18 Date Analyzed: 10/02/08 18:36

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.7	11	8.2	JB
71-43-2	Benzene	0.21	11		U
74-97-5	Bromochloromethane	0.39	11		U
75-27-4	Bromodichloromethane	0.24	11		U
75-25-2	Bromoform	0.65	11		U
74-83-9	Bromomethane	0.45	11		U
78-93-3	2-Butanone	2.2	11		U
75-15-0	Carbon disulfide	0.30	11		U
56-23-5	Carbon tetrachloride	0.26	11		U
108-90-7	Chlorobenzene	2.8	11		U
75-00-3	Chloroethane	0.44	11		U
67-66-3	Chloroform	0.48	11		U
74-87-3	Chloromethane	0.40	11		U
110-82-7	Cyclohexane	0.46	11		U
124-48-1	Dibromochloromethane	0.26	11		U
106-93-4	1,2-Dibromoethane	0.62	11		U
75-34-3	1,1-Dichloroethane	0.45	11		U
107-06-2	1,2-Dichloroethane	0.48	11		U
75-35-4	1,1-Dichloroethene	0.35	11		U
156-59-2	cis-1,2-Dichloroethene	0.30	11		U
156-60-5	trans-1,2-Dichloroethene	0.61	11		U
540-59-0	1,2-Dichloroethene (total)	0.61	11		U
78-87-5	1,2-Dichloropropane	0.63	11		U
10061-01-5	cis-1,3-Dichloropropene	0.39	11		U
10061-02-6	trans-1,3-Dichloropropene	0.41	11		U
100-41-4	Ethylbenzene	0.26	11		U
591-78-6	2-Hexanone	0.68	11		U
98-82-8	Isopropylbenzene	0.29	11		U
79-20-9	Methyl acetate	0.63	11		U
108-87-2	Methyl cyclohexane	0.43	11		U
75-09-2	Methylene chloride	1.2	11	6.0	JB
108-10-1	4-Methyl-2-pentanone	0.66	11		U
1634-04-4	Methyl tert-butyl ether	0.63	11		U
100-42-5	Styrene	0.38	11		U
79-34-5	1,1,2,2-Tetrachloroethane	0.35	11		U
127-18-4	Tetrachloroethene	0.23	11		U
108-88-3	Toluene	0.42	11		U
87-61-6	1,2,3-Trichlorobenzene	0.21	11		U
120-82-1	1,2,4-Trichlorobenzene	0.34	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1001006A

Level: (low/med) LOW Date Sampled: 09/30/08 14:20

% Moisture: not dec. 18 Date Analyzed: 10/02/08 18:36

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.38	11		U
79-00-5-----	1,1,2-Trichloroethane	0.54	11		U
79-01-6-----	Trichloroethene	0.45	11		U
76-13-1-----	Trichlorotrifluoroethane	0.40	11		U
75-01-4-----	Vinyl chloride	0.52	11		U
1330-20-7-----	Xylene (total)	0.23	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1001007A

Level: (low/med) LOW Date Sampled: 09/30/08 14:55

% Moisture: not dec. 11 Date Analyzed: 10/02/08 19:06

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	ug/Kg) CONC	
67-64-1	Acetone	1.6	10		U
71-43-2	Benzene	0.20	10		U
74-97-5	Bromochloromethane	0.37	10		U
75-27-4	Bromodichloromethane	0.23	10		U
75-25-2	Bromoform	0.62	10		U
74-83-9	Bromomethane	0.43	10		U
78-93-3	2-Butanone	2.1	10		U
75-15-0	Carbon disulfide	0.28	10		U
56-23-5	Carbon tetrachloride	0.25	10		U
108-90-7	Chlorobenzene	2.6	10		U
75-00-3	Chloroethane	0.42	10		U
67-66-3	Chloroform	0.45	10		U
74-87-3	Chloromethane	0.38	10		U
110-82-7	Cyclohexane	0.44	10		U
124-48-1	Dibromochloromethane	0.25	10		U
106-93-4	1,2-Dibromoethane	0.59	10		U
75-34-3	1,1-Dichloroethane	0.43	10		U
107-06-2	1,2-Dichloroethane	0.45	10		U
75-35-4	1,1-Dichloroethene	0.34	10		U
156-59-2	cis-1,2-Dichloroethene	0.28	10		U
156-60-5	trans-1,2-Dichloroethene	0.58	10		U
540-59-0	1,2-Dichloroethene (total)	0.58	10		U
78-87-5	1,2-Dichloropropane	0.60	10		U
10061-01-5	cis-1,3-Dichloropropene	0.37	10		U
10061-02-6	trans-1,3-Dichloropropene	0.39	10		U
100-41-4	Ethylbenzene	0.25	10		U
591-78-6	2-Hexanone	0.64	10		U
98-82-8	Isopropylbenzene	0.27	10		U
79-20-9	Methyl acetate	0.60	10		U
108-87-2	Methyl cyclohexane	0.41	10		U
75-09-2	Methylene chloride	1.1	10	7.3	JB
108-10-1	4-Methyl-2-pentanone	0.63	10		U
1634-04-4	Methyl tert-butyl ether	0.60	10		U
100-42-5	Styrene	0.36	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.34	10		U
127-18-4	Tetrachloroethene	0.22	10		U
108-88-3	Toluene	0.40	10		U
87-61-6	1,2,3-Trichlorobenzene	0.20	10		U
120-82-1	1,2,4-Trichlorobenzene	0.33	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 5.3 (g/mL) G Lab File ID: 1001007A

Level: (low/med) LOW Date Sampled: 09/30/08 14:55

% Moisture: not dec. 11 Date Analyzed: 10/02/08 19:06

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.36	10		U
79-00-5-----	1,1,2-Trichloroethane	0.52	10		U
79-01-6-----	Trichloroethene	0.43	10		U
76-13-1-----	Trichlorotrifluoroethane	0.38	10		U
75-01-4-----	Vinyl chloride	0.50	10		U
1330-20-7----	Xylene (total)	0.22	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001008A

Level: (low/med) LOW Date Sampled: 09/30/08 15:20

% Moisture: not dec. 7 Date Analyzed: 10/02/08 19:37

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG	Q
		MDL	(ug/L or ug/Kg) RL CONC		
67-64-1	Acetone	1.5	9.5	3.7	JB
71-43-2	Benzene	0.18	9.5		U
74-97-5	Bromochloromethane	0.33	9.5		U
75-27-4	Bromodichloromethane	0.21	9.5		U
75-25-2	Bromoform	0.56	9.5		U
74-83-9	Bromomethane	0.39	9.5		U
78-93-3	2-Butanone	1.8	9.5		U
75-15-0	Carbon disulfide	0.26	9.5		U
56-23-5	Carbon tetrachloride	0.23	9.5		U
108-90-7	Chlorobenzene	2.4	9.5		U
75-00-3	Chloroethane	0.38	9.5		U
67-66-3	Chloroform	0.41	9.5		U
74-87-3	Chloromethane	0.34	9.5		U
110-82-7	Cyclohexane	0.40	9.5		U
124-48-1	Dibromochloromethane	0.23	9.5		U
106-93-4	1,2-Dibromoethane	0.53	9.5		U
75-34-3	1,1-Dichloroethane	0.39	9.5		U
107-06-2	1,2-Dichloroethane	0.41	9.5		U
75-35-4	1,1-Dichloroethene	0.30	9.5		U
156-59-2	cis-1,2-Dichloroethene	0.26	9.5		U
156-60-5	trans-1,2-Dichloroethene	0.52	9.5		U
540-59-0	1,2-Dichloroethene (total)	0.52	9.5		U
78-87-5	1,2-Dichloropropane	0.54	9.5		U
10061-01-5	cis-1,3-Dichloropropene	0.33	9.5		U
10061-02-6	trans-1,3-Dichloropropene	0.35	9.5		U
100-41-4	Ethylbenzene	0.23	9.5		U
591-78-6	2-Hexanone	0.58	9.5		U
98-82-8	Isopropylbenzene	0.25	9.5		U
79-20-9	Methyl acetate	0.54	9.5		U
108-87-2	Methyl cyclohexane	0.37	9.5		U
75-09-2	Methylene chloride	1.0	9.5	5.4	JB
108-10-1	4-Methyl-2-pentanone	0.57	9.5	0.72	J
1634-04-4	Methyl tert-butyl ether	0.54	9.5		U
100-42-5	Styrene	0.32	9.5		U
79-34-5	1,1,2,2-Tetrachloroethane	0.30	9.5		U
127-18-4	Tetrachloroethene	0.20	9.5	0.28	J
108-88-3	Toluene	0.36	9.5		U
87-61-6	1,2,3-Trichlorobenzene	0.18	9.5		U
120-82-1	1,2,4-Trichlorobenzene	0.29	9.5		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001008A

Level: (low/med) LOW Date Sampled: 09/30/08 15:20

% Moisture: not dec. 7 Date Analyzed: 10/02/08 19:37

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.32	9.5		U
79-00-5-----	1,1,2-Trichloroethane	0.46	9.5		U
79-01-6-----	Trichloroethene	0.39	9.5		U
76-13-1-----	Trichlorotrifluoroethane	0.34	9.5		U
75-01-4-----	Vinyl chloride	0.44	9.5		U
1330-20-7-----	Xylene (total)	0.20	9.5		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1001009A

Level: (low/med) LOW Date Sampled: 09/30/08 15:40

% Moisture: not dec. 13 Date Analyzed: 10/02/08 20:07

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.6	10	3.8	JB
71-43-2	Benzene	0.20	10		U
74-97-5	Bromochloromethane	0.36	10		U
75-27-4	Bromodichloromethane	0.23	10		U
75-25-2	Bromoform	0.62	10		U
74-83-9	Bromomethane	0.43	10		U
78-93-3	2-Butanone	2.0	10		U
75-15-0	Carbon disulfide	0.28	10		U
56-23-5	Carbon tetrachloride	0.25	10		U
108-90-7	Chlorobenzene	2.6	10		U
75-00-3	Chloroethane	0.42	10		U
67-66-3	Chloroform	0.45	10		U
74-87-3	Chloromethane	0.38	10		U
110-82-7	Cyclohexane	0.44	10		U
124-48-1	Dibromochloromethane	0.25	10		U
106-93-4	1,2-Dibromoethane	0.58	10		U
75-34-3	1,1-Dichloroethane	0.43	10		U
107-06-2	1,2-Dichloroethane	0.45	10		U
75-35-4	1,1-Dichloroethene	0.33	10		U
156-59-2	cis-1,2-Dichloroethene	0.28	10		U
156-60-5	trans-1,2-Dichloroethene	0.57	10		U
540-59-0	1,2-Dichloroethene (total)	0.57	10		U
78-87-5	1,2-Dichloropropane	0.59	10		U
10061-01-5	cis-1,3-Dichloropropene	0.36	10		U
10061-02-6	trans-1,3-Dichloropropene	0.38	10		U
100-41-4	Ethylbenzene	0.25	10		U
591-78-6	2-Hexanone	0.64	10		U
98-82-8	Isopropylbenzene	0.27	10		U
79-20-9	Methyl acetate	0.59	10		U
108-87-2	Methyl cyclohexane	0.41	10		U
75-09-2	Methylene chloride	1.1	10	5.2	JB
108-10-1	4-Methyl-2-pentanone	0.62	10	0.71	J
1634-04-4	Methyl tert-butyl ether	0.59	10		U
100-42-5	Styrene	0.35	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.33	10		U
127-18-4	Tetrachloroethene	0.22	10		U
108-88-3	Toluene	0.40	10		U
87-61-6	1,2,3-Trichlorobenzene	0.20	10		U
120-82-1	1,2,4-Trichlorobenzene	0.32	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 1001009A

Level: (low/med) LOW Date Sampled: 09/30/08 15:40

% Moisture: not dec. 13 Date Analyzed: 10/02/08 20:07

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane _____	0.35	10		U
79-00-5-----	1,1,2-Trichloroethane _____	0.51	10		U
79-01-6-----	Trichloroethene _____	0.43	10		U
76-13-1-----	Trichlorotrifluoroethane _____	0.38	10		U
75-01-4-----	Vinyl chloride _____	0.49	10		U
1330-20-7-----	Xylene(total) _____	0.22	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 1001010B

Level: (low/med) LOW Date Sampled: 09/30/08 16:00

% Moisture: not dec. 9 Date Analyzed: 10/03/08 13:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.6	10	2.7	JB
71-43-2	Benzene	0.19	10		U
74-97-5	Bromochloromethane	0.36	10		U
75-27-4	Bromodichloromethane	0.22	10		U
75-25-2	Bromoform	0.60	10		U
74-83-9	Bromomethane	0.42	10		U
78-93-3	2-Butanone	2.0	10		U
75-15-0	Carbon disulfide	0.28	10		U
56-23-5	Carbon tetrachloride	0.24	10		U
108-90-7	Chlorobenzene	2.6	10		U
75-00-3	Chloroethane	0.41	10		U
67-66-3	Chloroform	0.44	10		U
74-87-3	Chloromethane	0.37	10		U
110-82-7	Cyclohexane	0.43	10		U
124-48-1	Dibromochloromethane	0.24	10		U
106-93-4	1,2-Dibromoethane	0.57	10		U
75-34-3	1,1-Dichloroethane	0.42	10		U
107-06-2	1,2-Dichloroethane	0.44	10		U
75-35-4	1,1-Dichloroethene	0.33	10		U
156-59-2	cis-1,2-Dichloroethene	0.28	10		U
156-60-5	trans-1,2-Dichloroethene	0.56	10		U
540-59-0	1,2-Dichloroethene (total)	0.56	10		U
78-87-5	1,2-Dichloropropane	0.58	10		U
10061-01-5	cis-1,3-Dichloropropene	0.36	10		U
10061-02-6	trans-1,3-Dichloropropene	0.38	10		U
100-41-4	Ethylbenzene	0.24	10		U
591-78-6	2-Hexanone	0.62	10		U
98-82-8	Isopropylbenzene	0.26	10		U
79-20-9	Methyl acetate	0.58	10		U
108-87-2	Methyl cyclohexane	0.40	10		U
75-09-2	Methylene chloride	1.1	10	6.9	JB
108-10-1	4-Methyl-2-pentanone	0.61	10		U
1634-04-4	Methyl tert-butyl ether	0.58	10		U
100-42-5	Styrene	0.35	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.33	10		U
127-18-4	Tetrachloroethene	0.21	10		U
108-88-3	Toluene	0.39	10		U
87-61-6	1,2,3-Trichlorobenzene	0.19	10		U
120-82-1	1,2,4-Trichlorobenzene	0.32	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 1001010B

Level: (low/med) LOW Date Sampled: 09/30/08 16:00

% Moisture: not dec. 9 Date Analyzed: 10/03/08 13:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG
		MDL	RL CONC		Q
71-55-6-----	1,1,1-Trichloroethane	0.35	10	U
79-00-5-----	1,1,2-Trichloroethane	0.50	10	U
79-01-6-----	Trichloroethene	0.42	10	U
76-13-1-----	Trichlorotrifluoroethane	0.37	10	U
75-01-4-----	Vinyl chloride	0.48	10	U
1330-20-7-----	Xylene (total)	0.21	10	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001011A

Level: (low/med) LOW Date Sampled: 09/30/08 16:00

% Moisture: not dec. 17 Date Analyzed: 10/02/08 21:09

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.7	11		U
71-43-2-----	Benzene	0.20	11		U
74-97-5-----	Bromochloromethane	0.38	11		U
75-27-4-----	Bromodichloromethane	0.24	11		U
75-25-2-----	Bromoform	0.64	11		U
74-83-9-----	Bromomethane	0.44	11		U
78-93-3-----	2-Butanone	2.1	11		U
75-15-0-----	Carbon disulfide	0.29	11		U
56-23-5-----	Carbon tetrachloride	0.26	11		U
108-90-7-----	Chlorobenzene	2.7	11		U
75-00-3-----	Chloroethane	0.43	11		U
67-66-3-----	Chloroform	0.46	11		U
74-87-3-----	Chloromethane	0.39	11		U
110-82-7-----	Cyclohexane	0.45	11		U
124-48-1-----	Dibromochloromethane	0.26	11		U
106-93-4-----	1,2-Dibromoethane	0.60	11		U
75-34-3-----	1,1-Dichloroethane	0.44	11		U
107-06-2-----	1,2-Dichloroethane	0.46	11		U
75-35-4-----	1,1-Dichloroethene	0.34	11		U
156-59-2-----	cis-1,2-Dichloroethene	0.29	11		U
156-60-5-----	trans-1,2-Dichloroethene	0.59	11		U
540-59-0-----	1,2-Dichloroethene (total)	0.59	11		U
78-87-5-----	1,2-Dichloropropane	0.61	11		U
10061-01-5----	cis-1,3-Dichloropropene	0.38	11		U
10061-02-6----	trans-1,3-Dichloropropene	0.40	11		U
100-41-4-----	Ethylbenzene	0.26	11		U
591-78-6-----	2-Hexanone	0.66	11		U
98-82-8-----	Isopropylbenzene	0.28	11		U
79-20-9-----	Methyl acetate	0.61	11		U
108-87-2-----	Methyl cyclohexane	0.42	11		U
75-09-2-----	Methylene chloride	1.2	11	6.5	JB
108-10-1-----	4-Methyl-2-pentanone	0.65	11		U
1634-04-4-----	Methyl tert-butyl ether	0.61	11		U
100-42-5-----	Styrene	0.37	11		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.34	11		U
127-18-4-----	Tetrachloroethene	0.23	11		U
108-88-3-----	Toluene	0.41	11		U
87-61-6-----	1,2,3-Trichlorobenzene	0.20	11		U
120-82-1-----	1,2,4-Trichlorobenzene	0.33	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 1001011A

Level: (low/med) LOW Date Sampled: 09/30/08 16:00

% Moisture: not dec. 17 Date Analyzed: 10/02/08 21:09

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.37	11		U
79-00-5-----	1,1,2-Trichloroethane	0.53	11		U
79-01-6-----	Trichloroethene	0.44	11		U
76-13-1-----	Trichlorotrifluoroethane	0.39	11		U
75-01-4-----	Vinyl chloride	0.51	11		U
1330-20-7----	Xylene (total)	0.23	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001002A

Level: (low/med) LOW Date Sampled: 09/30/08 11:05

% Moisture: not dec. 9 Date Analyzed: 10/02/08 16:33

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.5	9.7	5.2	JB
71-43-2-----	Benzene	0.18	9.7		U
74-97-5-----	Bromochloromethane	0.34	9.7		U
75-27-4-----	Bromodichloromethane	0.21	9.7		U
75-25-2-----	Bromoform	0.57	9.7		U
74-83-9-----	Bromomethane	0.40	9.7		U
78-93-3-----	2-Butanone	1.9	9.7		U
75-15-0-----	Carbon disulfide	0.26	9.7		U
56-23-5-----	Carbon tetrachloride	0.23	9.7		U
108-90-7-----	Chlorobenzene	2.4	9.7		U
75-00-3-----	Chloroethane	0.39	9.7		U
67-66-3-----	Chloroform	0.42	9.7		U
74-87-3-----	Chloromethane	0.35	9.7		U
110-82-7-----	Cyclohexane	0.41	9.7		U
124-48-1-----	Dibromochloromethane	0.23	9.7		U
106-93-4-----	1,2-Dibromoethane	0.54	9.7		U
75-34-3-----	1,1-Dichloroethane	0.40	9.7		U
107-06-2-----	1,2-Dichloroethane	0.42	9.7		U
75-35-4-----	1,1-Dichloroethene	0.31	9.7		U
156-59-2-----	cis-1,2-Dichloroethene	0.26	9.7		U
156-60-5-----	trans-1,2-Dichloroethene	0.53	9.7		U
540-59-0-----	1,2-Dichloroethene (total)	0.53	9.7		U
78-87-5-----	1,2-Dichloropropane	0.55	9.7		U
10061-01-5----	cis-1,3-Dichloropropene	0.34	9.7		U
10061-02-6----	trans-1,3-Dichloropropene	0.36	9.7		U
100-41-4-----	Ethylbenzene	0.23	9.7		U
591-78-6-----	2-Hexanone	0.59	9.7		U
98-82-8-----	Isopropylbenzene	0.25	9.7		U
79-20-9-----	Methyl acetate	0.55	9.7		U
108-87-2-----	Methyl cyclohexane	0.38	9.7		U
75-09-2-----	Methylene chloride	1.0	9.7	4.0	JB
108-10-1-----	4-Methyl-2-pentanone	0.58	9.7	0.90	J
1634-04-4----	Methyl tert-butyl ether	0.55	9.7		U
100-42-5-----	Styrene	0.33	9.7		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.31	9.7		U
127-18-4-----	Tetrachloroethene	0.20	9.7	0.22	J
108-88-3-----	Toluene	0.37	9.7		U
87-61-6-----	1,2,3-Trichlorobenzene	0.18	9.7		U
120-82-1-----	1,2,4-Trichlorobenzene	0.30	9.7		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 1001002A

Level: (low/med) LOW Date Sampled: 09/30/08 11:05

% Moisture: not dec. 9 Date Analyzed: 10/02/08 16:33

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.33	9.7		U
79-00-5-----	1,1,2-Trichloroethane	0.47	9.7		U
79-01-6-----	Trichloroethene	0.40	9.7		U
76-13-1-----	Trichlorotrifluoroethane	0.35	9.7		U
75-01-4-----	Vinyl chloride	0.46	9.7		U
1330-20-7-----	Xylene (total)	0.20	9.7		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003301
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 10/01/08 10:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:10/07/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 19:10
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9	Acenaphthene	29	360	U
208-96-8	Acenaphthylene	21	360	U
98-86-2	Acetophenone	45	360	U
120-12-7	Anthracene	30	360	U
1912-24-9	Atrazine	31	360	U
100-52-7	Benzaldehyde	61	360	U
56-55-3	Benzo (a) anthracene	40	360	U
205-99-2	Benzo (b) fluoranthene	34	360	U
207-08-9	Benzo (k) fluoranthene	43	360	U
191-24-2	Benzo (g,h,i) perylene	77	360	U
50-32-8	Benzo (a) pyrene	25	360	U
111-91-1	bis (2-Chloroethoxy) methane	34	360	U
92-52-4	1,1'-Biphenyl	32	360	U
111-44-4	bis (2-Chloroethyl) ether	45	360	U
108-60-1	bis (2-Chloroisopropyl) ether	56	360	U
117-81-7	Bis (2-ethylhexyl) phthalate	40	360	49 JB
101-55-3	4-Bromophenyl-phenylether	28	360	U
85-68-7	Butylbenzylphthalate	32	360	U
86-74-8	Carbazole	40	360	U
106-47-8	4-Chloroaniline	52	360	U
105-60-2	Caprolactam	74	360	U
59-50-7	4-Chloro-3-methylphenol	30	360	U
91-58-7	2-Chloronaphthalene	35	360	U
95-57-8	2-Chlorophenol	45	360	U
7005-72-3	4-Chlorophenyl-phenylether	34	360	U
218-01-9	Chrysene	34	360	U
53-70-3	Dibenz (a,h) anthracene	66	360	U
132-64-9	Dibenzofuran	27	360	U
91-94-1	3,3'-Dichlorobenzidine	34	360	U
120-83-2	2,4-Dichlorophenol	21	360	U
84-66-2	Diethylphthalate	37	360	U
105-67-9	2,4-Dimethylphenol	23	360	U
131-11-3	Dimethylphthalate	33	360	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003301
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 10/01/08 10:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 19:10
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
84-74-2	Di-n-butylphthalate	33	360	U
534-52-1	4,6-Dinitro-2-methylphenol	24	910	U
51-28-5	2,4-Dinitrophenol	150	910	U
121-14-2	2,4-Dinitrotoluene	26	360	U
606-20-2	2,6-Dinitrotoluene	42	360	U
117-84-0	Di-n-octylphthalate	30	360	U
206-44-0	Fluoranthene	59	360	U
86-73-7	Fluorene	29	360	U
118-74-1	Hexachlorobenzene	38	360	U
87-68-3	Hexachlorobutadiene	36	360	U
77-47-4	Hexachlorocyclopentadiene	67	360	U
67-72-1	Hexachloroethane	43	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	50	360	U
78-59-1	Isophorone	31	360	U
91-57-6	2-Methylnaphthalene	38	360	U
95-48-7	2-Methylphenol	42	360	U
106-44-5	4-Methylphenol	29	360	U
91-20-3	Naphthalene	36	360	U
88-74-4	2-Nitroaniline	35	360	U
99-09-2	3-Nitroaniline	52	910	U
100-01-6	4-Nitroaniline	110	910	U
98-95-3	Nitrobenzene	38	360	U
88-75-5	2-Nitrophenol	24	360	U
100-02-7	4-Nitrophenol	89	910	U
86-30-6	N-Nitrosodiphenylamine (1)	35	360	U
621-64-7	N-Nitroso-di-n-propylamine	60	360	U
87-86-5	Pentachlorophenol	37	910	U
85-01-8	Phenanthrene	25	360	U
108-95-2	Phenol	40	360	U
129-00-0	Pyrene	44	360	U
95-94-3	1,2,4,5-Tetrachlorobenzene	110	360	U
95-95-4	2,4,5-Trichlorophenol	29	910	U
88-06-2	2,4,6-Trichlorophenol	38	360	U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003302
 % Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 19:46
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
 MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	33	420			U
208-96-8	Acenaphthylene	24	420			U
98-86-2	Acetophenone	51	420			U
120-12-7	Anthracene	34	420			U
1912-24-9	Atrazine	35	420			U
100-52-7	Benzaldehyde	69	420			U
56-55-3	Benzo (a) anthracene	45	420			U
205-99-2	Benzo (b) fluoranthene	39	420			U
207-08-9	Benzo (k) fluoranthene	49	420			U
191-24-2	Benzo (g, h, i) perylene	88	420			U
50-32-8	Benzo (a) pyrene	28	420			U
111-91-1	bis (2-Chloroethoxy) methane	39	420			U
92-52-4	1, 1' -Biphenyl	37	420			U
111-44-4	bis (2-Chloroethyl) ether	51	420			U
108-60-1	bis (2-Chloroisopropyl) ether	64	420			U
117-81-7	Bis (2-ethylhexyl) phthalate	45	420		58	JB
101-55-3	4-Bromophenyl-phenylether	32	420			U
85-68-7	Butylbenzylphthalate	37	420			U
86-74-8	Carbazole	45	420			U
106-47-8	4-Chloroaniline	60	420			U
105-60-2	Caprolactam	84	420			U
59-50-7	4-Chloro-3-methylphenol	35	420			U
91-58-7	2-Chloronaphthalene	40	420			U
95-57-8	2-Chlorophenol	51	420			U
7005-72-3	4-Chlorophenyl-phenylether	38	420			U
218-01-9	Chrysene	39	420			U
53-70-3	Dibenz (a, h) anthracene	75	420			U
132-64-9	Dibenzofuran	30	420			U
91-94-1	3, 3' -Dichlorobenzidine	39	420			U
120-83-2	2, 4-Dichlorophenol	24	420			U
84-66-2	Diethylphthalate	42	420			U
105-67-9	2, 4-Dimethylphenol	27	420			U
131-11-3	Dimethylphthalate	38	420			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003302

% Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:10/07/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 19:46

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

84-74-2-----	Di-n-butylphthalate	38	420		U
534-52-1-----	4,6-Dinitro-2-methylphenol	27	1000		U
51-28-5-----	2,4-Dinitrophenol	170	1000		U
121-14-2-----	2,4-Dinitrotoluene	30	420		U
606-20-2-----	2,6-Dinitrotoluene	47	420		U
117-84-0-----	Di-n-octylphthalate	34	420		U
206-44-0-----	Fluoranthene	67	420		U
86-73-7-----	Fluorene	33	420		U
118-74-1-----	Hexachlorobenzene	43	420		U
87-68-3-----	Hexachlorobutadiene	41	420		U
77-47-4-----	Hexachlorocyclopentadiene	76	420		U
67-72-1-----	Hexachloroethane	49	420		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	58	420		U
78-59-1-----	Isophorone	35	420		U
91-57-6-----	2-Methylnaphthalene	44	420		U
95-48-7-----	2-Methylphenol	48	420		U
106-44-5-----	4-Methylphenol	33	420		U
91-20-3-----	Naphthalene	40	420		U
88-74-4-----	2-Nitroaniline	40	420		U
99-09-2-----	3-Nitroaniline	59	1000		U
100-01-6-----	4-Nitroaniline	120	1000		U
98-95-3-----	Nitrobenzene	43	420		U
88-75-5-----	2-Nitrophenol	28	420		U
100-02-7-----	4-Nitrophenol	100	1000		U
86-30-6-----	N-Nitrosodiphenylamine (1)	40	420		U
621-64-7-----	N-Nitroso-di-n-propylamine	68	420		U
87-86-5-----	Pentachlorophenol	42	1000		U
85-01-8-----	Phenanthrene	28	420		U
108-95-2-----	Phenol	45	420		U
129-00-0-----	Pyrene	50	420		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	420		U
95-95-4-----	2,4,5-Trichlorophenol	33	1000		U
88-06-2-----	2,4,6-Trichlorophenol	44	420		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003303

% Moisture: 30 decanted: (Y/N) N Date Sampled: 10/01/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 20:23

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	38	470			U
208-96-8	Acenaphthylene	28	470			U
98-86-2	Acetophenone	58	470			U
120-12-7	Anthracene	39	470			U
1912-24-9	Atrazine	40	470			U
100-52-7	Benzaldehyde	79	470			U
56-55-3	Benzo(a)anthracene	52	470			U
205-99-2	Benzo(b)fluoranthene	45	470			U
207-08-9	Benzo(k)fluoranthene	56	470			U
191-24-2	Benzo(g,h,i)perylene	100	470			U
50-32-8	Benzo(a)pyrene	32	470			U
111-91-1	bis(2-Chloroethoxy)methane	44	470			U
92-52-4	1,1'-Biphenyl	42	470			U
111-44-4	bis(2-Chloroethyl)ether	58	470			U
108-60-1	bis(2-Chloroisopropyl)ether	73	470			U
117-81-7	Bis(2-ethylhexyl)phthalate	51	470		71	JB
101-55-3	4-Bromophenyl-phenylether	37	470			U
85-68-7	Butylbenzylphthalate	42	470			U
86-74-8	Carbazole	51	470			U
106-47-8	4-Chloroaniline	68	470			U
105-60-2	Caprolactam	96	470			U
59-50-7	4-Chloro-3-methylphenol	40	470			U
91-58-7	2-Chloronaphthalene	46	470			U
95-57-8	2-Chlorophenol	58	470			U
7005-72-3	4-Chlorophenyl-phenylether	44	470			U
218-01-9	Chrysene	44	470			U
53-70-3	Dibenz(a,h)anthracene	86	470			U
132-64-9	Dibenzofuran	35	470			U
91-94-1	3,3'-Dichlorobenzidine	45	470			U
120-83-2	2,4-Dichlorophenol	27	470			U
84-66-2	Diethylphthalate	48	470			U
105-67-9	2,4-Dimethylphenol	30	470			U
131-11-3	Dimethylphthalate	43	470			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1003303

% Moisture: 30 decanted: (Y/N) N Date Sampled: 10/01/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 20:23

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC		
84-74-2-----	Di-n-butylphthalate	43	470		U
534-52-1-----	4,6-Dinitro-2-methylphenol	31	1200		U
51-28-5-----	2,4-Dinitrophenol	190	1200		U
121-14-2-----	2,4-Dinitrotoluene	34	470		U
606-20-2-----	2,6-Dinitrotoluene	54	470		U
117-84-0-----	Di-n-octylphthalate	38	470		U
206-44-0-----	Fluoranthene	76	470		U
86-73-7-----	Fluorene	37	470		U
118-74-1-----	Hexachlorobenzene	49	470		U
87-68-3-----	Hexachlorobutadiene	47	470		U
77-47-4-----	Hexachlorocyclopentadiene	87	470		U
67-72-1-----	Hexachloroethane	56	470		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	66	470		U
78-59-1-----	Isophorone	40	470		U
91-57-6-----	2-Methylnaphthalene	50	470		U
95-48-7-----	2-Methylphenol	55	470		U
106-44-5-----	4-Methylphenol	38	470		U
91-20-3-----	Naphthalene	46	470		U
88-74-4-----	2-Nitroaniline	46	470		U
99-09-2-----	3-Nitroaniline	67	1200		U
100-01-6-----	4-Nitroaniline	140	1200		U
98-95-3-----	Nitrobenzene	49	470		U
88-75-5-----	2-Nitrophenol	31	470		U
100-02-7-----	4-Nitrophenol	120	1200		U
86-30-6-----	N-Nitrosodiphenylamine (1)	45	470		U
621-64-7-----	N-Nitroso-di-n-propylamine	78	470		U
87-86-5-----	Pentachlorophenol	48	1200		U
85-01-8-----	Phenanthrene	32	470		U
108-95-2-----	Phenol	51	470		U
129-00-0-----	Pyrene	56	470		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	140	470		U
95-95-4-----	2,4,5-Trichlorophenol	38	1200		U
88-06-2-----	2,4,6-Trichlorophenol	50	470		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001003

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 13:25

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	30	380			U
208-96-8	Acenaphthylene	23	380			U
98-86-2	Acetophenone	47	380			U
120-12-7	Anthracene	31	380			U
1912-24-9	Atrazine	33	380			U
100-52-7	Benzaldehyde	64	380			U
56-55-3	Benzo (a) anthracene	42	380			U
205-99-2	Benzo (b) fluoranthene	36	380			U
207-08-9	Benzo (k) fluoranthene	45	380			U
191-24-2	Benzo (g, h, i) perylene	82	380			U
50-32-8	Benzo (a) pyrene	26	380			U
111-91-1	bis (2-Chloroethoxy) methane	36	380			U
92-52-4	1,1'-Biphenyl	34	380			U
111-44-4	bis (2-Chloroethyl) ether	47	380			U
108-60-1	bis (2-Chloroisopropyl) ether	59	380			U
117-81-7	Bis (2-ethylhexyl) phthalate	42	380		53	JB
101-55-3	4-Bromophenyl-phenylether	30	380			U
85-68-7	Butylbenzylphthalate	34	380			U
86-74-8	Carbazole	42	380			U
106-47-8	4-Chloroaniline	55	380			U
105-60-2	Caprolactam	78	380			U
59-50-7	4-Chloro-3-methylphenol	32	380			U
91-58-7	2-Chloronaphthalene	37	380			U
95-57-8	2-Chlorophenol	47	380			U
7005-72-3	4-Chlorophenyl-phenylether	36	380			U
218-01-9	Chrysene	36	380			U
53-70-3	Dibenz (a, h) anthracene	69	380			U
132-64-9	Dibenzofuran	28	380			U
91-94-1	3,3'-Dichlorobenzidine	36	380			U
120-83-2	2,4-Dichlorophenol	22	380			U
84-66-2	Diethylphthalate	39	380			U
105-67-9	2,4-Dimethylphenol	25	380			U
131-11-3	Dimethylphthalate	35	380			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001003

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 13:25

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	35	380		U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	960		U
51-28-5-----	2,4-Dinitrophenol	150	960		U
121-14-2-----	2,4-Dinitrotoluene	28	380		U
606-20-2-----	2,6-Dinitrotoluene	44	380		U
117-84-0-----	Di-n-octylphthalate	31	380		U
206-44-0-----	Fluoranthene	62	380		U
86-73-7-----	Fluorene	30	380		U
118-74-1-----	Hexachlorobenzene	40	380		U
87-68-3-----	Hexachlorobutadiene	38	380		U
77-47-4-----	Hexachlorocyclopentadiene	71	380		U
67-72-1-----	Hexachloroethane	45	380		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	53	380		U
78-59-1-----	Isophorone	33	380		U
91-57-6-----	2-Methylnaphthalene	40	380		U
95-48-7-----	2-Methylphenol	45	380		U
106-44-5-----	4-Methylphenol	31	380		U
91-20-3-----	Naphthalene	37	380		U
88-74-4-----	2-Nitroaniline	37	380		U
99-09-2-----	3-Nitroaniline	54	960		U
100-01-6-----	4-Nitroaniline	120	960		U
98-95-3-----	Nitrobenzene	40	380		U
88-75-5-----	2-Nitrophenol	25	380		U
100-02-7-----	4-Nitrophenol	93	960		U
86-30-6-----	N-Nitrosodiphenylamine (1)	37	380		U
621-64-7-----	N-Nitroso-di-n-propylamine	63	380		U
87-86-5-----	Pentachlorophenol	39	960		U
85-01-8-----	Phenanthrene	26	380		U
108-95-2-----	Phenol	42	380		U
129-00-0-----	Pyrene	46	380		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	380		U
95-95-4-----	2,4,5-Trichlorophenol	31	960		U
88-06-2-----	2,4,6-Trichlorophenol	40	380		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001004

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 14:01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	30	380			U
208-96-8	Acenaphthylene	22	380			U
98-86-2	Acetophenone	47	380			U
120-12-7	Anthracene	31	380			U
1912-24-9	Atrazine	33	380			U
100-52-7	Benzaldehyde	64	380			U
56-55-3	Benzo (a) anthracene	42	380			U
205-99-2	Benzo (b) fluoranthene	36	380			U
207-08-9	Benzo (k) fluoranthene	45	380			U
191-24-2	Benzo (g, h, i) perylene	81	380			U
50-32-8	Benzo (a) pyrene	26	380			U
111-91-1	bis (2-Chloroethoxy) methane	36	380			U
92-52-4	1, 1'-Biphenyl	34	380			U
111-44-4	bis (2-Chloroethyl) ether	47	380			U
108-60-1	bis (2-Chloroisopropyl) ether	59	380			U
117-81-7	Bis (2-ethylhexyl) phthalate	42	380		54	JB
101-55-3	4-Bromophenyl-phenylether	30	380			U
85-68-7	Butylbenzylphthalate	34	380			U
86-74-8	Carbazole	42	380			U
106-47-8	4-Chloroaniline	55	380			U
105-60-2	Caprolactam	78	380			U
59-50-7	4-Chloro-3-methylphenol	32	380			U
91-58-7	2-Chloronaphthalene	37	380			U
95-57-8	2-Chlorophenol	47	380			U
7005-72-3	4-Chlorophenyl-phenylether	35	380			U
218-01-9	Chrysene	36	380			U
53-70-3	Dibenz (a, h) anthracene	69	380			U
132-64-9	Dibenzofuran	28	380			U
91-94-1	3, 3'-Dichlorobenzidine	36	380			U
120-83-2	2, 4-Dichlorophenol	22	380			U
84-66-2	Diethylphthalate	39	380			U
105-67-9	2, 4-Dimethylphenol	25	380			U
131-11-3	Dimethylphthalate	35	380			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001004

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 14:01

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
84-74-2-----	Di-n-butylphthalate	35	380	U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	960	U
51-28-5-----	2,4-Dinitrophenol	150	960	U
121-14-2-----	2,4-Dinitrotoluene	28	380	U
606-20-2-----	2,6-Dinitrotoluene	44	380	U
117-84-0-----	Di-n-octylphthalate	31	380	U
206-44-0-----	Fluoranthene	62	380	U
86-73-7-----	Fluorene	30	380	U
118-74-1-----	Hexachlorobenzene	40	380	U
87-68-3-----	Hexachlorobutadiene	38	380	U
77-47-4-----	Hexachlorocyclopentadiene	70	380	U
67-72-1-----	Hexachloroethane	45	380	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	53	380	U
78-59-1-----	Isophorone	33	380	U
91-57-6-----	2-Methylnaphthalene	40	380	U
95-48-7-----	2-Methylphenol	44	380	U
106-44-5-----	4-Methylphenol	30	380	U
91-20-3-----	Naphthalene	37	380	U
88-74-4-----	2-Nitroaniline	37	380	U
99-09-2-----	3-Nitroaniline	54	960	U
100-01-6-----	4-Nitroaniline	120	960	U
98-95-3-----	Nitrobenzene	40	380	U
88-75-5-----	2-Nitrophenol	25	380	U
100-02-7-----	4-Nitrophenol	93	960	U
86-30-6-----	N-Nitrosodiphenylamine (1)	37	380	U
621-64-7-----	N-Nitroso-di-n-propylamine	63	380	U
87-86-5-----	Pentachlorophenol	39	960	U
85-01-8-----	Phenanthrene	26	380	U
108-95-2-----	Phenol	42	380	U
129-00-0-----	Pyrene	46	380	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	380	U
95-95-4-----	2,4,5-Trichlorophenol	31	960	U
88-06-2-----	2,4,6-Trichlorophenol	40	380	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001005
 % Moisture: 10 decanted: (Y/N) N Date Sampled: 09/30/08 11:40
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 14:38
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9	Acenaphthene	29	370	U
208-96-8	Acenaphthylene	22	370	U
98-86-2	Acetophenone	46	370	U
120-12-7	Anthracene	30	370	U
1912-24-9	Atrazine	32	370	U
100-52-7	Benzaldehyde	62	370	U
56-55-3	Benzo(a)anthracene	40	370	U
205-99-2	Benzo(b)fluoranthene	35	370	U
207-08-9	Benzo(k)fluoranthene	44	370	U
191-24-2	Benzo(g,h,i)perylene	78	370	U
50-32-8	Benzo(a)pyrene	26	370	U
111-91-1	bis(2-Chloroethoxy)methane	34	370	U
92-52-4	1,1'-Biphenyl	33	370	U
111-44-4	bis(2-Chloroethyl)ether	45	370	U
108-60-1	bis(2-Chloroisopropyl)ether	57	370	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	370	48 JB
101-55-3	4-Bromophenyl-phenylether	29	370	U
85-68-7	Butylbenzylphthalate	33	370	U
86-74-8	Carbazole	40	370	U
106-47-8	4-Chloroaniline	53	370	U
105-60-2	Caprolactam	75	370	U
59-50-7	4-Chloro-3-methylphenol	31	370	U
91-58-7	2-Chloronaphthalene	36	370	U
95-57-8	2-Chlorophenol	45	370	U
7005-72-3	4-Chlorophenyl-phenylether	34	370	U
218-01-9	Chrysene	34	370	U
53-70-3	Dibenz(a,h)anthracene	67	370	U
132-64-9	Dibenzofuran	27	370	U
91-94-1	3,3'-Dichlorobenzidine	35	370	U
120-83-2	2,4-Dichlorophenol	21	370	U
84-66-2	Diethylphthalate	38	370	60 J
105-67-9	2,4-Dimethylphenol	24	370	U
131-11-3	Dimethylphthalate	34	370	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001005

% Moisture: 10 decanted: (Y/N) N Date Sampled: 09/30/08 11:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 14:38

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	ug/Kg) CONC	
84-74-2-----	Di-n-butylphthalate	34	370		U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	930		U
51-28-5-----	2,4-Dinitrophenol	150	930		U
121-14-2-----	2,4-Dinitrotoluene	27	370		U
606-20-2-----	2,6-Dinitrotoluene	42	370		U
117-84-0-----	Di-n-octylphthalate	30	370		U
206-44-0-----	Fluoranthene	60	370		U
86-73-7-----	Fluorene	29	370		U
118-74-1-----	Hexachlorobenzene	39	370		U
87-68-3-----	Hexachlorobutadiene	36	370		U
77-47-4-----	Hexachlorocyclopentadiene	68	370		U
67-72-1-----	Hexachloroethane	44	370		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	51	370		U
78-59-1-----	Isophorone	32	370		U
91-57-6-----	2-Methylnaphthalene	39	370		U
95-48-7-----	2-Methylphenol	43	370		U
106-44-5-----	4-Methylphenol	30	370		U
91-20-3-----	Naphthalene	36	370		U
88-74-4-----	2-Nitroaniline	36	370		U
99-09-2-----	3-Nitroaniline	53	930		U
100-01-6-----	4-Nitroaniline	110	930		U
98-95-3-----	Nitrobenzene	38	370		U
88-75-5-----	2-Nitrophenol	24	370		U
100-02-7-----	4-Nitrophenol	90	930		U
86-30-6-----	N-Nitrosodiphenylamine (1)	36	370		U
621-64-7-----	N-Nitroso-di-n-propylamine	61	370		U
87-86-5-----	Pentachlorophenol	38	930		U
85-01-8-----	Phenanthrene	25	370		U
108-95-2-----	Phenol	40	370		U
129-00-0-----	Pyrene	44	370		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370		U
95-95-4-----	2,4,5-Trichlorophenol	30	930		U
88-06-2-----	2,4,6-Trichlorophenol	39	370		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001001

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 10:35

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 12:12

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	29	370			U
208-96-8	Acenaphthylene	22	370			U
98-86-2	Acetophenone	45	370			U
120-12-7	Anthracene	30	370			U
1912-24-9	Atrazine	31	370			U
100-52-7	Benzaldehyde	61	370			U
56-55-3	Benzo (a) anthracene	40	370			U
205-99-2	Benzo (b) fluoranthene	35	370			U
207-08-9	Benzo (k) fluoranthene	43	370			U
191-24-2	Benzo (g, h, i) perylene	78	370			U
50-32-8	Benzo (a) pyrene	25	370			U
111-91-1	bis (2-Chloroethoxy) methane	34	370			U
92-52-4	1,1'-Biphenyl	32	370			U
111-44-4	bis (2-Chloroethyl) ether	45	370			U
108-60-1	bis (2-Chloroisopropyl) ether	56	370			U
117-81-7	Bis (2-ethylhexyl) phthalate	40	370		63	JB
101-55-3	4-Bromophenyl-phenylether	28	370			U
85-68-7	Butylbenzylphthalate	33	370			U
86-74-8	Carbazole	40	370			U
106-47-8	4-Chloroaniline	53	370			U
105-60-2	Caprolactam	74	370			U
59-50-7	4-Chloro-3-methylphenol	30	370			U
91-58-7	2-Chloronaphthalene	35	370			U
95-57-8	2-Chlorophenol	45	370			U
7005-72-3	4-Chlorophenyl-phenylether	34	370			U
218-01-9	Chrysene	34	370			U
53-70-3	Dibenz (a, h) anthracene	66	370			U
132-64-9	Dibenzofuran	27	370			U
91-94-1	3,3'-Dichlorobenzidine	35	370			U
120-83-2	2,4-Dichlorophenol	21	370			U
84-66-2	Diethylphthalate	37	370			U
105-67-9	2,4-Dimethylphenol	23	370			U
131-11-3	Dimethylphthalate	34	370			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001001
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 10:35
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 12:12
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	UG/KG	
84-74-2-----	Di-n-butylphthalate	33	370	U	
534-52-1-----	4,6-Dinitro-2-methylphenol	24	920	U	
51-28-5-----	2,4-Dinitrophenol	150	920	U	
121-14-2-----	2,4-Dinitrotoluene	26	370	U	
606-20-2-----	2,6-Dinitrotoluene	42	370	U	
117-84-0-----	Di-n-octylphthalate	30	370	U	
206-44-0-----	Fluoranthene	59	370	U	
86-73-7-----	Fluorene	29	370	U	
118-74-1-----	Hexachlorobenzene	38	370	U	
87-68-3-----	Hexachlorobutadiene	36	370	U	
77-47-4-----	Hexachlorocyclopentadiene	67	370	U	
67-72-1-----	Hexachloroethane	43	370	U	
193-39-5-----	Indeno (1,2,3-cd) pyrene	51	370	U	
78-59-1-----	Isophorone	31	370	U	
91-57-6-----	2-Methylnaphthalene	38	370	U	
95-48-7-----	2-Methylphenol	42	370	U	
106-44-5-----	4-Methylphenol	29	370	U	
91-20-3-----	Naphthalene	36	370	U	
88-74-4-----	2-Nitroaniline	35	370	U	
99-09-2-----	3-Nitroaniline	52	920	U	
100-01-6-----	4-Nitroaniline	110	920	U	
98-95-3-----	Nitrobenzene	38	370	U	
88-75-5-----	2-Nitrophenol	24	370	U	
100-02-7-----	4-Nitrophenol	89	920	U	
86-30-6-----	N-Nitrosodiphenylamine (1)	35	370	U	
621-64-7-----	N-Nitroso-di-n-propylamine	60	370	U	
87-86-5-----	Pentachlorophenol	37	920	U	
85-01-8-----	Phenanthrene	25	370	U	
108-95-2-----	Phenol	40	370	U	
129-00-0-----	Pyrene	44	370	U	
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370	U	
95-95-4-----	2,4,5-Trichlorophenol	29	920	U	
88-06-2-----	2,4,6-Trichlorophenol	38	370	U	

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001006
 % Moisture: 18 decanted: (Y/N) N Date Sampled: 09/30/08 14:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 15:14
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	32	410		U
208-96-8	Acenaphthylene	24	410		U
98-86-2	Acetophenone	50	410		U
120-12-7	Anthracene	33	410		U
1912-24-9	Atrazine	34	410		U
100-52-7	Benzaldehyde	68	410		U
56-55-3	Benzo (a) anthracene	44	410		U
205-99-2	Benzo (b) fluoranthene	38	410		U
207-08-9	Benzo (k) fluoranthene	48	410		U
191-24-2	Benzo (g, h, i) perylene	86	410		U
50-32-8	Benzo (a) pyrene	28	410		U
111-91-1	bis (2-Chloroethoxy) methane	38	410		U
92-52-4	1,1'-Biphenyl	36	410		U
111-44-4	bis (2-Chloroethyl) ether	50	410		U
108-60-1	bis (2-Chloroisopropyl) ether	62	410		U
117-81-7	Bis (2-ethylhexyl) phthalate	44	410	86	JB
101-55-3	4-Bromophenyl-phenylether	31	410		U
85-68-7	Butylbenzylphthalate	36	410		U
86-74-8	Carbazole	44	410		U
106-47-8	4-Chloroaniline	58	410		U
105-60-2	Caprolactam	82	410		U
59-50-7	4-Chloro-3-methylphenol	34	410		U
91-58-7	2-Chloronaphthalene	39	410		U
95-57-8	2-Chlorophenol	50	410		U
7005-72-3	4-Chlorophenyl-phenylether	37	410		U
218-01-9	Chrysene	38	410		U
53-70-3	Dibenz (a, h) anthracene	73	410		U
132-64-9	Dibenzofuran	30	410		U
91-94-1	3,3'-Dichlorobenzidine	38	410		U
120-83-2	2,4-Dichlorophenol	23	410		U
84-66-2	Diethylphthalate	41	410		U
105-67-9	2,4-Dimethylphenol	26	410		U
131-11-3	Dimethylphthalate	37	410		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001006

% Moisture: 18 decanted: (Y/N) N Date Sampled: 09/30/08 14:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 15:14

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2-----	Di-n-butylphthalate	37	410		U
534-52-1-----	4,6-Dinitro-2-methylphenol	26	1000		U
51-28-5-----	2,4-Dinitrophenol	160	1000		U
121-14-2-----	2,4-Dinitrotoluene	29	410		U
606-20-2-----	2,6-Dinitrotoluene	46	410		U
117-84-0-----	Di-n-octylphthalate	33	410		U
206-44-0-----	Fluoranthene	65	410		U
86-73-7-----	Fluorene	32	410		U
118-74-1-----	Hexachlorobenzene	42	410		U
87-68-3-----	Hexachlorobutadiene	40	410		U
77-47-4-----	Hexachlorocyclopentadiene	74	410		U
67-72-1-----	Hexachloroethane	48	410		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	56	410		U
78-59-1-----	Isophorone	34	410		U
91-57-6-----	2-Methylnaphthalene	42	410		U
95-48-7-----	2-Methylphenol	47	410		U
106-44-5-----	4-Methylphenol	32	410		U
91-20-3-----	Naphthalene	39	410		U
88-74-4-----	2-Nitroaniline	39	410		U
99-09-2-----	3-Nitroaniline	58	1000		U
100-01-6-----	4-Nitroaniline	120	1000		U
98-95-3-----	Nitrobenzene	42	410		U
88-75-5-----	2-Nitrophenol	27	410		U
100-02-7-----	4-Nitrophenol	98	1000		U
86-30-6-----	N-Nitrosodiphenylamine (1)	39	410		U
621-64-7-----	N-Nitroso-di-n-propylamine	67	410		U
87-86-5-----	Pentachlorophenol	41	1000		U
85-01-8-----	Phenanthrene	28	410		U
108-95-2-----	Phenol	44	410		U
129-00-0-----	Pyrene	48	410		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	410		U
95-95-4-----	2,4,5-Trichlorophenol	33	1000		U
88-06-2-----	2,4,6-Trichlorophenol	42	410		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001007

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/30/08 14:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 15:50

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG Q
83-32-9	Acenaphthene	30	370		U
208-96-8	Acenaphthylene	22	370		U
98-86-2	Acetophenone	46	370		U
120-12-7	Anthracene	30	370		U
1912-24-9	Atrazine	32	370		U
100-52-7	Benzaldehyde	62	370		U
56-55-3	Benzo(a) anthracene	41	370		U
205-99-2	Benzo(b) fluoranthene	35	370		U
207-08-9	Benzo(k) fluoranthene	44	370		U
191-24-2	Benzo(g,h,i) perylene	79	370		U
50-32-8	Benzo(a) pyrene	26	370		U
111-91-1	bis(2-Chloroethoxy) methane	35	370		U
92-52-4	1,1'-Biphenyl	33	370		U
111-44-4	bis(2-Chloroethyl) ether	46	370		U
108-60-1	bis(2-Chloroisopropyl) ether	57	370		U
117-81-7	Bis(2-ethylhexyl) phthalate	40	370	55	JB
101-55-3	4-Bromophenyl-phenylether	29	370		U
85-68-7	Butylbenzylphthalate	33	370		U
86-74-8	Carbazole	40	370		U
106-47-8	4-Chloroaniline	54	370		U
105-60-2	Caprolactam	75	370		U
59-50-7	4-Chloro-3-methylphenol	31	370		U
91-58-7	2-Chloronaphthalene	36	370		U
95-57-8	2-Chlorophenol	46	370		U
7005-72-3	4-Chlorophenyl-phenylether	34	370		U
218-01-9	Chrysene	35	370		U
53-70-3	Dibenz(a,h) anthracene	67	370		U
132-64-9	Dibenzofuran	27	370		U
91-94-1	3,3'-Dichlorobenzidine	35	370		U
120-83-2	2,4-Dichlorophenol	21	370		U
84-66-2	Diethylphthalate	38	370		U
105-67-9	2,4-Dimethylphenol	24	370		U
131-11-3	Dimethylphthalate	34	370		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001007

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/30/08 14:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 15:50

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC		
84-74-2	Di-n-butylphthalate	34	370	U	
534-52-1	4,6-Dinitro-2-methylphenol	24	930	U	
51-28-5	2,4-Dinitrophenol	150	930	U	
121-14-2	2,4-Dinitrotoluene	27	370	U	
606-20-2	2,6-Dinitrotoluene	42	370	U	
117-84-0	Di-n-octylphthalate	30	370	U	
206-44-0	Fluoranthene	60	370	U	
86-73-7	Fluorene	29	370	U	
118-74-1	Hexachlorobenzene	39	370	U	
87-68-3	Hexachlorobutadiene	37	370	U	
77-47-4	Hexachlorocyclopentadiene	68	370	U	
67-72-1	Hexachloroethane	44	370	U	
193-39-5	Indeno(1,2,3-cd)pyrene	52	370	U	
78-59-1	Isophorone	32	370	U	
91-57-6	2-Methylnaphthalene	39	370	U	
95-48-7	2-Methylphenol	43	370	U	
106-44-5	4-Methylphenol	30	370	U	
91-20-3	Naphthalene	36	370	U	
88-74-4	2-Nitroaniline	36	370	U	
99-09-2	3-Nitroaniline	53	930	U	
100-01-6	4-Nitroaniline	110	930	U	
98-95-3	Nitrobenzene	39	370	U	
88-75-5	2-Nitrophenol	25	370	U	
100-02-7	4-Nitrophenol	91	930	U	
86-30-6	N-Nitrosodiphenylamine (1)	36	370	U	
621-64-7	N-Nitroso-di-n-propylamine	61	370	U	
87-86-5	Pentachlorophenol	38	930	U	
85-01-8	Phenanthrene	26	370	U	
108-95-2	Phenol	40	370	U	
129-00-0	Pyrene	44	370	U	
95-94-3	1,2,4,5-Tetrachlorobenzene	110	370	U	
95-95-4	2,4,5-Trichlorophenol	30	930	U	
88-06-2	2,4,6-Trichlorophenol	39	370	U	

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001008

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/30/08 15:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 16:27

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	28	360		U
208-96-8-----	Acenaphthylene	21	360		U
98-86-2-----	Acetophenone	44	360		U
120-12-7-----	Anthracene	29	360		U
1912-24-9-----	Atrazine	31	360		U
100-52-7-----	Benzaldehyde	60	360		U
56-55-3-----	Benzo(a)anthracene	39	360		U
205-99-2-----	Benzo(b)fluoranthene	34	360		U
207-08-9-----	Benzo(k)fluoranthene	42	360		U
191-24-2-----	Benzo(g,h,i)perylene	76	360		U
50-32-8-----	Benzo(a)pyrene	25	360		U
111-91-1-----	bis(2-Chloroethoxy)methane	33	360		U
92-52-4-----	1,1'-Biphenyl	32	360		U
111-44-4-----	bis(2-Chloroethyl)ether	44	360		U
108-60-1-----	bis(2-Chloroisopropyl)ether	55	360		U
117-81-7-----	Bis(2-ethylhexyl)phthalate	39	360	52	JB
101-55-3-----	4-Bromophenyl-phenylether	28	360		U
85-68-7-----	Butylbenzylphthalate	32	360		U
86-74-8-----	Carbazole	39	360		U
106-47-8-----	4-Chloroaniline	52	360		U
105-60-2-----	Caprolactam	73	360		U
59-50-7-----	4-Chloro-3-methylphenol	30	360		U
91-58-7-----	2-Chloronaphthalene	34	360		U
95-57-8-----	2-Chlorophenol	44	360		U
7005-72-3-----	4-Chlorophenyl-phenylether	33	360		U
218-01-9-----	Chrysene	33	360		U
53-70-3-----	Dibenz(a,h)anthracene	65	360		U
132-64-9-----	Dibenzofuran	26	360		U
91-94-1-----	3,3'-Dichlorobenzidine	34	360		U
120-83-2-----	2,4-Dichlorophenol	20	360		U
84-66-2-----	Diethylphthalate	36	360		U
105-67-9-----	2,4-Dimethylphenol	23	360		U
131-11-3-----	Dimethylphthalate	33	360		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001008
 % Moisture: 7 decanted: (Y/N) N Date Sampled: 09/30/08 15:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 16:27
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC		
84-74-2	Di-n-butylphthalate	33	360		U
534-52-1	4,6-Dinitro-2-methylphenol	24	900		U
51-28-5	2,4-Dinitrophenol	140	900		U
121-14-2	2,4-Dinitrotoluene	26	360		U
606-20-2	2,6-Dinitrotoluene	41	360		U
117-84-0	Di-n-octylphthalate	29	360		U
206-44-0	Fluoranthene	58	360		U
86-73-7	Fluorene	28	360		U
118-74-1	Hexachlorobenzene	37	360		U
87-68-3	Hexachlorobutadiene	35	360		U
77-47-4	Hexachlorocyclopentadiene	66	360		U
67-72-1	Hexachloroethane	42	360		U
193-39-5	Indeno(1,2,3-cd)pyrene	50	360		U
78-59-1	Isophorone	30	360		U
91-57-6	2-Methylnaphthalene	38	360		U
95-48-7	2-Methylphenol	42	360		U
106-44-5	4-Methylphenol	29	360		U
91-20-3	Naphthalene	35	360		U
88-74-4	2-Nitroaniline	35	360		U
99-09-2	3-Nitroaniline	51	900		U
100-01-6	4-Nitroaniline	110	900		U
98-95-3	Nitrobenzene	37	360		U
88-75-5	2-Nitrophenol	24	360		U
100-02-7	4-Nitrophenol	87	900		U
86-30-6	N-Nitrosodiphenylamine (1)	34	360		U
621-64-7	N-Nitroso-di-n-propylamine	59	360		U
87-86-5	Pentachlorophenol	36	900		U
85-01-8	Phenanthrene	25	360		U
108-95-2	Phenol	39	360		U
129-00-0	Pyrene	43	360		U
95-94-3	1,2,4,5-Tetrachlorobenzene	110	360		U
95-95-4	2,4,5-Trichlorophenol	29	900		U
88-06-2	2,4,6-Trichlorophenol	38	360		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001009
 % Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 15:40
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 17:03
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9	Acenaphthene	30	380	U
208-96-8	Acenaphthylene	22	380	U
98-86-2	Acetophenone	47	380	U
120-12-7	Anthracene	31	380	U
1912-24-9	Atrazine	32	380	U
100-52-7	Benzaldehyde	64	380	U
56-55-3	Benzo(a) anthracene	42	380	U
205-99-2	Benzo(b) fluoranthene	36	380	U
207-08-9	Benzo(k) fluoranthene	45	380	U
191-24-2	Benzo(g,h,i) perylene	81	380	U
50-32-8	Benzo(a) pyrene	26	380	U
111-91-1	bis(2-Chloroethoxy)methane	35	380	U
92-52-4	1,1'-Biphenyl	34	380	U
111-44-4	bis(2-Chloroethyl) ether	47	380	U
108-60-1	bis(2-Chloroisopropyl) ether	59	380	U
117-81-7	Bis(2-ethylhexyl) phthalate	41	380	53 JB
101-55-3	4-Bromophenyl-phenylether	30	380	U
85-68-7	Butylbenzylphthalate	34	380	U
86-74-8	Carbazole	41	380	U
106-47-8	4-Chloroaniline	55	380	U
105-60-2	Caprolactam	77	380	U
59-50-7	4-Chloro-3-methylphenol	32	380	U
91-58-7	2-Chloronaphthalene	37	380	U
95-57-8	2-Chlorophenol	47	380	U
7005-72-3	4-Chlorophenyl-phenylether	35	380	U
218-01-9	Chrysene	35	380	U
53-70-3	Dibenz(a,h) anthracene	69	380	U
132-64-9	Dibenzofuran	28	380	U
91-94-1	3,3'-Dichlorobenzidine	36	380	U
120-83-2	2,4-Dichlorophenol	22	380	U
84-66-2	Diethylphthalate	39	380	U
105-67-9	2,4-Dimethylphenol	24	380	U
131-11-3	Dimethylphthalate	35	380	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001009

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 15:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 17:03

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	MDL	RL	CONC	Q
---------	----------	-----	----	------	---

84-74-2-----	Di-n-butylphthalate	35	380		U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	960		U
51-28-5-----	2,4-Dinitrophenol	150	960		U
121-14-2-----	2,4-Dinitrotoluene	28	380		U
606-20-2-----	2,6-Dinitrotoluene	43	380		U
117-84-0-----	Di-n-octylphthalate	31	380		U
206-44-0-----	Fluoranthene	61	380		U
86-73-7-----	Fluorene	30	380		U
118-74-1-----	Hexachlorobenzene	40	380		U
87-68-3-----	Hexachlorobutadiene	38	380		U
77-47-4-----	Hexachlorocyclopentadiene	70	380		U
67-72-1-----	Hexachloroethane	45	380		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	53	380		U
78-59-1-----	Isophorone	32	380		U
91-57-6-----	2-Methylnaphthalene	40	380		U
95-48-7-----	2-Methylphenol	44	380		U
106-44-5-----	4-Methylphenol	30	380		U
91-20-3-----	Naphthalene	37	380		U
88-74-4-----	2-Nitroaniline	37	380		U
99-09-2-----	3-Nitroaniline	54	960		U
100-01-6-----	4-Nitroaniline	120	960		U
98-95-3-----	Nitrobenzene	40	380		U
88-75-5-----	2-Nitrophenol	25	380		U
100-02-7-----	4-Nitrophenol	93	960		U
86-30-6-----	N-Nitrosodiphenylamine (1)	37	380		U
621-64-7-----	N-Nitroso-di-n-propylamine	63	380		U
87-86-5-----	Pentachlorophenol	39	960		U
85-01-8-----	Phenanthrene	26	380		U
108-95-2-----	Phenol	41	380		U
129-00-0-----	Pyrene	46	380		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	380		U
95-95-4-----	2,4,5-Trichlorophenol	31	960		U
88-06-2-----	2,4,6-Trichlorophenol	40	380		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001010

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 16:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 17:39

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	29	370			U
208-96-8	Acenaphthylene	22	370			U
98-86-2	Acetophenone	45	370			U
120-12-7	Anthracene	30	370			U
1912-24-9	Atrazine	31	370			U
100-52-7	Benzaldehyde	61	370			U
56-55-3	Benzo (a) anthracene	40	370			U
205-99-2	Benzo (b) fluoranthene	35	370			U
207-08-9	Benzo (k) fluoranthene	43	370			U
191-24-2	Benzo (g,h,i) perylene	78	370			U
50-32-8	Benzo (a) pyrene	25	370			U
111-91-1	bis (2-Chloroethoxy) methane	34	370			U
92-52-4	1,1'-Biphenyl	32	370			U
111-44-4	bis (2-Chloroethyl) ether	45	370			U
108-60-1	bis (2-Chloroisopropyl) ether	56	370			U
117-81-7	Bis (2-ethylhexyl) phthalate	40	370		75	JB
101-55-3	4-Bromophenyl-phenylether	28	370			U
85-68-7	Butylbenzylphthalate	33	370			U
86-74-8	Carbazole	40	370			U
106-47-8	4-Chloroaniline	53	370			U
105-60-2	Caprolactam	74	370			U
59-50-7	4-Chloro-3-methylphenol	31	370			U
91-58-7	2-Chloronaphthalene	35	370			U
95-57-8	2-Chlorophenol	45	370			U
7005-72-3	4-Chlorophenyl-phenylether	34	370			U
218-01-9	Chrysene	34	370			U
53-70-3	Dibenz (a,h) anthracene	66	370			U
132-64-9	Dibenzofuran	27	370			U
91-94-1	3,3'-Dichlorobenzidine	35	370			U
120-83-2	2,4-Dichlorophenol	21	370			U
84-66-2	Diethylphthalate	37	370			U
105-67-9	2,4-Dimethylphenol	24	370			U
131-11-3	Dimethylphthalate	34	370			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001010

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 16:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 17:39

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

84-74-2-----	Di-n-butylphthalate	34	370		U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	920		U
51-28-5-----	2,4-Dinitrophenol	150	920		U
121-14-2-----	2,4-Dinitrotoluene	26	370		U
606-20-2-----	2,6-Dinitrotoluene	42	370		U
117-84-0-----	Di-n-octylphthalate	30	370		U
206-44-0-----	Fluoranthene	59	370		U
86-73-7-----	Fluorene	29	370		U
118-74-1-----	Hexachlorobenzene	38	370		U
87-68-3-----	Hexachlorobutadiene	36	370		U
77-47-4-----	Hexachlorocyclopentadiene	68	370		U
67-72-1-----	Hexachloroethane	43	370		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	51	370		U
78-59-1-----	Isophorone	31	370		U
91-57-6-----	2-Methylnaphthalene	38	370		U
95-48-7-----	2-Methylphenol	43	370		U
106-44-5-----	4-Methylphenol	29	370		U
91-20-3-----	Naphthalene	36	370		U
88-74-4-----	2-Nitroaniline	35	370		U
99-09-2-----	3-Nitroaniline	52	920		U
100-01-6-----	4-Nitroaniline	110	920		U
98-95-3-----	Nitrobenzene	38	370		U
88-75-5-----	2-Nitrophenol	24	370		U
100-02-7-----	4-Nitrophenol	89	920		U
86-30-6-----	N-Nitrosodiphenylamine (1)	35	370		U
621-64-7-----	N-Nitroso-di-n-propylamine	60	370		U
87-86-5-----	Pentachlorophenol	37	920		U
85-01-8-----	Phenanthrene	25	370		U
108-95-2-----	Phenol	40	370		U
129-00-0-----	Pyrene	44	370		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370		U
95-95-4-----	2,4,5-Trichlorophenol	30	920		U
88-06-2-----	2,4,6-Trichlorophenol	38	370		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001011
 % Moisture: 17 decanted: (Y/N) N Date Sampled: 09/30/08 16:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 18:16
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
 MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	32	400			U
208-96-8	Acenaphthylene	24	400			U
98-86-2	Acetophenone	49	400			U
120-12-7	Anthracene	33	400			U
1912-24-9	Atrazine	34	400			U
100-52-7	Benzaldehyde	67	400			U
56-55-3	Benzo(a)anthracene	44	400			U
205-99-2	Benzo(b)fluoranthene	38	400			U
207-08-9	Benzo(k)fluoranthene	47	400			U
191-24-2	Benzo(g,h,i)perylene	85	400			U
50-32-8	Benzo(a)pyrene	28	400			U
111-91-1	bis(2-Chloroethoxy)methane	37	400			U
92-52-4	1,1'-Biphenyl	36	400			U
111-44-4	bis(2-Chloroethyl)ether	49	400			U
108-60-1	bis(2-Chloroisopropyl)ether	62	400			U
117-81-7	Bis(2-ethylhexyl)phthalate	44	400	110		JB
101-55-3	4-Bromophenyl-phenylether	31	400			U
85-68-7	Butylbenzylphthalate	36	400			U
86-74-8	Carbazole	44	400			U
106-47-8	4-Chloroaniline	58	400			U
105-60-2	Caprolactam	81	400			U
59-50-7	4-Chloro-3-methylphenol	34	400			U
91-58-7	2-Chloronaphthalene	38	400			U
95-57-8	2-Chlorophenol	49	400			U
7005-72-3	4-Chlorophenyl-phenylether	37	400			U
218-01-9	Chrysene	37	400			U
53-70-3	Dibenz(a,h)anthracene	72	400			U
132-64-9	Dibenzofuran	29	400			U
91-94-1	3,3'-Dichlorobenzidine	38	400			U
120-83-2	2,4-Dichlorophenol	23	400			U
84-66-2	Diethylphthalate	41	400			U
105-67-9	2,4-Dimethylphenol	26	400			U
131-11-3	Dimethylphthalate	37	400			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001011
 % Moisture: 17 decanted: (Y/N) N Date Sampled: 09/30/08 16:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 18:16
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
84-74-2-----	Di-n-butylphthalate	37	400	U
534-52-1-----	4,6-Dinitro-2-methylphenol	26	1000	U
51-28-5-----	2,4-Dinitrophenol	160	1000	U
121-14-2-----	2,4-Dinitrotoluene	29	400	U
606-20-2-----	2,6-Dinitrotoluene	46	400	U
117-84-0-----	Di-n-octylphthalate	32	400	U
206-44-0-----	Fluoranthene	64	400	U
86-73-7-----	Fluorene	32	400	U
118-74-1-----	Hexachlorobenzene	42	400	U
87-68-3-----	Hexachlorobutadiene	40	400	U
77-47-4-----	Hexachlorocyclopentadiene	74	400	U
67-72-1-----	Hexachloroethane	47	400	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	56	400	U
78-59-1-----	Isophorone	34	400	U
91-57-6-----	2-Methylnaphthalene	42	400	U
95-48-7-----	2-Methylphenol	46	400	U
106-44-5-----	4-Methylphenol	32	400	U
91-20-3-----	Naphthalene	39	400	U
88-74-4-----	2-Nitroaniline	39	400	U
99-09-2-----	3-Nitroaniline	57	1000	U
100-01-6-----	4-Nitroaniline	120	1000	U
98-95-3-----	Nitrobenzene	42	400	U
88-75-5-----	2-Nitrophenol	27	400	U
100-02-7-----	4-Nitrophenol	98	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	38	400	U
621-64-7-----	N-Nitroso-di-n-propylamine	66	400	U
87-86-5-----	Pentachlorophenol	41	1000	U
85-01-8-----	Phenanthrene	28	400	U
108-95-2-----	Phenol	43	400	U
129-00-0-----	Pyrene	48	400	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	400	U
95-95-4-----	2,4,5-Trichlorophenol	32	1000	U
88-06-2-----	2,4,6-Trichlorophenol	42	400	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001002

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 11:05

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 12:48

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9-----	Acenaphthene	29	370	U
208-96-8-----	Acenaphthylene	22	370	U
98-86-2-----	Acetophenone	45	370	U
120-12-7-----	Anthracene	30	370	U
1912-24-9-----	Atrazine	31	370	U
100-52-7-----	Benzaldehyde	61	370	U
56-55-3-----	Benzo (a) anthracene	40	370	U
205-99-2-----	Benzo (b) fluoranthene	35	370	U
207-08-9-----	Benzo (k) fluoranthene	43	370	U
191-24-2-----	Benzo (g, h, i) perylene	78	370	U
50-32-8-----	Benzo (a) pyrene	25	370	U
111-91-1-----	bis (2-Chloroethoxy) methane	34	370	U
92-52-4-----	1, 1'-Biphenyl	32	370	U
111-44-4-----	bis (2-Chloroethyl) ether	45	370	U
108-60-1-----	bis (2-Chloroisopropyl) ether	56	370	U
117-81-7-----	Bis (2-ethylhexyl) phthalate	40	370	84 JB
101-55-3-----	4-Bromophenyl-phenylether	28	370	U
85-68-7-----	Butylbenzylphthalate	33	370	U
86-74-8-----	Carbazole	40	370	U
106-47-8-----	4-Chloroaniline	53	370	U
105-60-2-----	Caprolactam	74	370	U
59-50-7-----	4-Chloro-3-methylphenol	31	370	U
91-58-7-----	2-Chloronaphthalene	35	370	U
95-57-8-----	2-Chlorophenol	45	370	U
7005-72-3-----	4-Chlorophenyl-phenylether	34	370	U
218-01-9-----	Chrysene	34	370	U
53-70-3-----	Dibenz (a, h) anthracene	66	370	U
132-64-9-----	Dibenzofuran	27	370	U
91-94-1-----	3, 3'-Dichlorobenzidine	35	370	U
120-83-2-----	2, 4-Dichlorophenol	21	370	U
84-66-2-----	Diethylphthalate	37	370	U
105-67-9-----	2, 4-Dimethylphenol	24	370	U
131-11-3-----	Dimethylphthalate	34	370	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 1001002
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 11:05
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 12:48
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
84-74-2-----	Di-n-butylphthalate	34	370	U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	920	U
51-28-5-----	2,4-Dinitrophenol	150	920	U
121-14-2-----	2,4-Dinitrotoluene	26	370	U
606-20-2-----	2,6-Dinitrotoluene	42	370	U
117-84-0-----	Di-n-octylphthalate	30	370	U
206-44-0-----	Fluoranthene	59	370	U
86-73-7-----	Fluorene	29	370	U
118-74-1-----	Hexachlorobenzene	38	370	U
87-68-3-----	Hexachlorobutadiene	36	370	U
77-47-4-----	Hexachlorocyclopentadiene	68	370	U
67-72-1-----	Hexachloroethane	43	370	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	51	370	U
78-59-1-----	Isophorone	31	370	U
91-57-6-----	2-Methylnaphthalene	38	370	U
95-48-7-----	2-Methylphenol	43	370	U
106-44-5-----	4-Methylphenol	29	370	U
91-20-3-----	Naphthalene	36	370	U
88-74-4-----	2-Nitroaniline	35	370	U
99-09-2-----	3-Nitroaniline	52	920	U
100-01-6-----	4-Nitroaniline	110	920	U
98-95-3-----	Nitrobenzene	38	370	U
88-75-5-----	2-Nitrophenol	24	370	U
100-02-7-----	4-Nitrophenol	89	920	U
86-30-6-----	N-Nitrosodiphenylamine (1)	35	370	U
621-64-7-----	N-Nitroso-di-n-propylamine	60	370	U
87-86-5-----	Pentachlorophenol	37	920	U
85-01-8-----	Phenanthrene	25	370	U
108-95-2-----	Phenol	40	370	U
129-00-0-----	Pyrene	44	370	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370	U
95-95-4-----	2,4,5-Trichlorophenol	30	920	U
88-06-2-----	2,4,6-Trichlorophenol	38	370	U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 030F3001

% Moisture: 9 decanted: (Y/N) N Date Sampled: 10/01/08 10:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 18:27

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG	Q
		MDL	RL			CONC
309-00-2-----	Aldrin	0.12	0.36		U
319-84-6-----	Alpha-BHC	0.12	0.36		U
5103-71-9-----	Alpha-Chlordane	0.12	0.36	1.6	
319-85-7-----	Beta-BHC	0.12	0.36	0.32	JPM
72-54-8-----	4,4'-DDD	0.18	0.73		U
72-55-9-----	4,4'-DDE	0.18	0.73	0.35	J
50-29-3-----	4,4'-DDT	0.18	0.73	0.73	JY
319-86-8-----	Delta-BHC	0.12	0.36		U
60-57-1-----	Dieldrin	0.18	0.73	0.43	J
959-98-8-----	Endosulfan I	0.12	0.36		U
33213-65-9----	Endosulfan II	0.18	0.73	0.51	J
1031-07-8-----	Endosulfan Sulfate	0.18	0.73		U
72-20-8-----	Endrin	0.18	0.73		U
7421-93-4-----	Endrin Aldehyde	0.18	0.73		U
53494-70-5----	Endrin Ketone	0.18	0.73		U
58-89-9-----	Gamma-BHC	0.12	0.36		U
5103-74-2-----	Gamma-Chlordane	0.12	0.36	0.65	
76-44-8-----	Heptachlor	0.12	0.36		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.36	0.33	J
72-43-5-----	Methoxychlor	0.12	0.36		U
8001-35-2-----	Toxaphene	12	36		U
12674-11-2----	PCB-1016	4.6	18		U
11104-28-2----	PCB-1221	4.6	18		U
11141-16-5----	PCB-1232	4.6	18		U
53469-21-9----	PCB-1242	4.6	18		U
12672-29-6----	PCB-1248	4.6	18		U
11097-69-1----	PCB-1254	4.6	18		U
11096-82-5----	PCB-1260	4.6	18		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT02*

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 031F3101

% Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 18:45

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.14	0.42	2.9	PM
319-84-6-----	Alpha-BHC	0.14	0.42	4.2	
5103-71-9-----	Alpha-Chlordane	0.14	0.42		U
319-85-7-----	Beta-BHC	0.14	0.42	63	P
72-54-8-----	4,4'-DDD	0.21	0.83	1.5	PM
72-55-9-----	4,4'-DDE	0.21	0.83		U
50-29-3-----	4,4'-DDT	0.21	0.83	1.4	PMY
319-86-8-----	Delta-BHC	0.14	0.42	34	
60-57-1-----	Dieldrin	0.21	0.83	0.85	PM
959-98-8-----	Endosulfan I	0.14	0.42		U
33213-65-9----	Endosulfan II	0.21	0.83	4.4	
1031-07-8-----	Endosulfan Sulfate	0.21	0.83	1.5	
72-20-8-----	Endrin	0.21	0.83	7.6	
7421-93-4-----	Endrin Aldehyde	0.21	0.83	12	P
53494-70-5----	Endrin Ketone	0.21	0.83	1.3	PM
58-89-9-----	Gamma-BHC	0.14	0.42	10	PM
5103-74-2-----	Gamma-Chlordane	0.14	0.42	7.4	PM
76-44-8-----	Heptachlor	0.14	0.42	16	PM
1024-57-3-----	Heptachlor Epoxide	0.14	0.42	6.2	PM
72-43-5-----	Methoxychlor	0.14	0.42		U
8001-35-2-----	Toxaphene	14	42		U

* = THE REPORTED CONCENTRATION FOR THESE COMPOUNDS MAY BE DUE TO THE PRESENCE OF PCB.

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 006F0601

% Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/13/08 11:18

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
12674-11-2----	PCB-1016	5.2	21	U
11104-28-2----	PCB-1221	5.2	21	U
11141-16-5----	PCB-1232	5.2	21	U
53469-21-9----	PCB-1242	5.2	21	1600 E
12672-29-6----	PCB-1248	5.2	21	U
11097-69-1----	PCB-1254	5.2	21	U
11096-82-5----	PCB-1260	5.2	21	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT02DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02DL

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 011F1101

% Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/13/08 14:22

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
12674-11-2----	PCB-1016	26	100		UD
11104-28-2----	PCB-1221	26	100		UD
11141-16-5----	PCB-1232	26	100		UD
53469-21-9----	PCB-1242	26	100	2100	PD
12672-29-6----	PCB-1248	26	100		UD
11097-69-1----	PCB-1254	26	100		UD
11096-82-5----	PCB-1260	26	100		UD

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 032F3201

% Moisture: 30 decanted: (Y/N) N Date Sampled: 10/01/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 19:03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.16	0.47		U
319-84-6-----	Alpha-BHC	0.16	0.47		U
5103-71-9-----	Alpha-Chlordane	0.16	0.47	0.18	JPM
319-85-7-----	Beta-BHC	0.16	0.47	0.17	JPM
72-54-8-----	4,4'-DDD	0.24	0.95		U
72-55-9-----	4,4'-DDE	0.24	0.95		U
50-29-3-----	4,4'-DDT	0.24	0.95		UY
319-86-8-----	Delta-BHC	0.16	0.47		U
60-57-1-----	Dieldrin	0.24	0.95		U
959-98-8-----	Endosulfan I	0.16	0.47		U
33213-65-9----	Endosulfan II	0.24	0.95		U
1031-07-8-----	Endosulfan Sulfate	0.24	0.95	0.46	J
72-20-8-----	Endrin	0.24	0.95		U
7421-93-4-----	Endrin Aldehyde	0.24	0.95		U
53494-70-5----	Endrin Ketone	0.24	0.95		U
58-89-9-----	Gamma-BHC	0.16	0.47		U
5103-74-2-----	Gamma-Chlordane	0.16	0.47	0.20	JPM
76-44-8-----	Heptachlor	0.16	0.47		U
1024-57-3-----	Heptachlor Epoxide	0.16	0.47		U
72-43-5-----	Methoxychlor	0.16	0.47		U
8001-35-2-----	Toxaphene	16	47		U
12674-11-2----	PCB-1016	5.9	24		U
11104-28-2----	PCB-1221	5.9	24		U
11141-16-5----	PCB-1232	5.9	24		U
53469-21-9----	PCB-1242	5.9	24		U
12672-29-6----	PCB-1248	5.9	24		U
11097-69-1----	PCB-1254	5.9	24		U
11096-82-5----	PCB-1260	5.9	24		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 014F1401
 % Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:10/06/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 13:31
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		(ug/L or ug/Kg)		UG/KG Q
		MDL	RL	CONC		
309-00-2-----	Aldrin	0.13	0.38			U
319-84-6-----	Alpha-BHC	0.13	0.38			U
5103-71-9-----	Alpha-Chlordane	0.13	0.38			U
319-85-7-----	Beta-BHC	0.13	0.38			U
72-54-8-----	4,4'-DDD	0.19	0.77			U
72-55-9-----	4,4'-DDE	0.19	0.77			U
50-29-3-----	4,4'-DDT	0.19	0.77			U
319-86-8-----	Delta-BHC	0.13	0.38	0.26		JPM
60-57-1-----	Dieldrin	0.19	0.77	0.55		JPM
959-98-8-----	Endosulfan I	0.13	0.38			U
33213-65-9----	Endosulfan II	0.19	0.77	1.4		PM
1031-07-8-----	Endosulfan Sulfate	0.19	0.77			U
72-20-8-----	Endrin	0.19	0.77			U
7421-93-4-----	Endrin Aldehyde	0.19	0.77			U
53494-70-5----	Endrin Ketone	0.19	0.77			U
58-89-9-----	Gamma-BHC	0.13	0.38			U
5103-74-2-----	Gamma-Chlordane	0.13	0.38			U
76-44-8-----	Heptachlor	0.13	0.38			U
1024-57-3-----	Heptachlor Epoxide	0.13	0.38	0.56		U
72-43-5-----	Methoxychlor	0.13	0.38			U
8001-35-2-----	Toxaphene	13	38			U
12674-11-2----	PCB-1016	4.8	19			U
11104-28-2----	PCB-1221	4.8	19			U
11141-16-5----	PCB-1232	4.8	19			U
53469-21-9----	PCB-1242	4.8	19			U
12672-29-6----	PCB-1248	4.8	19			U
11097-69-1----	PCB-1254	4.8	19			U
11096-82-5----	PCB-1260	4.8	19			U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 015F1501
 % Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 13:50
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG CONC	UG/KG Q
		MDL	(ug/L or ug/Kg) RL		
309-00-2-----	Aldrin	0.13	0.38		U
319-84-6-----	Alpha-BHC	0.13	0.38		U
5103-71-9-----	Alpha-Chlordane	0.13	0.38		U
319-85-7-----	Beta-BHC	0.13	0.38		U
72-54-8-----	4,4'-DDD	0.19	0.77		U
72-55-9-----	4,4'-DDE	0.19	0.77		U
50-29-3-----	4,4'-DDT	0.19	0.77	0.32	J
319-86-8-----	Delta-BHC	0.13	0.38	0.18	JPM
60-57-1-----	Dieldrin	0.19	0.77	0.70	J
959-98-8-----	Endosulfan I	0.13	0.38		U
33213-65-9----	Endosulfan II	0.19	0.77	0.35	J
1031-07-8-----	Endosulfan Sulfate	0.19	0.77	0.29	J
72-20-8-----	Endrin	0.19	0.77		U
7421-93-4-----	Endrin Aldehyde	0.19	0.77		U
53494-70-5----	Endrin Ketone	0.19	0.77		U
58-89-9-----	Gamma-BHC	0.13	0.38		U
5103-74-2-----	Gamma-Chlordane	0.13	0.38		U
76-44-8-----	Heptachlor	0.13	0.38		U
1024-57-3-----	Heptachlor Epoxide	0.13	0.38	0.30	JPM
72-43-5-----	Methoxychlor	0.13	0.38		U
8001-35-2-----	Toxaphene	13	38		U
12674-11-2----	PCB-1016	4.8	19		U
11104-28-2----	PCB-1221	4.8	19		U
11141-16-5----	PCB-1232	4.8	19		U
53469-21-9----	PCB-1242	4.8	19		U
12672-29-6----	PCB-1248	4.8	19		U
11097-69-1----	PCB-1254	4.8	19		U
11096-82-5----	PCB-1260	4.8	19		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 016F1601

% Moisture: 10 decanted: (Y/N) N Date Sampled: 09/30/08 11:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 14:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.12	0.37		U
319-84-6-----	Alpha-BHC	0.12	0.37		U
5103-71-9-----	Alpha-Chlordane	0.12	0.37		U
319-85-7-----	Beta-BHC	0.12	0.37		U
72-54-8-----	4,4'-DDD	0.18	0.74		U
72-55-9-----	4,4'-DDE	0.18	0.74	0.86	
50-29-3-----	4,4'-DDT	0.18	0.74	0.23	JPM
319-86-8-----	Delta-BHC	0.12	0.37		U
60-57-1-----	Dieldrin	0.18	0.74	1.4	
959-98-8-----	Endosulfan I	0.12	0.37		U
33213-65-9----	Endosulfan II	0.18	0.74		U
1031-07-8-----	Endosulfan Sulfate	0.18	0.74		U
72-20-8-----	Endrin	0.18	0.74		U
7421-93-4-----	Endrin Aldehyde	0.18	0.74		U
53494-70-5----	Endrin Ketone	0.18	0.74		U
58-89-9-----	Gamma-BHC	0.12	0.37		U
5103-74-2-----	Gamma-Chlordane	0.12	0.37		U
76-44-8-----	Heptachlor	0.12	0.37		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37		U
72-43-5-----	Methoxychlor	0.12	0.37	0.80	P
8001-35-2-----	Toxaphene	12	37		U
12674-11-2----	PCB-1016	4.6	18		U
11104-28-2----	PCB-1221	4.6	18		U
11141-16-5----	PCB-1232	4.6	18		U
53469-21-9----	PCB-1242	4.6	18		U
12672-29-6----	PCB-1248	4.6	18		U
11097-69-1----	PCB-1254	4.6	18		U
11096-82-5----	PCB-1260	4.6	18		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 011F1101
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 10:35
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 12:36
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		(ug/L or ug/Kg)		UG/KG
		MDL	RL	CONC	Q	
309-00-2-----	Aldrin	0.12	0.37	6.3	P	
319-84-6-----	Alpha-BHC	0.12	0.37		U	
5103-71-9-----	Alpha-Chlordane	0.12	0.37		U	
319-85-7-----	Beta-BHC	0.12	0.37		U	
72-54-8-----	4,4'-DDD	0.18	0.73		U	
72-55-9-----	4,4'-DDE	0.18	0.73		U	
50-29-3-----	4,4'-DDT	0.18	0.73		U	
319-86-8-----	Delta-BHC	0.12	0.37		U	
60-57-1-----	Dieldrin	0.18	0.73		U	
959-98-8-----	Endosulfan I	0.12	0.37		U	
33213-65-9----	Endosulfan II	0.18	0.73		U	
1031-07-8-----	Endosulfan Sulfate	0.18	0.73		U	
72-20-8-----	Endrin	0.18	0.73		U	
7421-93-4-----	Endrin Aldehyde	0.18	0.73		U	
53494-70-5----	Endrin Ketone	0.18	0.73		U	
58-89-9-----	Gamma-BHC	0.12	0.37		U	
5103-74-2-----	Gamma-Chlordane	0.12	0.37		U	
76-44-8-----	Heptachlor	0.12	0.37		U	
1024-57-3-----	Heptachlor Epoxide	0.12	0.37		U	
72-43-5-----	Methoxychlor	0.12	0.37	130	E	
8001-35-2-----	Toxaphene	12	37		U	
12674-11-2----	PCB-1016	4.6	18		U	
11104-28-2----	PCB-1221	4.6	18		U	
11141-16-5----	PCB-1232	4.6	18		U	
53469-21-9----	PCB-1242	4.6	18		U	
12672-29-6----	PCB-1248	4.6	18		U	
11097-69-1----	PCB-1254	4.6	18		U	
11096-82-5----	PCB-1260	4.6	18		U	

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01DL

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 012F1201

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 10:35

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 12:54

Injection Volume: 2.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.60	1.8	7.2 D
319-84-6-----	Alpha-BHC	0.60	1.8	UD
5103-71-9-----	Alpha-Chlordane	0.60	1.8	UD
319-85-7-----	Beta-BHC	0.60	1.8	UD
72-54-8-----	4,4'-DDD	0.92	3.7	UD
72-55-9-----	4,4'-DDE	0.92	3.7	UD
50-29-3-----	4,4'-DDT	0.92	3.7	UD
319-86-8-----	Delta-BHC	0.60	1.8	UD
60-57-1-----	Dieldrin	0.92	3.7	UD
959-98-8-----	Endosulfan I	0.60	1.8	UD
33213-65-9----	Endosulfan II	0.92	3.7	UD
1031-07-8-----	Endosulfan Sulfate	0.92	3.7	UD
72-20-8-----	Endrin	0.92	3.7	UD
7421-93-4-----	Endrin Aldehyde	0.92	3.7	UD
53494-70-5----	Endrin Ketone	0.92	3.7	UD
58-89-9-----	Gamma-BHC	0.60	1.8	UD
5103-74-2-----	Gamma-Chlordane	0.60	1.8	UD
76-44-8-----	Heptachlor	0.60	1.8	UD
1024-57-3-----	Heptachlor Epoxide	0.60	1.8	UD
72-43-5-----	Methoxychlor	0.60	1.8	140 D
8001-35-2-----	Toxaphene	60	180	UD
12674-11-2----	PCB-1016	23	92	UD
11104-28-2----	PCB-1221	23	92	UD
11141-16-5----	PCB-1232	23	92	UD
53469-21-9----	PCB-1242	23	92	UD
12672-29-6----	PCB-1248	23	92	UD
11097-69-1----	PCB-1254	23	92	UD
11096-82-5----	PCB-1260	23	92	UD

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 017F1701
 % Moisture: 18 decanted: (Y/N) N Date Sampled: 09/30/08 14:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:10/06/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 14:27
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG CONC	UG/KG Q
		MDL	(ug/L or ug/Kg) RL		
309-00-2-----	Aldrin	0.13	0.41		U
319-84-6-----	Alpha-BHC	0.13	0.41		U
5103-71-9-----	Alpha-Chlordane	0.13	0.41	4.9	
319-85-7-----	Beta-BHC	0.13	0.41	0.19	JPM
72-54-8-----	4,4'-DDD	0.20	0.81		U
72-55-9-----	4,4'-DDE	0.20	0.81	0.97	
50-29-3-----	4,4'-DDT	0.20	0.81	1.5	
319-86-8-----	Delta-BHC	0.13	0.41		U
60-57-1-----	Dieldrin	0.20	0.81		U
959-98-8-----	Endosulfan I	0.13	0.41		U
33213-65-9----	Endosulfan II	0.20	0.81		U
1031-07-8-----	Endosulfan Sulfate	0.20	0.81		U
72-20-8-----	Endrin	0.20	0.81		U
7421-93-4-----	Endrin Aldehyde	0.20	0.81		U
53494-70-5----	Endrin Ketone	0.20	0.81		U
58-89-9-----	Gamma-BHC	0.13	0.41		U
5103-74-2-----	Gamma-Chlordane	0.13	0.41	3.4	P
76-44-8-----	Heptachlor	0.13	0.41		U
1024-57-3-----	Heptachlor Epoxide	0.13	0.41	1.2	
72-43-5-----	Methoxychlor	0.13	0.41		U
8001-35-2-----	Toxaphene	13	41		U
12674-11-2----	PCB-1016	5.1	20		U
11104-28-2----	PCB-1221	5.1	20		U
11141-16-5----	PCB-1232	5.1	20		U
53469-21-9----	PCB-1242	5.1	20		U
12672-29-6----	PCB-1248	5.1	20		U
11097-69-1----	PCB-1254	5.1	20		U
11096-82-5----	PCB-1260	5.1	20		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 018F1801

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/30/08 14:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 14:45

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.12	0.37	0.29	J
319-84-6-----	Alpha-BHC	0.12	0.37		U
5103-71-9-----	Alpha-Chlordane	0.12	0.37	0.23	J
319-85-7-----	Beta-BHC	0.12	0.37		U
72-54-8-----	4,4'-DDD	0.19	0.75		U
72-55-9-----	4,4'-DDE	0.19	0.75		U
50-29-3-----	4,4'-DDT	0.19	0.75	0.34	JPM
319-86-8-----	Delta-BHC	0.12	0.37		U
60-57-1-----	Dieldrin	0.19	0.75	420	E
959-98-8-----	Endosulfan I	0.12	0.37		U
33213-65-9----	Endosulfan II	0.19	0.75		U
1031-07-8-----	Endosulfan Sulfate	0.19	0.75		U
72-20-8-----	Endrin	0.19	0.75		U
7421-93-4-----	Endrin Aldehyde	0.19	0.75		U
53494-70-5----	Endrin Ketone	0.19	0.75		U
58-89-9-----	Gamma-BHC	0.12	0.37		U
5103-74-2-----	Gamma-Chlordane	0.12	0.37		U
76-44-8-----	Heptachlor	0.12	0.37		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37	0.25	JPM
72-43-5-----	Methoxychlor	0.12	0.37		U
8001-35-2-----	Toxaphene	12	37		U
12674-11-2----	PCB-1016	4.7	19		U
11104-28-2----	PCB-1221	4.7	19		U
11141-16-5----	PCB-1232	4.7	19		U
53469-21-9----	PCB-1242	4.7	19		U
12672-29-6----	PCB-1248	4.7	19		U
11097-69-1----	PCB-1254	4.7	19		U
11096-82-5----	PCB-1260	4.7	19		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07DL

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 019F1901

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/30/08 14:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 15:03

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG
		MDL	(ug/L or ug/Kg) RL CONC		Q
309-00-2-----	Aldrin	1.2	3.7	UD
319-84-6-----	Alpha-BHC	1.2	3.7	UD
5103-71-9-----	Alpha-Chlordane	1.2	3.7	UD
319-85-7-----	Beta-BHC	1.2	3.7	UD
72-54-8-----	4,4'-DDD	1.9	7.5	UD
72-55-9-----	4,4'-DDE	1.9	7.5	UD
50-29-3-----	4,4'-DDT	1.9	7.5	UD
319-86-8-----	Delta-BHC	1.2	3.7	UD
60-57-1-----	Dieldrin	1.9	7.5	460 D
959-98-8-----	Endosulfan I	1.2	3.7	UD
33213-65-9----	Endosulfan II	1.9	7.5	UD
1031-07-8-----	Endosulfan Sulfate	1.9	7.5	UD
72-20-8-----	Endrin	1.9	7.5	UD
7421-93-4-----	Endrin Aldehyde	1.9	7.5	UD
53494-70-5----	Endrin Ketone	1.9	7.5	UD
58-89-9-----	Gamma-BHC	1.2	3.7	UD
5103-74-2-----	Gamma-Chlordane	1.2	3.7	UD
76-44-8-----	Heptachlor	1.2	3.7	UD
1024-57-3-----	Heptachlor Epoxide	1.2	3.7	UD
72-43-5-----	Methoxychlor	1.2	3.7	UD
8001-35-2-----	Toxaphene	120	370	UD
12674-11-2----	PCB-1016	47	190	UD
11104-28-2----	PCB-1221	47	190	UD
11141-16-5----	PCB-1232	47	190	UD
53469-21-9----	PCB-1242	47	190	UD
12672-29-6----	PCB-1248	47	190	UD
11097-69-1----	PCB-1254	47	190	UD
11096-82-5----	PCB-1260	47	190	UD

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 026F2601

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/30/08 15:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 17:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG CONC	UG/KG Q
		MDL	(ug/L or ug/Kg) RL		
309-00-2-----	Aldrin	0.12	0.36		U
319-84-6-----	Alpha-BHC	0.12	0.36		U
5103-71-9-----	Alpha-Chlordane	0.12	0.36	0.32	J
319-85-7-----	Beta-BHC	0.12	0.36		U
72-54-8-----	4,4'-DDD	0.18	0.72		U
72-55-9-----	4,4'-DDE	0.18	0.72		U
50-29-3-----	4,4'-DDT	0.18	0.72	0.31	JY
319-86-8-----	Delta-BHC	0.12	0.36		U
60-57-1-----	Dieldrin	0.18	0.72	0.36	J
959-98-8-----	Endosulfan I	0.12	0.36		U
33213-65-9---	Endosulfan II	0.18	0.72	0.30	JP
1031-07-8-----	Endosulfan Sulfate	0.18	0.72		U
72-20-8-----	Endrin	0.18	0.72		U
7421-93-4-----	Endrin Aldehyde	0.18	0.72		U
53494-70-5----	Endrin Ketone	0.18	0.72		U
58-89-9-----	Gamma-BHC	0.12	0.36		U
5103-74-2-----	Gamma-Chlordane	0.12	0.36		U
76-44-8-----	Heptachlor	0.12	0.36		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.36		U
72-43-5-----	Methoxychlor	0.12	0.36		U
8001-35-2-----	Toxaphene	12	36		U
12674-11-2----	PCB-1016	4.5	18		U
11104-28-2----	PCB-1221	4.5	18		U
11141-16-5----	PCB-1232	4.5	18		U
53469-21-9----	PCB-1242	4.5	18		U
12672-29-6----	PCB-1248	4.5	18		U
11097-69-1----	PCB-1254	4.5	18		U
11096-82-5----	PCB-1260	4.5	18		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 027F2701

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 15:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 17:31

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG
		MDL	(ug/L or ug/Kg) RL CONC		Q
309-00-2-----	Aldrin	0.13	0.38	U
319-84-6-----	Alpha-BHC	0.13	0.38	U
5103-71-9-----	Alpha-Chlordane	0.13	0.38	U
319-85-7-----	Beta-BHC	0.13	0.38	U
72-54-8-----	4,4'-DDD	0.19	0.76	U
72-55-9-----	4,4'-DDE	0.19	0.76	U
50-29-3-----	4,4'-DDT	0.19	0.76	UY
319-86-8-----	Delta-BHC	0.13	0.38	U
60-57-1-----	Dieldrin	0.19	0.76	U
959-98-8-----	Endosulfan I	0.13	0.38	U
33213-65-9----	Endosulfan II	0.19	0.76	U
1031-07-8-----	Endosulfan Sulfate	0.19	0.76	U
72-20-8-----	Endrin	0.19	0.76	U
7421-93-4-----	Endrin Aldehyde	0.19	0.76	U
53494-70-5----	Endrin Ketone	0.19	0.76	U
58-89-9-----	Gamma-BHC	0.13	0.38	U
5103-74-2-----	Gamma-Chlordane	0.13	0.38	U
76-44-8-----	Heptachlor	0.13	0.38	U
1024-57-3-----	Heptachlor Epoxide	0.13	0.38	U
72-43-5-----	Methoxychlor	0.13	0.38	U
8001-35-2-----	Toxaphene	13	38	U
12674-11-2----	PCB-1016	4.8	19	U
11104-28-2----	PCB-1221	4.8	19	U
11141-16-5----	PCB-1232	4.8	19	U
53469-21-9----	PCB-1242	4.8	19	U
12672-29-6----	PCB-1248	4.8	19	U
11097-69-1----	PCB-1254	4.8	19	U
11096-82-5----	PCB-1260	4.8	19	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 028F2801
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 16:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 17:50
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG
		MDL	(ug/L or ug/Kg) RL		CONC
309-00-2-----	Aldrin	0.12	0.37	U
319-84-6-----	Alpha-BHC	0.12	0.37	U
5103-71-9-----	Alpha-Chlordane	0.12	0.37	U
319-85-7-----	Beta-BHC	0.12	0.37	U
72-54-8-----	4,4'-DDD	0.18	0.74	U
72-55-9-----	4,4'-DDE	0.18	0.74	U
50-29-3-----	4,4'-DDT	0.18	0.74	UY
319-86-8-----	Delta-BHC	0.12	0.37	U
60-57-1-----	Dieldrin	0.18	0.74	U
959-98-8-----	Endosulfan I	0.12	0.37	U
33213-65-9----	Endosulfan II	0.18	0.74	U
1031-07-8-----	Endosulfan Sulfate	0.18	0.74	U
72-20-8-----	Endrin	0.18	0.74	U
7421-93-4-----	Endrin Aldehyde	0.18	0.74	U
53494-70-5----	Endrin Ketone	0.18	0.74	U
58-89-9-----	Gamma-BHC	0.12	0.37	U
5103-74-2-----	Gamma-Chlordane	0.12	0.37	U
76-44-8-----	Heptachlor	0.12	0.37	U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37	U
72-43-5-----	Methoxychlor	0.12	0.37	U
8001-35-2-----	Toxaphene	12	37	U
12674-11-2----	PCB-1016	4.6	18	U
11104-28-2----	PCB-1221	4.6	18	U
11141-16-5----	PCB-1232	4.6	18	U
53469-21-9----	PCB-1242	4.6	18	U
12672-29-6----	PCB-1248	4.6	18	U
11097-69-1----	PCB-1254	4.6	18	U
11096-82-5----	PCB-1260	4.6	18	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 029F2901

% Moisture: 17 decanted: (Y/N) N Date Sampled: 09/30/08 16:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 18:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.13	0.40		U
319-84-6-----	Alpha-BHC	0.13	0.40		U
5103-71-9-----	Alpha-Chlordane	0.13	0.40		U
319-85-7-----	Beta-BHC	0.13	0.40	0.18	JPM
72-54-8-----	4,4'-DDD	0.20	0.80		U
72-55-9-----	4,4'-DDE	0.20	0.80		U
50-29-3-----	4,4'-DDT	0.20	0.80		UY
319-86-8-----	Delta-BHC	0.13	0.40		U
60-57-1-----	Dieldrin	0.20	0.80		U
959-98-8-----	Endosulfan I	0.13	0.40		U
33213-65-9----	Endosulfan II	0.20	0.80		U
1031-07-8-----	Endosulfan Sulfate	0.20	0.80		U
72-20-8-----	Endrin	0.20	0.80		U
7421-93-4-----	Endrin Aldehyde	0.20	0.80		U
53494-70-5----	Endrin Ketone	0.20	0.80		U
58-89-9-----	Gamma-BHC	0.13	0.40	0.23	JP
5103-74-2-----	Gamma-Chlordane	0.13	0.40		U
76-44-8-----	Heptachlor	0.13	0.40		U
1024-57-3-----	Heptachlor Epoxide	0.13	0.40		U
72-43-5-----	Methoxychlor	0.13	0.40		U
8001-35-2-----	Toxaphene	13	40		U
12674-11-2----	PCB-1016	5.0	20		U
11104-28-2----	PCB-1221	5.0	20		U
11141-16-5----	PCB-1232	5.0	20		U
53469-21-9----	PCB-1242	5.0	20		U
12672-29-6----	PCB-1248	5.0	20		U
11097-69-1----	PCB-1254	5.0	20		U
11096-82-5----	PCB-1260	5.0	20		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 013F1301

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 11:05

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 13:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG CONC	UG/KG Q
		MDL	(ug/L or ug/Kg) RL		
309-00-2-----	Aldrin	0.12	0.37	0.16	JPM
319-84-6-----	Alpha-BHC	0.12	0.37		U
5103-71-9-----	Alpha-Chlordane	0.12	0.37		U
319-85-7-----	Beta-BHC	0.12	0.37		U
72-54-8-----	4,4'-DDD	0.18	0.74		U
72-55-9-----	4,4'-DDE	0.18	0.74		U
50-29-3-----	4,4'-DDT	0.18	0.74	0.41	J
319-86-8-----	Delta-BHC	0.12	0.37		U
60-57-1-----	Dieldrin	0.18	0.74		U
959-98-8-----	Endosulfan I	0.12	0.37		U
33213-65-9----	Endosulfan II	0.18	0.74	1.6	
1031-07-8-----	Endosulfan Sulfate	0.18	0.74		U
72-20-8-----	Endrin	0.18	0.74		U
7421-93-4-----	Endrin Aldehyde	0.18	0.74		U
53494-70-5----	Endrin Ketone	0.18	0.74		U
58-89-9-----	Gamma-BHC	0.12	0.37		U
5103-74-2-----	Gamma-Chlordane	0.12	0.37	0.23	JPM
76-44-8-----	Heptachlor	0.12	0.37		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37		U
72-43-5-----	Methoxychlor	0.12	0.37	0.29	JPM
8001-35-2-----	Toxaphene	12	37		U
12674-11-2----	PCB-1016	4.6	18		U
11104-28-2----	PCB-1221	4.6	18		U
11141-16-5----	PCB-1232	4.6	18		U
53469-21-9----	PCB-1242	4.6	18		U
12672-29-6----	PCB-1248	4.6	18		U
11097-69-1----	PCB-1254	4.6	18		U
11096-82-5----	PCB-1260	4.6	18		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810033-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 034F0101

% Moisture: 9 decanted: (Y/N) N Date Sampled: 10/01/08 10:00

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/09/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 16:20

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.1	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.91	1.8	U
93-76-5-----	2,4,5-T	0.91	1.8	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810033-02
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 035F0101
 % Moisture: 20 decanted: (Y/N) N Date Sampled: 10/01/08 10:30
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/09/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 17:00
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	21	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.1	U
93-76-5-----	2,4,5-T	1.0	2.1	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810033-03
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 036F0101
 % Moisture: 30 decanted: (Y/N) N Date Sampled: 10/01/08 11:00
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/09/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 17:39
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	12	24	U
93-72-1-----	2,4,5-TP (Silvex)	1.2	2.4	U
93-76-5-----	2,4,5-T	1.2	2.4	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 016F0201

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 02:11

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.6	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.96	1.9	U
93-76-5-----	2,4,5-T	0.96	1.9	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 017F0201

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 02:50

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.6	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.96	1.9	U
93-76-5-----	2,4,5-T	0.96	1.9	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-05
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 018F0201
 % Moisture: 10 decanted: (Y/N) N Date Sampled: 09/30/08 11:40
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 03:29
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.3	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.93	1.8	U
93-76-5-----	2,4,5-T	0.93	1.8	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 014F0201

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 10:35

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 00:53

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.2	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.92	1.8	U
93-76-5-----	2,4,5-T	0.92	1.8	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 019F0201

% Moisture: 18 decanted: (Y/N) N Date Sampled: 09/30/08 14:20

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 04:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	20	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.0	U
93-76-5-----	2,4,5-T	1.0	2.0	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 020F0201

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/30/08 14:55

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 04:47

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG
		MDL	RL		CONC	Q
94-75-7-----	2,4-D	9.3	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.93	1.9	U
93-76-5-----	2,4,5-T	0.93	1.9	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 023F0201

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/30/08 15:20

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 06:43

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG
		MDL	RL		CONC	Q
94-75-7-----	2,4-D	9.0	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.90	1.8	U
93-76-5-----	2,4,5-T	0.90	1.8	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: 0810010-09

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 025F0201

% Moisture: 13 decanted: (Y/N) N Date Sampled: 09/30/08 15:40

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 08:01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.6	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.96	1.9	U
93-76-5-----	2,4,5-T	0.96	1.9	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-10
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 026F0201
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 16:00
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 08:40
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.2	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.92	1.8	U
93-76-5-----	2,4,5-T	0.92	1.8	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-11
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 027F0201
 % Moisture: 17 decanted: (Y/N) N Date Sampled: 09/30/08 16:00
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 09:19
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	20	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.0	U
93-76-5-----	2,4,5-T	1.0	2.0	U

FORM 1
 HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: 0810010-02
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 015F0201
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/30/08 11:05
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 01:32
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG
		MDL	RL		CONC	Q
94-75-7-----	2,4-D	9.2	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.92	1.8	U
93-76-5-----	2,4,5-T	0.92	1.8	U

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG GULFPORT12

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP_ANL
HERB	%	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	%	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	%	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	%	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	%	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HG	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HG	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
M	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
M	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
CN	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5
CN	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5
CN	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
OS	%	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SBDIT03	0810033-03	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SBDIT02	0810033-02	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SBDIT01	0810033-01	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OS	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	UG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OV	%	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/3/2008	3	0	3
OV	%	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	%	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	%	01SBDIT03	0810033-03	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2
OV	%	01SBDIT02	0810033-02	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2
OV	%	01SBDIT01	0810033-01	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2
OV	%	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/3/2008	3	0	3
OV	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2
OV	UG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/3/2008	10/3/2008	2	0	2
OV	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
OV	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/2/2008	2	0	2
PCB	%	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS02501DL	0810010-07DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS01701DL	0810010-01DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PCB	%	01SBDIT02DL	0810033-02DL	NM	10/1/2008	10/6/2008	10/13/2008	5	7	12
PCB	%	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/13/2008	5	7	12
PCB	%	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	%	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	%	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS02501DL	0810010-07DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PCB	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PCB	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PCB	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/13/2008	5	7	12
PCB	UG/KG	01SBDIT02DL	0810033-02DL	NM	10/1/2008	10/6/2008	10/13/2008	5	7	12

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	UG/KG	01SS01701DL	0810010-01DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS02501DL	0810010-07DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	%	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	%	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	%	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	%	01SS01701DL	0810010-01DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PEST	UG/KG	01SS02501DL	0810010-07DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS01701DL	0810010-01DL	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	UG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
PEST	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10
PEST	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/10/2008	6	4	10

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-012
Workorder: 0810010 and 0810033

Date Sampled	Date Received	Lab ID	Client ID
9/30/2008	10/1/2008	0810010-01	01SS01701
9/30/2008	10/1/2008	0810010-02	01SS42001
9/30/2008	10/1/2008	0810010-03	01SS01401
9/30/2008	10/1/2008	0810010-04	01SS01401DUP
9/30/2008	10/1/2008	0810010-05	01SS01501
9/30/2008	10/1/2008	0810010-06	01SS02401
9/30/2008	10/1/2008	0810010-07	01SS02501
9/30/2008	10/1/2008	0810010-08	01SS13701
9/30/2008	10/1/2008	0810010-09	01SS13801
9/30/2008	10/1/2008	0810010-10	01SS13901
9/30/2008	10/1/2008	0810010-11	01SS13901DUP
10/1/2008	10/2/2008	0810033-01	01SBDIT01
10/1/2008	10/2/2008	0810033-02	01SBDIT02
10/1/2008	10/2/2008	0810033-03	01SBDIT03

Volatiles

Method: The samples were extracted/analyzed by USEPA SW-846 Methods 5035/8260B (EnCore field sampling with lab preservation followed by purge and trap then capillary column GC/MS) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The volatile analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following note/exceptions:

- The method blanks associated with these samples have reported concentrations of acetone, methylene chloride, 1,2,3-trichlorobenzene and/or 1,2,4-trichlorobenzene. Reported concentrations in the associated samples are qualified with a "B".
- In spike samples V4BLK1003LCS/LCSD, recoveries of 1,2-dichloroethane exceeded the limit of 125% at (120%)/138%. All other recoveries and relative percent differences were within limits.
- In spike samples 01SS02501MS/MSD, recoveries of chlorobenzene and 1,2,4-trichlorobenzene were below the respective limits of 74% and 65% at (75%)/74% and 60%/(65%), respectively. All other recoveries and relative percent differences were within limits.
- Manual integrations: Quantitation signals were manually integrated in order to accurately reflect the peak areas based on the technical judgment of the analyst. A listing of the manual integrations performed and reason for the integration is attached to this case narrative. Before and after "pictures" are included with the raw data for each integration performed.

Semivolatiles

Method: The samples were analyzed by USEPA SW-846 Methods 3541/8270C (automated soxhlet extraction followed by capillary column GC/MS) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- In the initial calibration verification, 3,3'-dichlorobenzidine exceeded 25% difference with a positive bias. It was not detected in the associated samples.
- Bis(2-ethylhexyl)phthalate was detected in the method blanks at a concentration less than 1/2 the quantitation limit. Reported concentrations in the associated samples are qualified with a "B".
- In spike samples 01SS02501MS/MSD, 1 of 66 relative percent differences and 1 of 132 recoveries were outside the established limits. See form 3. Analyses of the MS/MSD were started 12 hours 30 minutes and 13 hours 6 minutes after the associated tuning standard.
- Manual integrations: Quantitation signals were manually integrated in order to accurately reflect the peak areas based on the technical judgment of the analyst. A listing of the manual integrations performed and reason for the integration is attached to this case narrative. Before and after "pictures" are included with the raw data for each integration performed.

Pesticides/PCBs

Method: The samples were analyzed by USEPA SW-846 Methods 3550C/8081A/8082 (sonication extraction followed by capillary column GC/ECD) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Initial analyses of the samples were completed using full calibration for 1016/1260. Analysis of sample 01SBDIT02 was completed under full 1242 calibration. As no other aroclor patterns were identified, no other aroclor calibration checks were performed.
- Some analytes in the continuing calibration verifications (CCVs) exceeded the 20%D limit with a positive bias. In most cases, the analyte was not detected above the quantitation limit and surrogate recoveries were determined not to have been biased into control by the exceedences. For the ending calibration verifications analyzed 10/10/08 at 19:22, 4,4'-DDT exceeded 20% difference at -21.3%/-22.4%. Reported concentrations in the associated samples are qualified with a "Y" for a potential negative bias.
- In spike samples 01SS02501MS/MSD, recoveries of dieldrin exceeded the limit of 125% at 1557%/270% with a relative percent difference of 63. This is attributed to fluctuations in the natural sample concentration or "hot spots".
- Recoveries of the surrogate TCMX exceeded the limit of 120% at 137%/136% in sample 01SBDIT02. This is attributed to sample matrix. In addition, the pesticide form I for this

sample is qualified with the statement "The reported concentration for these compounds may be due to the presence of PCB".

- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

Herbicide Samples

Method: The samples were analyzed by USEPA SW-846 Methods 8151A (sonication and separatory funnel extraction then esterification and capillary column GC/ECD) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Some analytes in the initial calibration verification (ICV) or continuing calibration verifications (CCVs) exceeded the 20 %D limit with a high bias. No target analytes were detected in the associated samples.
- In spike samples 01SS02501MS/MSD, 4 of 6 recoveries exceeded limits with a positive bias. See form 3.
- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

LSAMP_ID	SAMP_ID	LAB_CHEM	MANUALS
SBLK1003BS1LCS	SBLK1003BS1LCS	2,4-Dimethylphenol	A
0810010-07MS	01SS02501MS	2,4-Dimethylphenol	A
0810010-07MSD	01SS02501MSD	2,4-Dimethylphenol	A
SBLK1007BS1	SBLK1007BS1	1,4-dichlorobenzene-d4(IS)	A
SBLK1007BS1LCS	SBLK1007BS1LCS	2,4-Dimethylphenol	A

Chromatographic Flags for Manual Integrations

- A:** The peak was manually integrated as it was **not integrated** in the original chromatogram.
- B:** The peak was manually integrated due to **resolution or coelution** issues in the original chromatogram.
- C:** The peak was manually integrated to **correct the baseline** from the original chromatogram.
- D:** The peak was manually integrated to **identify the correct peak** as the incorrect peak was identified in the original chromatogram.
- E:** The peak was manually integrated to **include the entire peak** as the original chromatogram only integrated part of the peak.



SBLK1007BS1LCS



EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42079

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:						Lab Use Only:				
Name <u>Per Contract</u>		Name <u>PER CONTRACT</u>		VOL 8260 SVOL 8270 P-EST PCB 8081/82 HEPB 8151 TACMET Hg 6010/712 CN 9012 ASBESTOS							VOA Headspace	Y	N	<u>NA</u>
Company <u>Proz</u>		Company <u>Project</u>									Field Filtered	Y	N	<u>NA</u>
Address <u>0700</u>		Address <u>1126 00 700</u>									Correct Containers	<u>Y</u>	N	NA
City <u>Tech NUS</u>		City _____									Discrepancies	Y	<u>N</u>	NA
State, Zip _____		State, Zip <u>P.O. 1028532</u>									Cust. Seals Intact	<u>Y</u>	N	NA
Phone _____		Phone _____									Containers Intact	<u>Y</u>	N	NA
Fax _____		Fax _____		Airbill #: <u>7685, 1281</u>				CAR #: _____						
E-mail _____		E-mail _____		Project No./Name:		Sampler's (Signature):								
<u>00700/SITE 1 R1</u>														
Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix								Comments	No. of Bottles	Lab Use Only Containers/Pres.	
<u>0810010-01</u>	<u>9/30/08 10:35</u>	<u>015501701</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>1-0, 1L, 3-0</u>	
<u>-02 WS -02</u>	<u>9/30/08 11:05</u>	<u>015542001</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>↓</u>	
<u>-03 -03</u>	<u>9/30/08/11:30</u>	<u>015501401</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>↓</u>	
<u>-04 -04</u>	<u>9/30/08/11:30</u>	<u>015501401 DUP</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	<u>1L IM, 3-0</u>	
<u>-05 -05</u>	<u>9/30/08/11:40</u>	<u>015501501</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>1L WS 4-0, 1L</u>	
<u>-06 -06</u>	<u>9/30/14:20</u>	<u>015502401</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>↓</u>	
<u>-07 -07</u>	<u>9/30/14:45</u>	<u>015502501</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>↓</u>	
<u>↓ -08</u>	<u>9/30/14:50</u>	<u>015502501 MS</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	<u>3-0, 1L, 1M</u>	
<u>↓ -09</u>	<u>9/30/14:55</u>	<u>015502501 MD</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	<u>↓</u>	
<u>-08 -10</u>	<u>9/30/15:20</u>	<u>015513701</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>4-0, 1L, 1M</u>	
<u>-09 -11</u>	<u>9/30/15:40</u>	<u>015513801</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>↓</u>	
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)		REMARKS: * NO DUP FOR ASBESTOS * RAPID TURN AROUND * TIME REQUIRED						Details:			
Relinquished by: (Signature)		Date/Time	Received By: (Signature)								Page <u>1</u> of <u>2</u>			
Relinquished by: (Signature)		Date/Time	Received By: (Signature)								Cooler No. <u>1</u> of <u>2</u>			
Received for Laboratory by: (Signature)		Date/Time	Temperature								Date Shipped <u>9/30/08</u>			
		<u>10/1/08</u>	<u>0.8°C, 0.10C</u>		Shipped By <u>Fed Ex</u>									
					Turnaround <u>RAPID</u>									

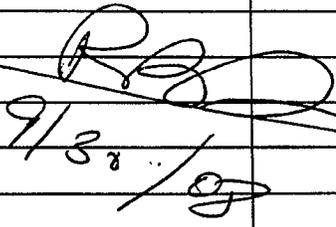
Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

09:00

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42010

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:						Lab Use Only:				
Name _____		Name <u>P.O. 1028532</u>		VDC SVOC PEST/PCB HERB TAL METAL LG+CN ASBESTOS						VOA Headspace Y N <u>NA</u>				
Company _____		Company _____								Field Filtered Y N <u>NA</u>				
Address _____		Address _____								Correct Containers <u>Y</u> N NA				
City _____		City _____								Discrepancies Y <u>N</u> NA				
State, Zip _____		State, Zip _____								Cust. Seals Intact <u>Y</u> N NA				
Phone _____		Phone _____		Containers Intact <u>Y</u> N NA			Airbill #: <u>7685, 1281</u>							
Fax _____		Fax _____		Project No./Name:			CAR #: _____							
E-mail _____		E-mail _____		Sampler's (Signature):										
Lab Use Only Lab # <u>WS</u>		Date/Time Sampled	Sample Description		Sample Matrix							Comments	No. of Bottles	Lab Use Only Containers/Pres.
<u>0810010-12</u>		<u>9/30/08 6:00</u>	<u>015513901</u>		<u>soil</u>	<u>✓ ✓ ✓ ✓ ✓ ✓</u>							<u>6</u>	<u>4-0, 1L, 1M</u>
<u>-11-15</u>		<u>9/30/08 6:00</u>	<u>015513901 DUP</u>		<u>soil</u>	<u>✓ ✓ ✓ ✓ ✓</u>							<u>5</u>	<u>3-0, 1L, 1M</u>
														
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)			REMARKS: <u>* Quick Turn *</u> <u>Ahead TIME</u>						Details:		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)									Page <u>2</u> of <u>2</u>		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)									Cooler No. <u>2</u> of <u>2</u>		
Received for Laboratory by: (Signature)		Date/Time	Temperature									Date Shipped <u>9/30/08</u>		
		<u>10/1/08</u>	<u>0.8°C, 0.1°C</u>			Shipped By <u>Fed Ex</u>								
		<u>09:00</u>				Turnaround <u>RAPID</u>								

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42214

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:		
Name: <u>DIED PRO</u>		Name: _____		VOC 02608 SVOC 8270C PEST/PCB 80812 HERB 0151A TRACE METS + HG 60106 CN 90124				VOA Headspace Y N <input checked="" type="radio"/> NA		
Company: <u>Terratech, LLC</u>		Company: _____						Field Filtered Y N <input checked="" type="radio"/> NA		
Address: _____		Address: <u>532</u>						Correct Containers <input checked="" type="radio"/> Y N NA		
City: <u>1028</u>		City: _____						Discrepancies <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA		
State, Zip: _____		State, Zip: _____						Cust. Seals Intact <input checked="" type="radio"/> Y N NA		
Phone: _____		Phone: _____						Containers Intact <input checked="" type="radio"/> Y N NA		
Fax: _____		Fax: _____		Airbill #: <u>5899</u>						
E-mail: _____		E-mail: _____		CAR #: _____						
Project No./Name: _____		Sampler's (Signature): _____								

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix								Comments	No. of Bottles	Lab Use Only Containers/Pres.
6810033-01	10/10/08 10:00	01SB DIT01	Soil	<input checked="" type="checkbox"/>			5	3-0, 1L, 1M					
-02	10:30	01SB DIT02	Soil	<input checked="" type="checkbox"/>			5	↓					
-03	1100	01SB DIT03	Soil	<input checked="" type="checkbox"/>			5	↓					
		TEMP BLANK											
<div style="font-size: 2em; opacity: 0.5;"> </div>													

Sample Kit Prep'd by: (Signature) _____		Date/Time	Received By: (Signature) _____		REMARKS: <div style="font-size: 1.5em; font-family: cursive;">* Quick Turn *</div>	Details:	
Relinquished by: (Signature) _____		Date/Time	Received By: (Signature) _____			Page <u>1</u> of <u>1</u>	
Relinquished by: (Signature) _____		Date/Time	Received By: (Signature) _____			Cooler No. <u>1</u> of <u>1</u>	
Received for Laboratory by: (Signature) _____		Date/Time	Temperature			Date Shipped <u>10/10/08</u>	
					Shipped By: <u>[Signature]</u>	Turnaround <u>3-7D</u>	

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

**EMPIRICAL LABORATORIES
COOLER RECEIPT FORM**

LIMS Number: 0810010 Number of Coolers: 2 of 2
 Client: Tetra tech NUS Project: GTO-065
 Date/Time Received: 10/01/08 09:00 Date cooler(s) opened: 10/01/08
 Opened By (print): WILLIAM SCHWAB (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 1281

2. Were custody seals on outside of cooler(s)? Yes No
 How many: 2 Seal date: - Seal Initials: -

- 3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
- 4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
- 5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
- 6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
- 7. Was project identifiable from custody papers? Yes No N/A
- 8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 0.10C

Dates samples were logged-in: 10/01/08

9. Initial this form to acknowledge login of sample(s): (Name): WILLIAM SCHWAB (Initial): WS

- 10. Were all bottle lids intact and sealed tightly? Yes No N/A
- 11. Did all bottles arrive unbroken? Yes No N/A
- 12. Was all required bottle label information complete? Yes No N/A
- 13. Did all bottle labels agree with custody papers? Yes No N/A
- 14. Were correct containers used for the analyses indicated? Yes No N/A
- 15. Were preservative levels correct in all applicable sample containers? Yes No N/A
- 16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
- 17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0810010 Number of Coolers: 1 of 2
Client: Tetra Tech NUS Project: LTO-065
Date/Time Received: 10/01/08 09:00 Date cooler(s) opened: 10/01/08
Opened By (print): WILLIAM SCHWAB (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 7685

2. Were custody seals on outside of cooler(s)? Yes No
How many: 2 Seal date: - Seal Initials: -

- 3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
- 4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
- 5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
- 6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
- 7. Was project identifiable from custody papers? Yes No N/A
- 8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 0.80C

Dates samples were logged-in: 10/01/08

9. Initial this form to acknowledge login of sample(s): (Name): WILLIAM SCHWAB (Initial): WS

- 10. Were all bottle lids intact and sealed tightly? Yes No N/A
- 11. Did all bottles arrive unbroken? Yes No N/A
- 12. Was all required bottle label information complete? Yes No N/A
- 13. Did all bottle labels agree with custody papers? Yes No N/A
- 14. Were correct containers used for the analyses indicated? Yes No N/A
- 15. Were preservative levels correct in all applicable sample containers? Yes No N/A
- 16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
- 17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0810033 Number of Coolers: 1 of 1
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 10/02/08 09:00 Date cooler(s) opened: 10/02/08
Opened By (print): WILLIAM SCHWAB (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5899

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 10/1/08 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.0°C

Dates samples were logged-in: 10/02/08

9. Initial this form to acknowledge login of sample(s): (Name): WILLIAM SCHWAB (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4BLK1002

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID: V4BLK01 Lab Sample ID: V4BLK1002

Date Analyzed: 10/02/08 Time Analyzed: 1501

Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4BLK1002LCS	V4BLK1002LCS	V4LCS01	1251
02	01SS02501MS	0810010-07MS	1001007AM	1330
03	01SS02501MSD	0810010-07MSD	1001007AS	1400
04	01SS01701	0810010-01	1001001A	1603
05	01SS42001	0810010-02	1001002A	1633
06	01SS01401	0810010-03	1001003A	1704
07	01SS01401 DU	0810010-04	1001004A	1735
08	01SS01501	0810010-05	1001005A	1805
09	01SS02401	0810010-06	1001006A	1836
10	01SS02501	0810010-07	1001007A	1906
11	01SS13701	0810010-08	1001008A	1937
12	01SS13801	0810010-09	1001009A	2007
13	01SS13901 DU	0810010-11	1001011A	2109
14				
15				
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COMMENTS:

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK1002

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix: (soil/water) SOIL Lab Sample ID: V4BLK1002
 Sample wt/vol: 5.0 (g/mL) G Lab File ID: V4BLK01
 Level: (low/med) LOW Date Sampled: _____
 % Moisture: not dec. 0 Date Analyzed: 10/02/08 15:01
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.6	10	2.9	J
71-43-2	Benzene	0.19	10		U
74-97-5	Bromochloromethane	0.35	10		U
75-27-4	Bromodichloromethane	0.22	10		U
75-25-2	Bromoform	0.59	10		U
74-83-9	Bromomethane	0.41	10		U
78-93-3	2-Butanone	2.0	10		U
75-15-0	Carbon disulfide	0.27	10		U
56-23-5	Carbon tetrachloride	0.24	10		U
108-90-7	Chlorobenzene	2.5	10		U
75-00-3	Chloroethane	0.40	10		U
67-66-3	Chloroform	0.43	10		U
74-87-3	Chloromethane	0.36	10		U
110-82-7	Cyclohexane	0.42	10		U
124-48-1	Dibromochloromethane	0.24	10		U
106-93-4	1,2-Dibromoethane	0.56	10		U
75-34-3	1,1-Dichloroethane	0.41	10		U
107-06-2	1,2-Dichloroethane	0.43	10		U
75-35-4	1,1-Dichloroethene	0.32	10		U
156-59-2	cis-1,2-Dichloroethene	0.27	10		U
156-60-5	trans-1,2-Dichloroethene	0.55	10		U
540-59-0	1,2-Dichloroethene (total)	0.55	10		U
78-87-5	1,2-Dichloropropane	0.57	10		U
10061-01-5	cis-1,3-Dichloropropene	0.35	10		U
10061-02-6	trans-1,3-Dichloropropene	0.37	10		U
100-41-4	Ethylbenzene	0.24	10		U
591-78-6	2-Hexanone	0.61	10		U
98-82-8	Isopropylbenzene	0.26	10		U
79-20-9	Methyl acetate	0.57	10		U
108-87-2	Methyl cyclohexane	0.39	10		U
75-09-2	Methylene chloride	1.1	10	2.8	J
108-10-1	4-Methyl-2-pentanone	0.60	10		U
1634-04-4	Methyl tert-butyl ether	0.57	10		U
100-42-5	Styrene	0.34	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.32	10		U
127-18-4	Tetrachloroethene	0.21	10		U
108-88-3	Toluene	0.38	10	0.64	J
87-61-6	1,2,3-Trichlorobenzene	0.19	10	0.36	J
120-82-1	1,2,4-Trichlorobenzene	0.31	10	0.31	J

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK1002

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: V4BLK1002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V4BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 10/02/08 15:01

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.34	10		U
79-00-5-----	1,1,2-Trichloroethane	0.49	10		U
79-01-6-----	Trichloroethene	0.41	10		U
76-13-1-----	Trichlorotrifluoroethane	0.36	10		U
75-01-4-----	Vinyl chloride	0.47	10		U
1330-20-7-----	Xylene (total)	0.21	10		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID: V4BLK01 Lab Sample ID: V4BLK1003

Date Analyzed: 10/03/08 Time Analyzed: 1244

Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4BLK1003LCS	V4BLK1003LCS	V4LCS01	1112
02	01SS13901	0810010-10	1001010B	1346
03	01SBDIT01	0810033-01	1003301A	1416
04	01SBDIT02	0810033-02	1003302A	1447
05	01SBDIT03	0810033-03	1003303A	1518
06	V4BLK1003LCS	V4BLK1003LCSD	V4LCSD01	1619
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COMMENTS:

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: V4BLK1003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V4BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 10/03/08 12:44

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.6	10	2.8	J
71-43-2	Benzene	0.19	10		U
74-97-5	Bromochloromethane	0.35	10		U
75-27-4	Bromodichloromethane	0.22	10		U
75-25-2	Bromoform	0.59	10		U
74-83-9	Bromomethane	0.41	10		U
78-93-3	2-Butanone	2.0	10		U
75-15-0	Carbon disulfide	0.27	10		U
56-23-5	Carbon tetrachloride	0.24	10		U
108-90-7	Chlorobenzene	2.5	10		U
75-00-3	Chloroethane	0.40	10		U
67-66-3	Chloroform	0.43	10		U
74-87-3	Chloromethane	0.36	10		U
110-82-7	Cyclohexane	0.42	10		U
124-48-1	Dibromochloromethane	0.24	10		U
106-93-4	1,2-Dibromoethane	0.56	10		U
75-34-3	1,1-Dichloroethane	0.41	10		U
107-06-2	1,2-Dichloroethane	0.43	10		U
75-35-4	1,1-Dichloroethene	0.32	10		U
156-59-2	cis-1,2-Dichloroethene	0.27	10		U
156-60-5	trans-1,2-Dichloroethene	0.55	10		U
540-59-0	1,2-Dichloroethene (total)	0.55	10		U
78-87-5	1,2-Dichloropropane	0.57	10		U
10061-01-5	cis-1,3-Dichloropropene	0.35	10		U
10061-02-6	trans-1,3-Dichloropropene	0.37	10		U
100-41-4	Ethylbenzene	0.24	10		U
591-78-6	2-Hexanone	0.61	10		U
98-82-8	Isopropylbenzene	0.26	10		U
79-20-9	Methyl acetate	0.57	10		U
108-87-2	Methyl cyclohexane	0.39	10		U
75-09-2	Methylene chloride	1.1	10	4.8	J
108-10-1	4-Methyl-2-pentanone	0.60	10		U
1634-04-4	Methyl tert-butyl ether	0.57	10		U
100-42-5	Styrene	0.34	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.32	10		U
127-18-4	Tetrachloroethene	0.21	10		U
108-88-3	Toluene	0.38	10		U
87-61-6	1,2,3-Trichlorobenzene	0.19	10	0.25	J
120-82-1	1,2,4-Trichlorobenzene	0.31	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL

Lab Sample ID: V4BLK1003

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: V4BLK01

Level: (low/med) LOW

Date Sampled: _____

% Moisture: not dec. 0

Date Analyzed: 10/03/08 12:44

GC Column: DB-VRX ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.34	10		U
79-00-5-----	1,1,2-Trichloroethane	0.49	10		U
79-01-6-----	Trichloroethene	0.41	10		U
76-13-1-----	Trichlorotrifluoroethane	0.36	10		U
75-01-4-----	Vinyl chloride	0.47	10		U
1330-20-7-----	Xylene (total)	0.21	10		U

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA25189

Lab File ID: V4BFB01 BFB Injection Date: 08/11/08

Instrument ID: VOA4 BFB Injection Time: 1435

GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.8
75	30.0 - 60.0% of mass 95	53.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	60.7
175	5.0 - 9.0% of mass 174	4.2 (6.9)1
176	95.0 - 101.0% of mass 174	58.2 (95.9)1
177	5.0 - 9.0% of mass 176	4.0 (6.9)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V4STD200PPB	V4STD200PPB	V4STD07	08/11/08	1625
02	V4STD100PPB	V4STD100PPB	V4STD06	08/11/08	1655
03	V4STD50PPB	V4STD50PPB	V4STD05	08/11/08	1726
04	V4BLK0811LCS	V4BLK0811LCS	V4ICV01	08/11/08	1757
05	V4STD20PPB	V4STD20PPB	V4STD04	08/11/08	1828
06	V4STD10PPB	V4STD10PPB	V4STD03	08/11/08	1858
07	V4STD5PPB	V4STD5PPB	V4STD02	08/11/08	1929
08	V4STD2PPB	V4STD2PPB	V4STD01	08/11/08	2000
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FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 .2000

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Acetone	2ORDR	0.00000000	8.87863459	-1.0545921	0.999
Acrolein	AVRG		5.215e-002		10.8
Acrylonitrile	AVRG		7.99e-002		7.6
Benzene	AVRG		1.17033631		7.7
Bromobenzene	AVRG		0.89078740		8.9
Bromochloromethane	AVRG		0.16380791		8.4
Bromodichloromethane	AVRG		0.39454310		7.2
Bromoform	AVRG		0.48484151		9.5
Bromomethane	AVRG		0.28092280		14.2
2-Butanone	AVRG		0.14095699		14.4
n-Butylbenzene	AVRG		2.86006134		6.8
sec-Butylbenzene	AVRG		3.63109594		9.3
tert-Butylbenzene	AVRG		2.31093502		7.7
Carbon disulfide	AVRG		1.07141070		9.7
Carbon tetrachloride	AVRG		0.39104726		8.8
Chlorobenzene	AVRG		1.91850204		11.9
Chloroethane	AVRG		0.28415289		6.6
2-Chloroethyl vinyl ether	AVRG		1.79e-003		8.3
Chloroform	AVRG		0.53566752		9.0
Chloromethane	AVRG		0.51468228		13.1
2-Chlorotoluene	AVRG		2.37152269		8.9
4-Chlorotoluene	AVRG		2.56989719		12.6
Cyclohexane	AVRG		0.48403824		6.9
Dibromochloromethane	AVRG		0.74824431		9.6
1,2-Dibromo-3-chloropropane	AVRG		0.14460299		12.1
1,2-Dibromoethane	AVRG		0.59877307		12.0
Dibromomethane	AVRG		0.18247515		11.8
1,2-Dichlorobenzene	AVRG		1.45885784		11.7
1,3-Dichlorobenzene	AVRG		1.68368656		13.3
1,4-Dichlorobenzene	AVRG		1.69727497		13.1
Dichlorodifluoromethane	AVRG		0.46670707		6.9
1,1-Dichloroethane	AVRG		0.58779398		6.0
1,2-Dichloroethane	AVRG		0.33154374		8.2
1,1-Dichloroethene	AVRG		0.31154635		6.1
cis-1,2-Dichloroethene	AVRG		0.34227057		6.2
trans-1,2-Dichloroethene	AVRG		0.33411275		8.0
1,2-Dichloroethene (total)	AVRG		0.33819166		6.9

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,2-Dichloropropane	AVRG		0.30814061		6.6
1,3-Dichloropropane	AVRG		0.94919699		11.8
2,2-Dichloropropane	AVRG		0.43434504		6.8
1,1-Dichloropropene	AVRG		0.42016485		6.6
cis-1,3-Dichloropropene	AVRG		0.44527157		5.9
trans-1,3-Dichloropropene	AVRG		0.88411756		9.6
Ethylbenzene	AVRG		3.29878271		10.3
Ethyl methacrylate	AVRG		0.78484362		8.0
Hexachlorobutadiene	AVRG		0.58582425		10.0
2-Hexanone	AVRG		0.51123766		14.7
Iodomethane	AVRG		0.40716529		11.9
Isopropylbenzene	AVRG		2.79259455		8.2
p-Isopropyltoluene	AVRG		2.89408779		7.1
Methyl acetate	AVRG		0.20004566		13.3
Methyl cyclohexane	AVRG		0.47111811		7.3
Methylene chloride	LINR	0.00000000	0.37384817		0.999
Methyl methacrylate	AVRG		0.20144836		10.8
4-Methyl-2-pentanone	AVRG		0.23923667		10.4
MTBE	AVRG		0.41512753		6.9
Naphthalene	AVRG		1.80825263		9.1
n-Propylbenzene	AVRG		4.05053469		9.2
Styrene	AVRG		2.06080683		7.0
1,1,1,2-Tetrachloroethane	AVRG		0.67870506		9.0
1,1,2,2-Tetrachloroethane	AVRG		0.66157014		10.6
Tetrachloroethene	AVRG		0.82038552		9.6
Tetrahydrofuran	LINR	0.00000000	6.392e-002		0.996
Toluene	AVRG		1.77955624		11.7
1,2,3-Trichlorobenzene	AVRG		0.91285670		8.4
1,2,4-Trichlorobenzene	AVRG		1.03068968		11.8
1,1,1-Trichloroethane	AVRG		0.42546850		8.1
1,1,2-Trichloroethane	AVRG		0.48782511		12.5
Trichloroethene	AVRG		0.33010050		10.5
Trichlorofluoromethane	AVRG		0.56205104		8.8
Trichlorotrifluoroethane	AVRG		0.31721328		5.5
1,2,3-Trichloropropane	AVRG		0.18080059		11.1
1,2,4-Trimethylbenzene	AVRG		2.75748641		6.7
1,3,5-Trimethylbenzene	AVRG		2.71986127		8.0

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Vinyl acetate	AVRG		0.50994404		7.9
Vinyl chloride	AVRG		0.47350622		7.2
m,p-Xylene	AVRG		2.55691809		13.6
Xylene (total)	AVRG		2.55951341		11.6
Dibromofluoromethane	AVRG		0.29360379		1.6
1,2-Dichloroethane-d4	AVRG		5.594e-002		3.6
Toluene-d8	AVRG		2.17376880		7.5
Bromofluorobenzene	AVRG		0.89838093		5.6

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

LAB FILE ID: RF2: V4STD01 RF5: V4STD02 RF10: V4STD03
RF20: V4STD04 RF50: V4STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
Acetone	0.211	0.144	0.172	0.131	0.112
Acrolein	0.057	0.046	0.053	0.048	0.046
Acrylonitrile	0.081	0.072	0.090	0.078	0.073
Benzene	1.323	1.141	1.259	1.121	1.059
Bromobenzene	1.001	0.918	0.946	0.849	0.771
Bromochloromethane	0.187	0.151	0.173	0.162	0.146
Bromodichloromethane	0.430	0.376	0.433	0.383	0.356
Bromoform	0.543	0.467	0.503	0.444	0.428
Bromomethane	0.333	0.237	0.249	0.267	0.250
2-Butanone	0.172	0.121	0.156	0.131	0.116
n-Butylbenzene	3.170	2.897	2.897	2.702	2.575
sec-Butylbenzene	4.234	3.499	3.715	3.354	3.260
tert-Butylbenzene	2.575	2.410	2.346	2.147	2.085
Carbon disulfide	1.252	0.985	1.146	1.010	0.952
Carbon tetrachloride	0.455	0.372	0.410	0.365	0.354
Chlorobenzene	2.235	2.014	2.189	1.805	1.783
Chloroethane	0.307	0.255	0.303	0.288	0.267
2-Chloroethyl vinyl ether			0.002	0.002	0.002
Chloroform	0.616	0.524	0.587	0.526	0.482
Chloromethane	0.636	0.523	0.535	0.519	0.422
2-Chlorotoluene	2.709	2.485	2.491	2.329	2.103
4-Chlorotoluene	2.846	2.648	2.918	2.536	2.178
Cyclohexane	0.526	0.482	0.527	0.468	0.431
Dibromochloromethane	0.832	0.722	0.864	0.732	0.717
1,2-Dibromo-3-chloropropane	0.165	0.132	0.151	0.131	0.122
1,2-Dibromoethane	0.712	0.572	0.691	0.570	0.570
Dibromomethane	0.226	0.171	0.190	0.178	0.158
1,2-Dichlorobenzene	1.789	1.467	1.527	1.357	1.263
1,3-Dichlorobenzene	2.118	1.728	1.750	1.671	1.473
1,4-Dichlorobenzene	2.119	1.864	1.659	1.617	1.478
Dichlorodifluoromethane	0.502	0.431	0.496	0.443	0.433
1,1-Dichloroethane	0.631	0.574	0.630	0.565	0.533
1,2-Dichloroethane	0.364	0.319	0.367	0.324	0.289
1,1-Dichloroethene	0.336	0.291	0.324	0.299	0.288
cis-1,2-Dichloroethene	0.376	0.347	0.355	0.330	0.308
trans-1,2-Dichloroethene	0.374	0.313	0.361	0.320	0.299
1,2-Dichloroethene (total)	0.375	0.330	0.358	0.325	0.304

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

LAB FILE ID: RF2: V4STD01 RF5: V4STD02 RF10: V4STD03
RF20: V4STD04 RF50: V4STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
1,2-Dichloropropane	0.332	0.315	0.334	0.297	0.277
1,3-Dichloropropane	1.091	1.002	1.086	0.917	0.889
2,2-Dichloropropane	0.479	0.421	0.455	0.419	0.388
1,1-Dichloropropene	0.459	0.402	0.448	0.402	0.380
cis-1,3-Dichloropropene	0.448	0.452	0.488	0.437	0.404
trans-1,3-Dichloropropene	1.006	0.901	0.983	0.870	0.829
Ethylbenzene	3.852	3.303	3.659	3.167	3.172
Ethyl methacrylate	0.852	0.761	0.879	0.784	0.767
Hexachlorobutadiene	0.641	0.555	0.589	0.520	0.520
2-Hexanone	0.632	0.515	0.591	0.501	0.456
Iodomethane	0.380	0.331	0.405	0.398	0.403
Isopropylbenzene	3.057	2.771	3.144	2.722	2.728
p-Isopropyltoluene	3.301	2.867	2.974	2.717	2.687
Methyl acetate	0.236	0.204	0.233	0.182	0.163
Methyl cyclohexane	0.510	0.441	0.516	0.466	0.420
Methylene chloride	0.905	0.545	0.504	0.403	0.347
Methyl methacrylate	0.195	0.184	0.244	0.197	0.177
4-Methyl-2-pentanone	0.280	0.220	0.263	0.233	0.207
MTBE	0.460	0.403	0.447	0.401	0.378
Naphthalene	2.018	1.802	1.939	1.672	1.543
n-Propylbenzene	4.749	3.993	4.210	3.841	3.604
Styrene	2.172	2.041	2.296	2.022	2.087
1,1,1,2-Tetrachloroethane	0.777	0.665	0.749	0.653	0.660
1,1,2,2-Tetrachloroethane	0.774	0.646	0.715	0.628	0.564
Tetrachloroethene	0.913	0.838	0.932	0.805	0.780
Tetrahydrofuran	0.104	0.062	0.080	0.059	0.052
Toluene	2.078	1.714	2.046	1.790	1.658
1,2,3-Trichlorobenzene	1.023	0.882	0.920	0.859	0.799
1,2,4-Trichlorobenzene	1.215	0.997	1.078	0.913	0.863
1,1,1-Trichloroethane	0.469	0.414	0.468	0.402	0.375
1,1,2-Trichloroethane	0.556	0.490	0.586	0.462	0.454
Trichloroethene	0.392	0.310	0.362	0.315	0.292
Trichlorofluoromethane	0.651	0.550	0.576	0.526	0.496
Trichlorotrifluoroethane	0.340	0.315	0.330	0.309	0.285
1,2,3-Trichloropropane	0.216	0.192	0.193	0.168	0.165
1,2,4-Trimethylbenzene	3.028	2.714	2.886	2.601	2.531
1,3,5-Trimethylbenzene	3.098	2.638	2.834	2.586	2.442

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

LAB FILE ID: RF2: V4STD01 RF5: V4STD02 RF10: V4STD03
RF20: V4STD04 RF50: V4STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
Vinyl acetate	0.516	0.466	0.572	0.491	0.462
Vinyl chloride	0.545	0.464	0.466	0.476	0.435
m,p-Xylene	3.006	2.611	2.995	2.517	2.403
Xylene (total)	2.886	2.603	2.977	2.501	2.442
Dibromofluoromethane	0.297	0.290	0.302	0.292	0.294
1,2-Dichloroethane-d4	0.055	0.055	0.058	0.058	0.056
Toluene-d8	2.183	2.108	2.395	2.256	2.306
Bromofluorobenzene	0.908	0.895	0.964	0.920	0.938

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899
 Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08
 Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000
 LAB FILE ID: RF100: V4STD06 RF200: V4STD07

COMPOUND	RF100	RF200
Acetone	0.124	0.147
Acrolein	0.054	0.061
Acrylonitrile	0.082	0.084
Benzene	1.150	1.138
Bromobenzene	0.825	0.925
Bromochloromethane	0.160	0.167
Bromodichloromethane	0.386	0.397
Bromoform	0.465	0.543
Bromomethane	0.302	0.328
2-Butanone	0.136	0.155
n-Butylbenzene	2.792	2.987
sec-Butylbenzene	3.475	3.879
tert-Butylbenzene	2.186	2.428
Carbon disulfide	1.052	1.102
Carbon tetrachloride	0.379	0.402
Chlorobenzene	1.763	1.640
Chloroethane	0.279	0.290
2-Chloroethyl vinyl ether	0.002	0.002
Chloroform	0.519	0.496
Chloromethane	0.458	0.509
2-Chlorotoluene	2.138	2.344
4-Chlorotoluene	2.773	2.089
Cyclohexane	0.473	0.480
Dibromochloromethane	0.699	0.672
1,2-Dibromo-3-chloropropane	0.144	0.167
1,2-Dibromoethane	0.541	0.535
Dibromomethane	0.175	0.180
1,2-Dichlorobenzene	1.350	1.458
1,3-Dichlorobenzene	1.458	1.588
1,4-Dichlorobenzene	1.540	1.602
Dichlorodifluoromethane	0.464	0.500
1,1-Dichloroethane	0.587	0.595
1,2-Dichloroethane	0.325	0.332
1,1-Dichloroethene	0.315	0.328
cis-1,2-Dichloroethene	0.332	0.348
trans-1,2-Dichloroethene	0.328	0.345
1,2-Dichloroethene (total)	0.330	0.346

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899
 Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08
 Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000
 LAB FILE ID: RF100: V4STD06 RF200: V4STD07

COMPOUND	RF100	RF200
1,2-Dichloropropane	0.296	0.306
1,3-Dichloropropane	0.844	0.815
2,2-Dichloropropane	0.428	0.451
1,1-Dichloropropene	0.418	0.432
cis-1,3-Dichloropropene	0.428	0.458
trans-1,3-Dichloropropene	0.822	0.778
Ethylbenzene	3.046	2.892
Ethyl methacrylate	0.758	0.693
Hexachlorobutadiene	0.602	0.673
2-Hexanone	0.447	0.437
Iodomethane	0.458	0.476
Isopropylbenzene	2.623	2.503
p-Isopropyltoluene	2.802	2.911
Methyl acetate	0.187	0.195
Methyl cyclohexane	0.466	0.478
Methylene chloride	0.372	0.375
Methyl methacrylate	0.201	0.212
4-Methyl-2-pentanone	0.230	0.240
MTBE	0.402	0.415
Naphthalene	1.774	1.909
n-Propylbenzene	3.813	4.144
Styrene	1.964	1.844
1,1,1,2-Tetrachloroethane	0.645	0.602
1,1,2,2-Tetrachloroethane	0.614	0.689
Tetrachloroethene	0.741	0.732
Tetrahydrofuran	0.062	0.065
Toluene	1.635	1.535
1,2,3-Trichlorobenzene	0.917	0.990
1,2,4-Trichlorobenzene	1.023	1.125
1,1,1-Trichloroethane	0.413	0.437
1,1,2-Trichloroethane	0.446	0.420
Trichloroethene	0.314	0.325
Trichlorofluoromethane	0.549	0.586
Trichlorotrifluoroethane	0.318	0.323
1,2,3-Trichloropropane	0.164	0.167
1,2,4-Trimethylbenzene	2.639	2.904
1,3,5-Trimethylbenzene	2.603	2.837

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date(s): 08/11/08 08/11/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1625 2000

LAB FILE ID: RF100: V4STD06 RF200: V4STD07

COMPOUND	RF100	RF200
Vinyl acetate	0.519	0.544
Vinyl chloride	0.463	0.466
m,p-Xylene	2.300	2.066
Xylene (total)	2.398	2.109
Dibromofluoromethane	0.289	0.290
1,2-Dichloroethane-d4	0.053	0.057
Toluene-d8	2.062	1.907
Bromofluorobenzene	0.841	0.822

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899
 Instrument ID: VOA4 Calibration Date: 08/11/08 · Time: 1757
 Lab File ID: V4ICV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.149	0.123	100.0	104.1		2ORDR	4.1	25.0
Acrolein	0.052	0.047	250.0	223.8		AVRG	-10.5	25.0
Acrylonitrile	0.080	0.074	250.0	231.6		AVRG	-7.4	25.0
Benzene	1.170	1.032	50.00	44.07		AVRG	-11.8	25.0
Bromobenzene	0.891	0.790	50.00	44.33		AVRG	-11.3	25.0
Bromochloromethane	0.164	0.147	50.00	44.80		AVRG	-10.4	25.0
Bromodichloromethane	0.394	0.357	50.00	45.19		AVRG	-9.6	25.0
Bromoform	0.485	0.420	50.00	43.37	0.100	AVRG	-13.3	25.0
Bromomethane	0.281	0.266	50.00	47.42		AVRG	-5.2	25.0
2-Butanone	0.141	0.128	100.0	91.07		AVRG	-8.9	25.0
n-Butylbenzene	2.860	2.594	50.00	45.36		AVRG	-9.3	25.0
sec-Butylbenzene	3.631	3.235	50.00	44.54		AVRG	-10.9	25.0
tert-Butylbenzene	2.311	2.061	50.00	44.58		AVRG	-10.8	25.0
Carbon disulfide	1.071	1.128	50.00	52.63		AVRG	5.3	25.0
Carbon tetrachloride	0.391	0.343	50.00	43.89		AVRG	-12.2	25.0
Chlorobenzene	1.918	1.696	50.00	44.20	0.300	AVRG	-11.6	25.0
Chloroethane	0.284	0.279	50.00	49.06		AVRG	-1.9	25.0
2-Chloroethyl vinyl ether	0.002	0.001	100.0	81.76		AVRG	-18.2	25.0
Chloroform	0.536	0.471	50.00	43.94		AVRG	-12.1	25.0
Chloromethane	0.514	0.477	50.00	46.32	0.100	AVRG	-7.4	25.0
2-Chlorotoluene	2.371	2.301	50.00	48.52		AVRG	-3.0	25.0
4-Chlorotoluene	2.570	2.357	50.00	45.86		AVRG	-8.3	25.0
Cyclohexane	0.484	0.487	50.00	50.27		AVRG	0.5	25.0
Dibromochloromethane	0.748	0.666	50.00	44.48		AVRG	-11.0	25.0
1,2-Dibromo-3-chloropropane	0.144	0.120	50.00	41.41		AVRG	-17.2	25.0
1,2-Dibromoethane	0.599	0.523	50.00	43.70		AVRG	-12.6	25.0
Dibromomethane	0.182	0.159	50.00	43.52		AVRG	-12.9	25.0
1,2-Dichlorobenzene	1.459	1.270	50.00	43.54		AVRG	-12.9	25.0
1,3-Dichlorobenzene	1.684	1.355	50.00	40.24		AVRG	-19.5	25.0
1,4-Dichlorobenzene	1.697	1.555	50.00	45.80		AVRG	-8.4	25.0
Dichlorodifluoromethane	0.467	0.462	50.00	49.45		AVRG	-1.1	25.0
1,1-Dichloroethane	0.588	0.518	50.00	44.10	0.100	AVRG	-11.8	25.0
1,2-Dichloroethane	0.331	0.297	50.00	44.86		AVRG	-10.3	25.0
1,1-Dichloroethene	0.312	0.294	50.00	47.22		AVRG	-5.6	25.0
cis-1,2-Dichloroethene	0.342	0.297	50.00	43.35		AVRG	-13.3	25.0
trans-1,2-Dichloroethene	0.334	0.294	50.00	44.07		AVRG	-11.8	25.0
1,2-Dichloroethene (total)	0.338	0.296	100.0	87.42		AVRG	-12.6	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date: 08/11/08 Time: 1757

Lab File ID: V4ICV01 Init. Calib. Date(s): 08/11/08 08/11/08

Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000

GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloropropane	0.308	0.270	50.00	43.86		AVRG	-12.3	25.0
1,3-Dichloropropane	0.949	0.815	50.00	42.93		AVRG	-14.1	25.0
2,2-Dichloropropane	0.434	0.391	50.00	44.99		AVRG	-10.0	25.0
1,1-Dichloropropene	0.420	0.374	50.00	44.48		AVRG	-11.0	25.0
cis-1,3-Dichloropropene	0.445	0.408	50.00	45.78		AVRG	-8.4	25.0
trans-1,3-Dichloropropene	0.884	0.864	50.00	48.86		AVRG	-2.3	25.0
Ethylbenzene	3.299	3.064	50.00	46.44		AVRG	-7.1	25.0
Ethyl methacrylate	0.785	0.702	50.00	44.71		AVRG	-10.6	25.0
Hexachlorobutadiene	0.586	0.561	50.00	47.88		AVRG	-4.2	25.0
2-Hexanone	0.511	0.431	100.0	84.24		AVRG	-15.8	25.0
Iodomethane	0.407	0.448	50.00	55.08		AVRG	10.2	25.0
Isopropylbenzene	2.792	2.811	50.00	50.33		AVRG	0.6	25.0
p-Isopropyltoluene	2.894	2.764	50.00	47.76		AVRG	-4.5	25.0
Methyl acetate	0.200	0.176	50.00	43.88		AVRG	-12.2	25.0
Methyl cyclohexane	0.471	0.460	50.00	48.80		AVRG	-2.4	25.0
Methylene chloride	0.493	0.334	50.00	44.67		LINR	-10.7	25.0
Methyl methacrylate	0.201	0.188	50.00	46.77		AVRG	-6.5	25.0
4-Methyl-2-pentanone	0.239	0.213	100.0	89.20		AVRG	-10.8	25.0
MTBE	0.415	0.384	50.00	46.27		AVRG	-7.5	25.0
Naphthalene	1.808	1.597	50.00	44.17		AVRG	-11.6	25.0
n-Propylbenzene	4.050	3.760	50.00	46.41		AVRG	-7.2	25.0
Styrene	2.061	1.992	50.00	48.33		AVRG	-3.3	25.0
1,1,1,2-Tetrachloroethane	0.679	0.597	50.00	43.97		AVRG	-12.1	25.0
1,1,2,2-Tetrachloroethane	0.661	0.578	50.00	43.69	0.300	AVRG	-12.6	25.0
Tetrachloroethene	0.820	0.718	50.00	43.78		AVRG	-12.4	25.0
Tetrahydrofuran	0.069	0.060	50.00	47.37		LINR	-5.2	25.0
Toluene	1.779	1.624	50.00	45.62		AVRG	-8.8	25.0
1,2,3-Trichlorobenzene	0.913	0.798	50.00	43.70		AVRG	-12.6	25.0
1,2,4-Trichlorobenzene	1.030	0.867	50.00	42.05		AVRG	-15.9	25.0
1,1,1-Trichloroethane	0.425	0.371	50.00	43.64		AVRG	-12.7	25.0
1,1,2-Trichloroethane	0.488	0.423	50.00	43.35		AVRG	-13.3	25.0
Trichloroethene	0.330	0.290	50.00	43.96		AVRG	-12.1	25.0
Trichlorofluoromethane	0.562	0.511	50.00	45.48		AVRG	-9.0	25.0
Trichlorotrifluoroethane	0.317	0.318	50.00	50.08		AVRG	0.2	25.0
1,2,3-Trichloropropane	0.181	0.152	50.00	42.06		AVRG	-15.9	25.0
1,2,4-Trimethylbenzene	2.758	2.629	50.00	47.67		AVRG	-4.6	25.0
1,3,5-Trimethylbenzene	2.720	2.515	50.00	46.24		AVRG	-7.5	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA18899

Instrument ID: VOA4 Calibration Date: 08/11/08 Time: 1757

Lab File ID: V4ICV01 Init. Calib. Date(s): 08/11/08 08/11/08

Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000

GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Vinyl acetate	0.510	0.469	100.0	92.02		AVRG	-8.0	25.0
Vinyl chloride	0.474	0.456	50.00	48.10		AVRG	-3.8	25.0
Xylene(total)	2.559	2.418	150.0	139.1		AVRG	-5.5	25.0
Dibromofluoromethane	0.293	0.291	30.00	29.72		AVRG	-0.9	25.0
1,2-Dichloroethane-d4	0.056	0.054	30.00	28.80		AVRG	-4.0	25.0
Toluene-d8	2.174	2.146	30.00	29.61		AVRG	-1.3	25.0
Bromofluorobenzene	0.898	0.929	30.00	31.03		AVRG	3.4	25.0

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID: V4BFB01 BFB Injection Date: 10/02/08

Instrument ID: VOA4 BFB Injection Time: 1129

GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	47.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	71.4
175	5.0 - 9.0% of mass 174	5.9 (8.2)1
176	95.0 - 101.0% of mass 174	70.9 (99.3)1
177	5.0 - 9.0% of mass 176	4.6 (6.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V4STD50PPB	V4STD50PPB	V4CCV01	10/02/08	1200
02	V4BLK1002LCS	V4BLK1002LCS	V4LCS01	10/02/08	1251
03	01SS02501MS	0810010-07MS	1001007AM	10/02/08	1330
04	01SS02501MSD	0810010-07MSD	1001007AS	10/02/08	1400
05	V4BLK1002	V4BLK1002	V4BLK01	10/02/08	1501
06	01SS01701	0810010-01	1001001A	10/02/08	1603
07	01SS42001	0810010-02	1001002A	10/02/08	1633
08	01SS01401	0810010-03	1001003A	10/02/08	1704
09	01SS01401 DU	0810010-04	1001004A	10/02/08	1735
10	01SS01501	0810010-05	1001005A	10/02/08	1805
11	01SS02401	0810010-06	1001006A	10/02/08	1836
12	01SS02501	0810010-07	1001007A	10/02/08	1906
13	01SS13701	0810010-08	1001008A	10/02/08	1937
14	01SS13801	0810010-09	1001009A	10/02/08	2007
15	01SS13901 DU	0810010-11	1001011A	10/02/08	2109
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: VOA4 Calibration Date: 10/02/08 Time: 1200
 Lab File ID: V4CCV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.149	0.151	100.0	126.2		2ORDR	26.2	
Benzene	1.170	1.225	50.00	52.34		AVRG	4.7	
Bromochloromethane	0.164	0.174	50.00	52.96		AVRG	5.9	
Bromodichloromethane	0.394	0.445	50.00	56.44		AVRG	12.9	
Bromoform	0.485	0.512	50.00	52.76	0.100	AVRG	5.5	
Bromomethane	0.281	0.339	50.00	60.33		AVRG	20.7	
2-Butanone	0.141	0.145	100.0	102.9		AVRG	2.9	
Carbon disulfide	1.071	1.131	50.00	52.79		AVRG	5.6	
Carbon tetrachloride	0.391	0.456	50.00	58.30		AVRG	16.6	
Chlorobenzene	1.918	1.986	50.00	51.77	0.300	AVRG	3.5	
Chloroethane	0.284	0.315	50.00	55.40		AVRG	10.8	
Chloroform	0.536	0.603	50.00	56.25		AVRG	12.5	20.0
Chloromethane	0.514	0.551	50.00	53.51	0.100	AVRG	7.0	
Cyclohexane	0.484	0.545	50.00	56.30		AVRG	12.6	
Dibromochloromethane	0.748	0.784	50.00	52.36		AVRG	4.7	
1,2-Dibromoethane	0.599	0.597	50.00	49.86		AVRG	-0.3	
1,1-Dichloroethane	0.588	0.660	50.00	56.12	0.100	AVRG	12.2	
1,2-Dichloroethane	0.331	0.383	50.00	57.73		AVRG	15.5	
1,1-Dichloroethene	0.312	0.338	50.00	54.29		AVRG	8.6	20.0
cis-1,2-Dichloroethene	0.342	0.367	50.00	53.56		AVRG	7.1	
trans-1,2-Dichloroethene	0.334	0.358	50.00	53.62		AVRG	7.2	
1,2-Dichloroethene (total)	0.338	0.362	100.0	107.2		AVRG	7.2	
1,2-Dichloropropane	0.308	0.318	50.00	51.58		AVRG	3.2	20.0
cis-1,3-Dichloropropene	0.445	0.488	50.00	54.78		AVRG	9.6	
trans-1,3-Dichloropropene	0.884	0.959	50.00	54.26		AVRG	8.5	
Ethylbenzene	3.299	3.552	50.00	53.83		AVRG	7.7	20.0
2-Hexanone	0.511	0.450	100.0	88.09		AVRG	-11.9	
Isopropylbenzene	2.792	2.937	50.00	52.59		AVRG	5.2	
Methyl acetate	0.200	0.220	50.00	54.88		AVRG	9.8	
Methyl cyclohexane	0.471	0.507	50.00	53.78		AVRG	7.6	
Methylene chloride	0.493	0.416	50.00	55.62		LINR	11.2	
4-Methyl-2-pentanone	0.239	0.224	100.0	93.76		AVRG	-6.2	
Methyl tert-butyl ether	0.415	0.443	50.00	53.38		AVRG	6.8	
Styrene	2.061	2.192	50.00	53.19		AVRG	6.4	
1,1,2,2-Tetrachloroethane	0.661	0.689	50.00	52.09	0.300	AVRG	4.2	
Tetrachloroethene	0.820	0.858	50.00	52.28		AVRG	4.6	
Toluene	1.779	1.845	50.00	51.85		AVRG	3.7	20.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: VOA4 Calibration Date: 10/02/08 Time: 1200
 Lab File ID: V4CCV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2,3-Trichlorobenzene	0.913	0.893	50.00	48.93		AVRG	-2.1	
1,2,4-Trichlorobenzene	1.030	1.011	50.00	49.03		AVRG	-1.9	
1,1,1-Trichloroethane	0.425	0.507	50.00	59.58		AVRG	19.2	
1,1,2-Trichloroethane	0.488	0.487	50.00	49.90		AVRG	-0.2	
Trichloroethene	0.330	0.354	50.00	53.58		AVRG	7.2	
Trichlorotrifluoroethane	0.317	0.367	50.00	57.86		AVRG	15.7	
Vinyl chloride	0.474	0.535	50.00	56.49		AVRG	13.0	20.0
Xylene (total)	2.559	2.743	150.0	157.5		AVRG	7.2	
Dibromofluoromethane	0.293	0.296	30.00	30.25		AVRG	0.8	
1,2-Dichloroethane-d4	0.056	0.052	30.00	28.17		AVRG	-6.1	
Toluene-d8	2.174	2.176	30.00	30.03		AVRG	0.1	
Bromofluorobenzene	0.898	0.938	30.00	31.31		AVRG	4.4	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: VOA4 Calibration Date: 10/03/08 Time: 1028
 Lab File ID: V4CCV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.149	0.154	100.0	128.8		2ORDR	28.8	
Benzene	1.170	1.195	50.00	51.07		AVRG	2.1	
Bromochloromethane	0.164	0.171	50.00	52.27		AVRG	4.5	
Bromodichloromethane	0.394	0.451	50.00	57.16		AVRG	14.3	
Bromoform	0.485	0.509	50.00	52.54	0.100	AVRG	5.1	
Bromomethane	0.281	0.338	50.00	60.22		AVRG	20.4	
2-Butanone	0.141	0.155	100.0	109.8		AVRG	9.8	
Carbon disulfide	1.071	1.123	50.00	52.41		AVRG	4.8	
Carbon tetrachloride	0.391	0.479	50.00	61.23		AVRG	22.4	
Chlorobenzene	1.918	1.891	50.00	49.30	0.300	AVRG	-1.4	
Chloroethane	0.284	0.317	50.00	55.81		AVRG	11.6	
Chloroform	0.536	0.637	50.00	59.44		AVRG	18.9	20.0
Chloromethane	0.514	0.582	50.00	56.58	0.100	AVRG	13.2	
Cyclohexane	0.484	0.545	50.00	56.26		AVRG	12.5	
Dibromochloromethane	0.748	0.747	50.00	49.90		AVRG	-0.2	
1,2-Dibromoethane	0.599	0.579	50.00	48.37		AVRG	-3.3	
1,1-Dichloroethane	0.588	0.682	50.00	57.99	0.100	AVRG	16.0	
1,2-Dichloroethane	0.331	0.422	50.00	63.61		AVRG	27.2	
1,1-Dichloroethene	0.312	0.335	50.00	53.81		AVRG	7.6	20.0
cis-1,2-Dichloroethene	0.342	0.370	50.00	54.08		AVRG	8.2	
trans-1,2-Dichloroethene	0.334	0.369	50.00	55.25		AVRG	10.5	
1,2-Dichloroethene (total)	0.338	0.370	100.0	109.3		AVRG	9.3	
1,2-Dichloropropane	0.308	0.336	50.00	54.46		AVRG	8.9	20.0
cis-1,3-Dichloropropene	0.445	0.482	50.00	54.13		AVRG	8.3	
trans-1,3-Dichloropropene	0.884	0.940	50.00	53.15		AVRG	6.3	
Ethylbenzene	3.299	3.332	50.00	50.50		AVRG	1.0	20.0
2-Hexanone	0.511	0.421	100.0	82.36		AVRG	-17.6	
Isopropylbenzene	2.792	2.862	50.00	51.24		AVRG	2.5	
Methyl acetate	0.200	0.220	50.00	55.06		AVRG	10.1	
Methyl cyclohexane	0.471	0.503	50.00	53.35		AVRG	6.7	
Methylene chloride	0.493	0.426	50.00	56.94		LINR	13.9	
4-Methyl-2-pentanone	0.239	0.231	100.0	96.66		AVRG	-3.3	
Methyl tert-butyl ether	0.415	0.459	50.00	55.30		AVRG	10.6	
Styrene	2.061	2.022	50.00	49.06		AVRG	-1.9	
1,1,2,2-Tetrachloroethane	0.661	0.688	50.00	52.03	0.300	AVRG	4.0	
Tetrachloroethene	0.820	0.773	50.00	47.11		AVRG	-5.8	
Toluene	1.779	1.716	50.00	48.21		AVRG	-3.6	20.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: VOA4 Calibration Date: 10/03/08 Time: 1028
 Lab File ID: V4CCV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2,3-Trichlorobenzene	0.913	0.874	50.00	47.90		AVRG	-4.2	
1,2,4-Trichlorobenzene	1.030	0.972	50.00	47.13		AVRG	-5.7	
1,1,1-Trichloroethane	0.425	0.520	50.00	61.08		AVRG	22.2	
1,1,2-Trichloroethane	0.488	0.468	50.00	47.95		AVRG	-4.1	
Trichloroethene	0.330	0.357	50.00	54.04		AVRG	8.1	
Trichlorotrifluoroethane	0.317	0.362	50.00	57.07		AVRG	14.1	
Vinyl chloride	0.474	0.540	50.00	57.04		AVRG	14.1	20.0
Xylene (total)	2.559	2.643	150.0	152.5		AVRG	3.3	
Dibromofluoromethane	0.293	0.310	30.00	31.63		AVRG	5.4	
1,2-Dichloroethane-d4	0.056	0.052	30.00	27.85		AVRG	-7.2	
Toluene-d8	2.174	2.046	30.00	28.24		AVRG	-5.9	
Bromofluorobenzene	0.898	0.922	30.00	30.77		AVRG	2.6	

FORM 2
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Level: (low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	V4BLK1002LCS	103	100	93	99	0
02	01SS02501MS	103	94	94	99	0
03	01SS02501MSD	105	96	97	100	0
04	V4BLK1002	106	96	100	103	0
05	01SS01701	109	102	98	106	0
06	01SS42001	108	103	99	100	0
07	01SS01401	110	102	102	105	0
08	01SS01401 DU	111	103	100	102	0
09	01SS01501	112	104	101	108	0
10	01SS02401	113	98	105	109	0
11	01SS02501	112	96	98	101	0
12	01SS13701	115	104	100	106	0
13	01SS13801	113	104	96	102	0
14	01SS13901 DU	112	106	100	102	0
15	V4BLK1003LCS	106	98	92	98	0
16	V4BLK1003	106	96	97	101	0
17	01SS13901	113	101	100	105	0
18	01SBDIT01	112	99	99	102	0
19	01SBDIT02	113	105	98	107	0
20	01SBDIT03	117	105	97	104	0
21	V4BLK1003LCS	112	96	90	100	0
22						
23						
24						
25						
26						
27						
28						
29						
30						

		EL	SPIKE
		QC LIMITS	CONC (ug/Kg)
SMC1	(DFM) = Dibromofluoromethane	(80-125)	30
SMC2	(DCE) = 1,2-Dichloroethane-d4	(75-140)	30
SMC3	(TOL) = Toluene-d8	(80-120)	30
SMC4	(BFB) = Bromofluorobenzene	(80-125)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: V4BLK1002 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	2.885	126.0	123	20-160
Benzene	50.00	0.0000	48.71	97	75-125
Bromochloromethane	50.00	0.0000	50.58	101	70-125
Bromodichloromethane	50.00	0.0000	53.70	107	70-130
Bromoform	50.00	0.0000	47.30	95	55-135
Bromomethane	50.00	0.0000	54.31	109	30-160
2-Butanone	100.0	0.0000	103.8	104	30-160
Carbon disulfide	50.00	0.0000	58.44	117	45-160
Carbon tetrachloride	50.00	0.0000	54.97	110	65-135
Chlorobenzene	50.00	0.0000	47.07	94	75-125
Chloroethane	50.00	0.0000	51.99	104	40-155
Chloroform	50.00	0.0000	53.35	107	70-125
Chloromethane	50.00	0.0000	49.07	98	50-130
Cyclohexane	50.00	0.0000	58.36	117	65-140
Dibromochloromethane	50.00	0.0000	49.37	99	65-130
1,2-Dibromoethane	50.00	0.0000	45.64	91	70-125
1,1-Dichloroethane	50.00	0.0000	53.28	106	75-125
1,2-Dichloroethane	50.00	0.0000	55.44	111	70-125
1,1-Dichloroethene	50.00	0.0000	52.71	105	65-135
cis-1,2-Dichloroethene	50.00	0.0000	49.15	98	65-125
trans-1,2-Dichloroethen	50.00	0.0000	50.30	101	65-135
1,2-Dichloropropane	50.00	0.0000	49.44	99	70-120
cis-1,3-Dichloropropene	50.00	0.0000	53.15	106	70-125
trans-1,3-Dichloroprope	50.00	0.0000	51.99	104	65-125
Ethylbenzene	50.00	0.0000	48.95	98	75-125
2-Hexanone	100.0	0.0000	89.28	89	45-145
Isopropylbenzene	50.00	0.0000	53.06	106	75-130
Methyl acetate	50.00	0.0000	55.70	111	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: V4BLK1002 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Methyl cyclohexane	50.00	0.0000	56.69	113	65-135
Methylene chloride	50.00	2.812	53.18	101	55-140
4-Methyl-2-pentanone	100.0	0.0000	100.6	101	45-145
Methyl tert-butyl ether	50.00	0.0000	51.02	102	55-150
Styrene	50.00	0.0000	50.76	102	75-125
1,1,2,2-Tetrachloroetha	50.00	0.0000	49.63	99	55-130
Tetrachloroethene	50.00	0.0000	46.36	93	65-140
Toluene	50.00	0.6395	48.62	96	70-125
1,2,3-Trichlorobenzene	50.00	0.3615	47.70	95	60-135
1,2,4-Trichlorobenzene	50.00	0.3101	45.37	90	65-130
1,1,1-Trichloroethane	50.00	0.0000	54.43	109	70-135
1,1,2-Trichloroethane	50.00	0.0000	45.67	91	60-125
Trichloroethene	50.00	0.0000	49.70	99	75-125
Trichlorotrifluoroethan	50.00	0.0000	60.38	121	60-140
Vinyl chloride	50.00	0.0000	51.01	102	60-125
Xylene(total)	150.0	0.0000	152.7	102	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 44 outside limits

COMMENTS:

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: V4BLK1003 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	2.835	135.0	132	20-160
Benzene	50.00	0.0000	48.46	97	75-125
Bromochloromethane	50.00	0.0000	50.65	101	70-125
Bromodichloromethane	50.00	0.0000	53.67	107	70-130
Bromoform	50.00	0.0000	50.49	101	55-135
Bromomethane	50.00	0.0000	54.65	109	30-160
2-Butanone	100.0	0.0000	115.9	116	30-160
Carbon disulfide	50.00	0.0000	59.84	120	45-160
Carbon tetrachloride	50.00	0.0000	55.66	111	65-135
Chlorobenzene	50.00	0.0000	47.14	94	75-125
Chloroethane	50.00	0.0000	54.00	108	40-155
Chloroform	50.00	0.0000	54.75	110	70-125
Chloromethane	50.00	0.0000	53.24	106	50-130
Cyclohexane	50.00	0.0000	56.19	112	65-140
Dibromochloromethane	50.00	0.0000	48.27	96	65-130
1,2-Dibromoethane	50.00	0.0000	46.19	92	70-125
1,1-Dichloroethane	50.00	0.0000	54.88	110	75-125
1,2-Dichloroethane	50.00	0.0000	60.03	120	70-125
1,1-Dichloroethene	50.00	0.0000	54.67	109	65-135
cis-1,2-Dichloroethene	50.00	0.0000	49.87	100	65-125
trans-1,2-Dichloroethene	50.00	0.0000	52.03	104	65-135
1,2-Dichloropropane	50.00	0.0000	48.78	98	70-120
cis-1,3-Dichloropropene	50.00	0.0000	53.16	106	70-125
trans-1,3-Dichloroprope	50.00	0.0000	53.88	108	65-125
Ethylbenzene	50.00	0.0000	49.60	99	75-125
2-Hexanone	100.0	0.0000	94.43	94	45-145
Isopropylbenzene	50.00	0.0000	52.57	105	75-130
Methyl acetate	50.00	0.0000	57.29	114	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: V4BLK1003 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Methyl cyclohexane	50.00	0.0000	55.33	111	65-135
Methylene chloride	50.00	4.816	54.87	100	55-140
4-Methyl-2-pentanone	100.0	0.0000	105.1	105	45-145
Methyl tert-butyl ether	50.00	0.0000	54.82	110	55-150
Styrene	50.00	0.0000	48.86	98	75-125
1,1,2,2-Tetrachloroetha	50.00	0.0000	52.61	105	55-130
Tetrachloroethene	50.00	0.0000	45.05	90	65-140
Toluene	50.00	0.0000	47.13	94	70-125
1,2,3-Trichlorobenzene	50.00	0.2533	49.00	97	60-135
1,2,4-Trichlorobenzene	50.00	0.0000	47.70	95	65-130
1,1,1-Trichloroethane	50.00	0.0000	55.66	111	70-135
1,1,2-Trichloroethane	50.00	0.0000	45.36	91	60-125
Trichloroethene	50.00	0.0000	48.11	96	75-125
Trichlorotrifluoroethan	50.00	0.0000	61.00	122	60-140
Vinyl chloride	50.00	0.0000	51.96	104	60-125
Xylene (total)	150.0	0.0000	149.0	99	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: V4BLK1003 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCS D CONCENTRATION (ug/Kg)	LCS D % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	127.0	124	6	30	20-160
Benzene	50.00	47.48	95	2	30	75-125
Bromochloromethane	50.00	50.10	100	1	30	70-125
Bromodichloromethane	50.00	59.21	118	10	30	70-130
Bromoform	50.00	47.30	95	6	30	55-135
Bromomethane	50.00	52.32	105	4	30	30-160
2-Butanone	100.0	104.4	104	10	30	30-160
Carbon disulfide	50.00	53.12	106	12	30	45-160
Carbon tetrachloride	50.00	62.74	125	12	30	65-135
Chlorobenzene	50.00	45.93	92	3	30	75-125
Chloroethane	50.00	48.98	98	10	30	40-155
Chloroform	50.00	58.10	116	6	30	70-125
Chloromethane	50.00	51.72	103	3	30	50-130
Cyclohexane	50.00	55.47	111	1	30	65-140
Dibromochloromethane	50.00	49.50	99	2	30	65-130
1,2-Dibromoethane	50.00	46.11	92	0	30	70-125
1,1-Dichloroethane	50.00	54.61	109	0	30	75-125
<u>1,2-Dichloroethane</u>	50.00	69.02	138*	14	30	70-125
1,1-Dichloroethene	50.00	49.96	100	9	30	65-135
cis-1,2-Dichloroethene	50.00	47.77	96	4	30	65-125
trans-1,2-Dichloroethen	50.00	48.38	97	7	30	65-135
1,2-Dichloropropane	50.00	48.47	97	1	30	70-120
cis-1,3-Dichloropropene	50.00	52.56	105	1	30	70-125
trans-1,3-Dichloroprop	50.00	53.46	107	1	30	65-125
Ethylbenzene	50.00	47.09	94	5	30	75-125
2-Hexanone	100.0	87.06	87	8	30	45-145
Isopropylbenzene	50.00	52.17	104	1	30	75-130
Methyl acetate	50.00	55.47	111	3	30	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: V4BLK1003 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Methyl cyclohexane	50.00	54.01	108	2	30	65-135
Methylene chloride	50.00	52.92	96	4	30	55-140
4-Methyl-2-pentanone	100.0	100.1	100	5	30	45-145
Methyl tert-butyl ether	50.00	55.06	110	0	30	55-150
Styrene	50.00	46.77	94	4	30	75-125
1,1,2,2-Tetrachloroethane	50.00	47.63	95	10	30	55-130
Tetrachloroethene	50.00	43.26	86	4	30	65-140
Toluene	50.00	43.35	87	8	30	70-125
1,2,3-Trichlorobenzene	50.00	47.69	95	3	30	60-135
1,2,4-Trichlorobenzene	50.00	44.41	89	7	30	65-130
1,1,1-Trichloroethane	50.00	62.61	125	12	30	70-135
1,1,2-Trichloroethane	50.00	41.44	83	9	30	60-125
Trichloroethene	50.00	49.89	100	4	30	75-125
Trichlorotrifluoroethane	50.00	62.71	125	3	30	60-140
Vinyl chloride	50.00	52.00	104	0	30	60-125
Xylene (total)	150.0	147.7	98	1	30	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 44 outside limits

Spike Recovery: 1 out of 88 outside limits

COMMENTS: _____

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Acetone	107.7	0.0000	117.1	109	20-160
Benzene	53.84	0.0000	43.79	81	75-125
Bromochloromethane	53.84	0.0000	43.96	82	70-125
Bromodichloromethane	53.84	0.0000	47.05	87	70-130
Bromoform	53.84	0.0000	41.28	77	55-135
Bromomethane	53.84	0.0000	47.55	88	30-160
2-Butanone	107.7	0.0000	96.43	90	30-160
Carbon disulfide	53.84	0.0000	52.48	97	45-160
Carbon tetrachloride	53.84	0.0000	47.70	88	65-135
Chlorobenzene	53.84	0.0000	40.32	75	75-125
Chloroethane	53.84	0.0000	44.86	83	40-155
Chloroform	53.84	0.0000	46.06	86	70-125
Chloromethane	53.84	0.0000	42.81	80	50-130
Cyclohexane	53.84	0.0000	46.51	86	65-140
Dibromochloromethane	53.84	0.0000	42.22	78	65-130
1,2-Dibromoethane	53.84	0.0000	40.07	74	70-125
1,1-Dichloroethane	53.84	0.0000	45.87	85	75-125
1,2-Dichloroethane	53.84	0.0000	49.53	92	70-125
1,1-Dichloroethene	53.84	0.0000	46.28	86	65-135
cis-1,2-Dichloroethene	53.84	0.0000	42.88	80	65-125
trans-1,2-Dichloroethen	53.84	0.0000	44.71	83	65-135
1,2-Dichloropropane	53.84	0.0000	43.26	80	70-120
cis-1,3-Dichloropropene	53.84	0.0000	46.18	86	70-125
trans-1,3-Dichloroprope	53.84	0.0000	46.54	86	65-125
Ethylbenzene	53.84	0.0000	41.92	78	75-125
2-Hexanone	107.7	0.0000	81.45	76	45-145
Isopropylbenzene	53.84	0.0000	42.65	79	75-130
Methyl acetate	53.84	0.0000	50.82	94	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07
 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Methyl cyclohexane	53.84	0.0000	43.85	81	65-135
Methylene chloride	53.84	7.283	55.13	89	55-140
4-Methyl-2-pentanone	107.7	0.0000	92.88	86	45-145
Methyl tert-butyl ether	53.84	0.0000	46.19	86	55-150
Styrene	53.84	0.0000	42.24	78	75-125
1,1,2,2-Tetrachloroetha	53.84	0.0000	41.66	77	55-130
Tetrachloroethene	53.84	0.0000	37.91	70	65-140
Toluene	53.84	0.0000	41.09	76	70-125
1,2,3-Trichlorobenzene	53.84	0.0000	32.16	60	60-135
1,2,4-Trichlorobenzene	53.84	0.0000	32.23	60*	65-130
1,1,1-Trichloroethane	53.84	0.0000	46.73	87	70-135
1,1,2-Trichloroethane	53.84	0.0000	38.74	72	60-125
Trichloroethene	53.84	0.0000	43.37	80	75-125
Trichlorotrifluoroethan	53.84	0.0000	50.89	94	60-140
Vinyl chloride	53.84	0.0000	44.90	83	60-125
Xylene(total)	161.5	0.0000	126.7	78	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07
 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	109.8	110.9	101	5	30	20-160
Benzene	54.89	44.51	81	2	30	75-125
Bromochloromethane	54.89	45.70	83	4	30	70-125
Bromodichloromethane	54.89	48.87	89	4	30	70-130
Bromoform	54.89	44.47	81	7	30	55-135
Bromomethane	54.89	49.41	90	4	30	30-160
2-Butanone	109.8	88.87	81	8	30	30-160
Carbon disulfide	54.89	53.26	97	1	30	45-160
Carbon tetrachloride	54.89	51.43	94	8	30	65-135
Chlorobenzene	54.89	40.50	74*	0	30	75-125
Chloroethane	54.89	48.51	88	8	30	40-155
Chloroform	54.89	49.02	89	6	30	70-125
Chloromethane	54.89	46.53	85	8	30	50-130
Cyclohexane	54.89	50.48	92	8	30	65-140
Dibromochloromethane	54.89	44.50	81	5	30	65-130
1,2-Dibromoethane	54.89	42.26	77	5	30	70-125
1,1-Dichloroethane	54.89	47.93	87	4	30	75-125
1,2-Dichloroethane	54.89	50.56	92	2	30	70-125
1,1-Dichloroethene	54.89	47.38	86	2	30	65-135
cis-1,2-Dichloroethene	54.89	44.18	80	3	30	65-125
trans-1,2-Dichloroethen	54.89	46.13	84	3	30	65-135
1,2-Dichloropropane	54.89	44.11	80	2	30	70-120
cis-1,3-Dichloropropene	54.89	48.93	89	6	30	70-125
trans-1,3-Dichloroprope	54.89	49.62	90	6	30	65-125
Ethylbenzene	54.89	45.10	82	7	30	75-125
2-Hexanone	109.8	82.04	75	1	30	45-145
Isopropylbenzene	54.89	46.76	85	9	30	75-130
Methyl acetate	54.89	55.04	100	8	30	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Methyl cyclohexane	54.89	46.09	84	5	30	65-135
Methylene chloride	54.89	55.18	87	0	30	55-140
4-Methyl-2-pentanone	109.8	89.80	82	3	30	45-145
Methyl tert-butyl ether	54.89	46.11	84	0	30	55-150
Styrene	54.89	45.07	82	6	30	75-125
1,1,2,2-Tetrachloroetha	54.89	46.26	84	10	30	55-130
Tetrachloroethene	54.89	43.31	79	13	30	65-140
Toluene	54.89	43.86	80	6	30	70-125
1,2,3-Trichlorobenzene	54.89	35.37	64	10	30	60-135
1,2,4-Trichlorobenzene	54.89	35.46	65	10	30	65-130
1,1,1-Trichloroethane	54.89	48.40	88	4	30	70-135
1,1,2-Trichloroethane	54.89	41.33	75	6	30	60-125
Trichloroethene	54.89	42.88	78	1	30	75-125
Trichlorotrifluoroethan	54.89	51.84	94	2	30	60-140
Vinyl chloride	54.89	46.28	84	3	30	60-125
Xylene (total)	164.7	138.7	84	9	30	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 44 outside limits

Spike Recovery: 2 out of 88 outside limits

COMMENTS:

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Lab File ID (Standard): V4CCV01 Date Analyzed: 10/02/08
 Instrument ID: VOA4 Time Analyzed: 1200
 GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB)	RT #	IS2 (CBZ)	RT #	IS3 (DCB)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	696434	13.29	285945	16.63	262611	18.58
UPPER LIMIT	1392868	13.79	571890	17.13	525222	19.08
LOWER LIMIT	348217	12.79	142973	16.13	131306	18.08
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4BLK1002LCS	683690	13.29	293337	16.63	273499	18.59
02 01SS0250IMS	679005	13.29	289071	16.63	272569	18.59
03 01SS0250IMSD	649374	13.29	272268	16.63	244099	18.59
04 V4BLK1002	567520	13.30	235742	16.63	210730	18.59
05 01SS01701	553376	13.29	227776	16.63	205015	18.59
06 01SS42001	541578	13.30	224395	16.63	198775	18.60
07 01SS01401	530997	13.29	210965	16.63	194721	18.59
08 01SS01401 DU	517866	13.29	214698	16.63	190567	18.59
09 01SS01501	514093	13.30	208424	16.64	184553	18.59
10 01SS02401	483839	13.30	194003	16.63	169725	18.59
11 01SS02501	491760	13.30	203483	16.63	179327	18.59
12 01SS13701	490138	13.30	204053	16.63	183807	18.59
13 01SS13801	478580	13.29	201650	16.63	182030	18.59
14 01SS13901 DU	463314	13.29	196062	16.63	168207	18.59
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Lab File ID (Standard): V4CCV01 Date Analyzed: 10/03/08
 Instrument ID: VOA4 Time Analyzed: 1028
 GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	633919	13.29	274171	16.62	240757	18.58
UPPER LIMIT	1267838	13.79	548342	17.12	481514	19.08
LOWER LIMIT	316960	12.79	137086	16.12	120379	18.08
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4BLK1003LCS	638621	13.29	275032	16.63	240967	18.59
02 V4BLK1003	535023	13.29	218573	16.62	195768	18.58
03 01SS13901	491059	13.29	209626	16.63	187767	18.59
04 01SBDIT01	484983	13.29	197397	16.63	172630	18.58
05 01SBDIT02	470307	13.29	193828	16.63	179601	18.59
06 01SBDIT03	451056	13.29	195190	16.63	172597	18.59
07 V4BLK1003LCS	456239	13.29	208323	16.63	187172	18.58
08						
09						
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12						
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17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK1003BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID: S1BS1003 Lab Sample ID: SBLK1003BS1

Instrument ID: BNA1 Date Extracted: 10/03/08

Matrix: (soil/water) SOIL Date Analyzed: 10/07/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 1059

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK1003BS1L	SBLK1003BS1LCS	S1LS1003	10/07/08
02	01SS01701	0810010-01	1001001	10/07/08
03	01SS42001	0810010-02	1001002	10/07/08
04	01SS01401	0810010-03	1001003	10/07/08
05	01SS01401 DU	0810010-04	1001004	10/07/08
06	01SS01501	0810010-05	1001005	10/07/08
07	01SS02401	0810010-06	1001006	10/07/08
08	01SS02501	0810010-07	1001007	10/07/08
09	01SS13701	0810010-08	1001008	10/07/08
10	01SS13801	0810010-09	1001009	10/07/08
11	01SS13901	0810010-10	1001010	10/07/08
12	01SS13901 DU	0810010-11	1001011	10/07/08
13	01SS02501MS	0810010-07MS	1001007M	10/07/08
14	01SS02501MSD	0810010-07MSD	1001007S	10/07/08
15				
16				
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COMMENTS:

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK1003BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: SBLK1003BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS1003

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 10:59

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

83-32-9-----	Acenaphthene	26	330		U
208-96-8-----	Acenaphthylene	20	330		U
98-86-2-----	Acetophenone	41	330		U
120-12-7-----	Anthracene	27	330		U
1912-24-9-----	Atrazine	28	330		U
100-52-7-----	Benzaldehyde	55	330		U
56-55-3-----	Benzo (a) anthracene	36	330		U
205-99-2-----	Benzo (b) fluoranthene	32	330		U
207-08-9-----	Benzo (k) fluoranthene	39	330		U
191-24-2-----	Benzo (g, h, i) perylene	70	330		U
50-32-8-----	Benzo (a) pyrene	23	330		U
111-91-1-----	bis (2-Chloroethoxy) methane	31	330		U
92-52-4-----	1, 1'-Biphenyl	29	330		U
111-44-4-----	bis (2-Chloroethyl) ether	41	330		U
108-60-1-----	bis (2-Chloroisopropyl) ether	51	330		U
117-81-7-----	Bis (2-ethoxyethyl) phthalate	36	330	60	J
101-55-3-----	4-Bromophenyl-phenylether	26	330		U
85-68-7-----	Butylbenzylphthalate	30	330		U
86-74-8-----	Carbazole	36	330		U
106-47-8-----	4-Chloroaniline	48	330		U
105-60-2-----	Caprolactam	67	330		U
59-50-7-----	4-Chloro-3-methylphenol	28	330		U
91-58-7-----	2-Chloronaphthalene	32	330		U
95-57-8-----	2-Chlorophenol	41	330		U
7005-72-3-----	4-Chlorophenyl-phenylether	31	330		U
218-01-9-----	Chrysene	31	330		U
53-70-3-----	Dibenz (a, h) anthracene	60	330		U
132-64-9-----	Dibenzofuran	24	330		U
91-94-1-----	3, 3'-Dichlorobenzidine	31	330		U
120-83-2-----	2, 4-Dichlorophenol	19	330		U
84-66-2-----	Diethylphthalate	34	330		U
105-67-9-----	2, 4-Dimethylphenol	21	330		U
131-11-3-----	Dimethylphthalate	30	330		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK1003BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: SBLK1003BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS1003

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/07/08 10:59

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2	Di-n-butylphthalate	30	330		U
534-52-1	4,6-Dinitro-2-methylphenol	22	830		U
51-28-5	2,4-Dinitrophenol	130	830		U
121-14-2	2,4-Dinitrotoluene	24	330		U
606-20-2	2,6-Dinitrotoluene	38	330		U
117-84-0	Di-n-octylphthalate	27	330		U
206-44-0	Fluoranthene	54	330		U
86-73-7	Fluorene	26	330		U
118-74-1	Hexachlorobenzene	35	330		U
87-68-3	Hexachlorobutadiene	33	330		U
77-47-4	Hexachlorocyclopentadiene	61	330		U
67-72-1	Hexachloroethane	39	330		U
193-39-5	Indeno (1,2,3-cd) pyrene	46	330		U
78-59-1	Isophorone	28	330		U
91-57-6	2-Methylnaphthalene	35	330		U
95-48-7	2-Methylphenol	39	330		U
106-44-5	4-Methylphenol	26	330		U
91-20-3	Naphthalene	32	330		U
88-74-4	2-Nitroaniline	32	330		U
99-09-2	3-Nitroaniline	47	830		U
100-01-6	4-Nitroaniline	100	830		U
98-95-3	Nitrobenzene	34	330		U
88-75-5	2-Nitrophenol	22	330		U
100-02-7	4-Nitrophenol	81	830		U
86-30-6	N-Nitrosodiphenylamine (1)	32	330		U
621-64-7	N-Nitroso-di-n-propylamine	55	330		U
87-86-5	Pentachlorophenol	34	830		U
85-01-8	Phenanthrene	23	330		U
108-95-2	Phenol	36	330		U
129-00-0	Pyrene	40	330		U
95-94-3	1,2,4,5-Tetrachlorobenzene	100	330		U
95-95-4	2,4,5-Trichlorophenol	27	830		U
88-06-2	2,4,6-Trichlorophenol	35	330		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK1007BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID: S1BS1007 Lab Sample ID: SBLK1007BS1

Instrument ID: BNA1 Date Extracted: 10/07/08

Matrix: (soil/water) SOIL Date Analyzed: 10/08/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 1038

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK1007BS1L	SBLK1007BS1LCS	S1LS1007	10/08/08
02	01SBDIT01	0810033-01	1003301	10/08/08
03	01SBDIT02	0810033-02	1003302	10/08/08
04	01SBDIT03	0810033-03	1003303	10/08/08
05				
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COMMENTS:

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK1007BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: SBLK1007BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS1007

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 10:38

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9-----	Acenaphthene	26	330	U
208-96-8-----	Acenaphthylene	20	330	U
98-86-2-----	Acetophenone	41	330	U
120-12-7-----	Anthracene	27	330	U
1912-24-9-----	Atrazine	28	330	U
100-52-7-----	Benzaldehyde	55	330	U
56-55-3-----	Benzo (a) anthracene	36	330	U
205-99-2-----	Benzo (b) fluoranthene	32	330	U
207-08-9-----	Benzo (k) fluoranthene	39	330	U
191-24-2-----	Benzo (g, h, i) perylene	70	330	U
50-32-8-----	Benzo (a) pyrene	23	330	U
111-91-1-----	bis (2-Chloroethoxy) methane	31	330	U
92-52-4-----	1,1'-Biphenyl	29	330	U
111-44-4-----	bis (2-Chloroethyl) ether	41	330	U
108-60-1-----	bis (2-Chloroisopropyl) ether	51	330	U
117-81-7-----	Bis (2-ethylhexyl) phthalate	36	330	50 J
101-55-3-----	4-Bromophenyl-phenylether	26	330	U
85-68-7-----	Butylbenzylphthalate	30	330	U
86-74-8-----	Carbazole	36	330	U
106-47-8-----	4-Chloroaniline	48	330	U
105-60-2-----	Caprolactam	67	330	U
59-50-7-----	4-Chloro-3-methylphenol	28	330	U
91-58-7-----	2-Chloronaphthalene	32	330	U
95-57-8-----	2-Chlorophenol	41	330	U
7005-72-3-----	4-Chlorophenyl-phenylether	31	330	U
218-01-9-----	Chrysene	31	330	U
53-70-3-----	Dibenz (a, h) anthracene	60	330	U
132-64-9-----	Dibenzofuran	24	330	U
91-94-1-----	3,3'-Dichlorobenzidine	31	330	U
120-83-2-----	2,4-Dichlorophenol	19	330	U
84-66-2-----	Diethylphthalate	34	330	U
105-67-9-----	2,4-Dimethylphenol	21	330	U
131-11-3-----	Dimethylphthalate	30	330	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK1007BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: SBLK1007BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS1007

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/07/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 10/08/08 10:38

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
84-74-2	Di-n-butylphthalate	30	330		U
534-52-1	4,6-Dinitro-2-methylphenol	22	830		U
51-28-5	2,4-Dinitrophenol	130	830		U
121-14-2	2,4-Dinitrotoluene	24	330		U
606-20-2	2,6-Dinitrotoluene	38	330		U
117-84-0	Di-n-octylphthalate	27	330		U
206-44-0	Fluoranthene	54	330		U
86-73-7	Fluorene	26	330		U
118-74-1	Hexachlorobenzene	35	330		U
87-68-3	Hexachlorobutadiene	33	330		U
77-47-4	Hexachlorocyclopentadiene	61	330		U
67-72-1	Hexachloroethane	39	330		U
193-39-5	Indeno(1,2,3-cd)pyrene	46	330		U
78-59-1	Isophorone	28	330		U
91-57-6	2-Methylnaphthalene	35	330		U
95-48-7	2-Methylphenol	39	330		U
106-44-5	4-Methylphenol	26	330		U
91-20-3	Naphthalene	32	330		U
88-74-4	2-Nitroaniline	32	330		U
99-09-2	3-Nitroaniline	47	830		U
100-01-6	4-Nitroaniline	100	830		U
98-95-3	Nitrobenzene	34	330		U
88-75-5	2-Nitrophenol	22	330		U
100-02-7	4-Nitrophenol	81	830		U
86-30-6	N-Nitrosodiphenylamine (1)	32	330		U
621-64-7	N-Nitroso-di-n-propylamine	55	330		U
87-86-5	Pentachlorophenol	34	830		U
85-01-8	Phenanthrene	23	330		U
108-95-2	Phenol	36	330		U
129-00-0	Pyrene	40	330		U
95-94-3	1,2,4,5-Tetrachlorobenzene	100	330		U
95-95-4	2,4,5-Trichlorophenol	27	830		U
88-06-2	2,4,6-Trichlorophenol	35	330		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B1

DFTPP Injection Date: 07/24/08

Instrument ID: BNA1

DFTPP Injection Time: 1025

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	40.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	19.9
365	Greater than 1.0% of mass 198	1.88
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	66.4
443	17.0 - 23.0% of mass 442	12.7 (19.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL001PPM	BNACAL001PPM	CAL001	07/24/08	1046
02	BNACAL005PPM	BNACAL005PPM	CAL005	07/24/08	1158
03	BNACAL010PPM	BNACAL010PPM	CAL010	07/24/08	1234
04	BNACAL020PPM	BNACAL020PPM	CAL020	07/24/08	1310
05	BNACAL040PPM	BNACAL040PPM	CAL040	07/24/08	1422
06	BNACAL050PPM	BNACAL050PPM	CAL050	07/24/08	1458
07	BNACAL060PPM	BNACAL060PPM	CAL060	07/24/08	1534
08	BNACAL070PPM	BNACAL070PPM	CAL070	07/24/08	1610
09	BNACAL080PPM	BNACAL080PPM	CAL080	07/24/08	1646
10	BNACAL090PPM	BNACAL090PPM	CAL090	07/24/08	1721
11	BNACAL100PPM	BNACAL100PPM	CAL100	07/24/08	1757
12	BNACAL001PPM	BNACAL001PPM	CALB001	07/24/08	1833
13	BNACAL002PPM	BNACAL002PPM	CALB002	07/24/08	1909
14	BNACAL005PPM	BNACAL005PPM	CALB005	07/24/08	1945
15	BNACAL010PPM	BNACAL010PPM	CALB010	07/24/08	2021
16	BNACAL020PPM	BNACAL020PPM	CALB020	07/24/08	2057
17	BNACAL050PPM	BNACAL050PPM	CALB050	07/24/08	2133
18	BNACAL070PPM	BNACAL070PPM	CALB070	07/24/08	2209
19					
20					
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B2

DFTPP Injection Date: 07/24/08

Instrument ID: BNA1

DFTPP Injection Time: 2241

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.8
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	42.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.0% of mass 198	1.59
441	Present, but less than mass 442	9.1
442	Greater than 40.0% of mass 198	55.6
443	17.0 - 23.0% of mass 442	11.5 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL080PPM	BNACAL080PPM	CALB080	07/24/08	2302
02	BNACAL100PPM	BNACAL100PPM	CALB100	07/24/08	2338
03	BNAICV050PPM	BNAICV050PPM	ICVEX	07/25/08	0014
04	BNAICV050PPM	BNAICV050PPM	ICVMAIN	07/25/08	0050
05	BNAICV050PPM	BNAICV050PPM	ICV02	07/25/08	0126
06	BNAICV050PPM	BNAICV050PPM	ICV03	07/25/08	0202
07	CALAP9C001PP	CALAP9C001PPM	CAP9C001	07/25/08	0238
08	CALAP9C002PP	CALAP9C002PPM	CAP9C002	07/25/08	0314
09	CALAP9C005PP	CALAP9C005PPM	CAP9C005	07/25/08	0349
10	CALAP9C010PP	CALAP9C010PPM	CAP9C010	07/25/08	0425
11	CALAP9C020PP	CALAP9C020PPM	CAP9C020	07/25/08	0501
12	CALAP9C030PP	CALAP9C030PPM	CAP9C030	07/25/08	0537
13	CALAP9C050PP	CALAP9C050PPM	CAP9C050	07/25/08	0612
14	CALAP9C070PP	CALAP9C070PPM	CAP9C070	07/25/08	0648
15	CALAP9C100PP	CALAP9C100PPM	CAP9C100	07/25/08	0724
16	CALAP9A001PP	CALAP9A001PPM	CAP9A001	07/25/08	0800
17	CALAP9A002PP	CALAP9A002PPM	CAP9A002	07/25/08	0836
18	CALAP9A005PP	CALAP9A005PPM	CAP9A005	07/25/08	0912
19	CALAP9A010PP	CALAP9A010PPM	CAP9A010	07/25/08	0948
20	BNAICV050PPM	BNAICV050PPM	ICVEX1	07/25/08	1024
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DFO724B3

DFTPP Injection Date: 07/25/08

Instrument ID: BNA1

DFTPP Injection Time: 1056

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	59.7
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	45.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	18.3
365	Greater than 1.0% of mass 198	1.80
441	Present, but less than mass 443	7.5
442	Greater than 40.0% of mass 198	52.7
443	17.0 - 23.0% of mass 442	10.3 (19.6)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CALAP9A020PP	CALAP9A020PPM	CAP9A020	07/25/08	1117
02	CALAP9A030PP	CALAP9A030PPM	CAP9A030	07/25/08	1152
03	CALAP9A050PP	CALAP9A050PPM	CAP9A050	07/25/08	1228
04	CALAP9A070PP	CALAP9A070PPM	CAP9A070	07/25/08	1304
05	CALAP9A100PP	CALAP9A100PPM	CAP9A100	07/25/08	1340
06	CALAP9B001PP	CALAP9B001PPM	CAP9B001	07/25/08	1416
07	CALAP9B002PP	CALAP9B002PPM	CAP9B002	07/25/08	1453
08	CALAP9B005PP	CALAP9B005PPM	CAP9B005	07/25/08	1529
09	CALAP9B010PP	CALAP9B010PPM	CAP9B010	07/25/08	1605
10	CALAP9B020PP	CALAP9B020PPM	CAP9B020	07/25/08	1641
11	CALAP9B030PP	CALAP9B030PPM	CAP9B030	07/25/08	1717
12	CALAP9B050PP	CALAP9B050PPM	CAP9B050	07/25/08	1753
13	CALAP9B070PP	CALAP9B070PPM	CAP9B070	07/25/08	1830
14	CALAP9B100PP	CALAP9B100PPM	CAP9B100	07/25/08	1906
15					
16					
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0728B1

DFTPP Injection Date: 07/28/08

Instrument ID: BNA1

DFTPP Injection Time: 0948

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	39.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	56.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	43.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.0
275	10.0 - 30.0% of mass 198	18.9
365	Greater than 1.0% of mass 198	1.84
441	Present, but less than mass 443	8.3
442	Greater than 40.0% of mass 198	47.6
443	17.0 - 23.0% of mass 442	9.4 (19.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CALAP9C080PP	CALAP9C080PPM	CAP9C080	07/28/08	1122
02					
03					
04					
05					
06					
07					
08					
09					
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FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Acenaphthene	AVRG		1.09139170		9.0
Acenaphthylene	AVRG		1.53182455		10.6
Acetophenone	2ORDR	0.00000000	0.64936256	0.10790983	0.995
Aniline	AVRG		1.65682728		12.6
Anthracene	AVRG		1.06648172		7.2
Benzoic acid	2ORDR	0.00000000	3.98005908	-1.0444470	0.995
Benzo(a)anthracene	AVRG		1.03077121		2.8
Benzo(b)fluoranthene	AVRG		1.05722188		6.6
Benzo(k)fluoranthene	AVRG		1.10885119		5.7
Benzo(g,h,i)perylene	AVRG		0.78210443		10.5
Benzo(a)pyrene	AVRG		0.93455939		9.1
Benzyl alcohol	AVRG		0.83895015		4.4
bis(2-Chloroethoxy)methane	AVRG		0.49345373		14.5
1,1'-Biphenyl	AVRG		1.47806094		14.3
bis(2-Chloroethyl) ether	LINR	0.00000000	1.45848833		0.996
bis(2-Chloroisopropyl) ether	AVRG		2.25983627		14.3
Bis(2-ethylhexyl) phthalate	AVRG		1.04861488		10.8
4-Bromophenyl-phenylether	AVRG		0.27331114		10.9
Butylbenzylphthalate	AVRG		0.81176373		9.4
Carbazole	AVRG		1.08597457		9.1
4-Chloroaniline	AVRG		0.42040722		6.8
Caprolactam	2ORDR	0.00000000	9.51295377	-1.7864253	0.990
4-Chloro-3-methylphenol	AVRG		0.27799591		5.0
2-Chloronaphthalene	AVRG		1.14444890		12.7
2-Chlorophenol	2ORDR	0.00000000	0.81163348	6.617e-002	0.995
4-Chlorophenyl-phenylether	AVRG		0.56066559		9.4
Chrysene	AVRG		0.97560077		5.1
Dibenz(a,h)anthracene	AVRG		0.73731945		10.8
Dibenzofuran	AVRG		1.49129502		13.8
1,4-Dichlorobenzene	AVRG		1.38341996		14.6
1,2-Dichlorobenzene	2ORDR	0.00000000	0.61311311	0.12904362	0.998
1,3-Dichlorobenzene	2ORDR	0.00000000	0.56974861	7.529e-002	0.999
2,4-Dichlorophenol	AVRG		0.31114275		7.7
Diethylphthalate	AVRG		1.39912579		8.8
2,4-Dimethylphenol	AVRG		0.27674878		10.6
Dimethylphthalate	AVRG		1.48965062		7.7
Di-n-butylphthalate	AVRG		1.67222367		8.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
4,6-Dinitro-2-methylphenol	2ORDR	0.00000000	6.20382331	-2.7236493	0.996
2,4-Dinitrophenol	2ORDR	0.00000000	5.81850805	-2.8659744	0.995
2,4-Dinitrotoluene	AVRG		0.41569477		13.5
2,6-Dinitrotoluene	AVRG		0.36596872		11.9
Di-n-octylphthalate	LINR	0.00000000	2.15587229		0.996
1,2-Diphenylhydrazine	AVRG		1.10577930		12.0
Fluoranthene	AVRG		1.08571994		6.9
Fluorene	AVRG		1.19572482		8.1
Hexachlorobenzene	AVRG		0.26368974		11.0
Hexachlorobutadiene	AVRG		0.18904097		11.6
Hexachlorocyclopentadiene	AVRG		0.28463270		4.2
Hexachloroethane	AVRG		0.63190826		9.9
Indeno(1,2,3-cd)pyrene	AVRG		0.72510758		13.2
Isophorone	AVRG		0.83469872		7.6
2-Methylnaphthalene	AVRG		0.51410995		13.8
1-Methylnaphthalene	AVRG		0.48543091		13.3
4-Methylphenol	AVRG		1.09198482		7.5
2-Methylphenol	AVRG		1.12475212		4.5
Naphthalene	AVRG		0.92804711		13.7
3-Methylphenol	AVRG		1.09290214		7.5
2-Nitroaniline	AVRG		0.38138430		5.3
3-Nitroaniline	AVRG		0.39798816		14.8
4-Nitroaniline	2ORDR	0.00000000	2.97809699	-0.4472226	0.995
Nitrobenzene	AVRG		0.43098596		13.3
2-Nitrophenol	AVRG		0.26039302		6.1
4-Nitrophenol	AVRG		0.22439960		14.4
N-Nitroso-di-methylamine	AVRG		0.66545727		7.8
N-Nitrosodiphenylamine	AVRG		0.68913050		7.4
N-Nitroso-di-n-propylamine	AVRG		0.89533188		10.6
Pentachlorophenol	LINR	0.00000000	0.19926606		0.996
Phenanthrene	AVRG		1.09575510		12.2
Phenol	AVRG		1.63925115		14.6
Pyrene	AVRG		1.20712725		5.5
Pyridine	AVRG		1.79722027		5.2
1,2,4,5-Tetrachlorobenzene	AVRG		0.25926288		11.8
1,2,4-Trichlorobenzene	AVRG		0.35023048		13.0
2,4,5-Trichlorophenol	AVRG		0.39701621		6.9

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4,6-Trichlorophenol	AVRG		0.38204520		5.5
2-Fluorophenol	2ORDR	0.00000000	0.56691538	7.38e-002	0.996
Phenol-d6	2ORDR	0.00000000	0.52282494	4.688e-002	0.997
Nitrobenzene-d5	AVRG		0.43773029		9.9
2-Fluorobiphenyl	AVRG		1.37616048		14.6
2,4,6-Tribromophenol	AVRG		0.13495814		6.3
Terphenyl-d14	AVRG		0.86401658		5.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
Atrazine	AVRG		0.19998352	8.0
Benzaldehyde	AVRG		1.13441801	14.1
Benzidine	LINR	0.00000000	0.68404336	0.999
3,3'-Dichlorobenzidine	AVRG		0.34213412	14.7
2,3,4,6-Tetrachlorophenol	LINR	0.00000000	0.24497359	0.997

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS

Contract: 1XBN.m

Lab Code: NA

Case No.: NA

SAS No.: NA

SDG No.: SDGA81969

Instrument ID: BNA1

Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm)

Calibration Time(s): 1046

1757

LAB FILE ID:
RF10: CAL010

RF1: CAL001
RF20: CAL020

RF2:

RF5: CAL005

COMPOUND	RF1	RF2	RF5	RF10	RF20
Acenaphthene	1.194		1.269	1.212	1.148
Acenaphthylene	1.751		1.783	1.767	1.526
Acetophenone	1.655		1.564	1.476	1.337
Aniline	1.837		2.013	1.932	1.830
Anthracene	1.188		1.167	1.161	1.038
Benzoic acid	0.081		0.179	0.173	0.231
Benzo (a) anthracene	1.023		1.048	1.056	1.052
Benzo (b) fluoranthene	0.869		1.001	1.115	1.093
Benzo (k) fluoranthene	0.974		1.052	1.201	1.102
Benzo (g, h, i) perylene	0.580		0.807	0.857	0.842
Benzo (a) pyrene	0.696		0.898	1.008	0.968
Benzyl alcohol	0.768		0.844	0.858	0.896
bis (2-Chloroethoxy) methane	0.593		0.572	0.570	0.570
1,1'-Biphenyl	1.794		1.776	1.680	1.556
bis (2-Chloroethyl) ether	2.009		1.984	1.905	1.731
bis (2-Chloroisopropyl) ether	2.598		2.615	2.528	2.473
Bis (2-ethylhexyl) phthalate	0.734		1.012	1.063	1.116
4-Bromophenyl-phenylether	0.349		0.250	0.294	0.279
Butylbenzylphthalate	0.597		0.826	0.836	0.824
Carbazole	1.316		1.212	1.122	1.047
4-Chloroaniline	0.424		0.452	0.443	0.459
Caprolactam	0.095		0.074	0.094	0.109
4-Chloro-3-methylphenol	0.284		0.298	0.281	0.288
2-Chloronaphthalene	1.370		1.397	1.240	1.221
2-Chlorophenol	1.501		1.480	1.375	1.384
4-Chlorophenyl-phenylether	0.668		0.639	0.601	0.559
Chrysene	1.015		1.063	1.022	0.976
Dibenz (a, h) anthracene	0.524		0.784	0.758	0.729
Dibenzofuran	1.872		1.776	1.689	1.540
1,4-Dichlorobenzene	1.659		1.626	1.641	1.554
1,2-Dichlorobenzene	1.607		1.655	1.586	1.520
1,3-Dichlorobenzene	1.888		1.812	1.870	1.689
2,4-Dichlorophenol	0.296		0.350	0.340	0.335
Diethylphthalate	1.474		1.592	1.609	1.467
2,4-Dimethylphenol	0.317		0.331	0.290	0.281
Dimethylphthalate	1.581		1.678	1.649	1.555
Di-n-butylphthalate	1.716		1.889	1.846	1.742

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
4,6-Dinitro-2-methylphenol	0.034		0.095	0.110	0.135
2,4-Dinitrophenol	0.045		0.085	0.088	0.125
2,4-Dinitrotoluene	0.257		0.418	0.419	0.444
2,6-Dinitrotoluene	0.244		0.359	0.352	0.373
Di-n-octylphthalate	0.846		1.553	1.722	1.939
1,2-Diphenylhydrazine	1.358		1.212	1.223	1.135
Fluoranthene	1.192		1.154	1.159	1.133
Fluorene	1.238		1.433	1.268	1.196
Hexachlorobenzene	0.344		0.262	0.279	0.262
Hexachlorobutadiene	0.201		0.214	0.221	0.212
Hexachlorocyclopentadiene	0.257		0.296	0.285	0.286
Hexachloroethane	0.685		0.701	0.717	0.722
Indeno(1,2,3-cd)pyrene	0.468		0.693	0.758	0.782
Isophorone	0.876		0.905	0.892	0.940
2-Methylnaphthalene	0.542		0.672	0.574	0.538
1-Methylnaphthalene	0.553		0.590	0.538	0.505
4-Methylphenol	1.161		1.236	1.161	1.151
2-Methylphenol	1.174		1.199	1.141	1.187
Naphthalene	1.077		1.093	1.009	1.034
3-Methylphenol	1.168		1.236	1.161	1.151
2-Nitroaniline	0.349		0.360	0.388	0.418
3-Nitroaniline	0.238		0.361	0.388	0.412
4-Nitroaniline	0.241		0.240	0.225	0.272
Nitrobenzene	0.524		0.473	0.494	0.488
2-Nitrophenol	0.243		0.279	0.257	0.279
4-Nitrophenol	0.143		0.200	0.204	0.228
N-Nitroso-di-methylamine	0.568		0.647	0.727	0.772
N-Nitrosodiphenylamine	0.780		0.718	0.724	0.680
N-Nitroso-di-n-propylamine	1.005		1.050	1.027	0.937
Pentachlorophenol	0.110		0.135	0.159	0.169
Phenanthrene	1.436		1.169	1.177	1.056
Phenol	1.991		1.855	1.861	1.825
Pyrene	1.297		1.295	1.228	1.215
Pyridine	1.715		1.839	1.955	1.984
1,2,4,5-Tetrachlorobenzene	0.299		0.315	0.263	0.263
1,2,4-Trichlorobenzene	0.414		0.409	0.396	0.390
2,4,5-Trichlorophenol	0.338		0.416	0.428	0.416

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
2,4,6-Trichlorophenol	0.389		0.409	0.408	0.406
2-Fluorophenol	1.592		1.686	1.679	1.617
Phenol-d6	1.880		1.948	1.949	1.842
Nitrobenzene-d5	0.490		0.468	0.497	0.484
2-Fluorobiphenyl	1.706		1.583	1.686	1.467
2,4,6-Tribromophenol	0.114		0.127	0.135	0.136
Terphenyl-d14	0.924		0.921	0.833	0.868

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: ENA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
Acenaphthene		1.048	1.090	1.030	1.008
Acenaphthylene		1.482	1.488	1.476	1.477
Acetophenone		1.215	1.254	1.163	1.240
Aniline		1.659	1.534	1.516	1.519
Anthracene		1.105	1.056	0.979	1.020
Benzoic acid		0.262	0.266	0.308	0.305
Benzo (a) anthracene		1.021	1.033	1.037	1.077
Benzo (b) fluoranthene		1.062	1.074	1.043	1.085
Benzo (k) fluoranthene		1.130	1.152	1.045	1.122
Benzo (g, h, i) perylene		0.784	0.781	0.756	0.872
Benzo (a) pyrene		0.931	0.931	0.950	0.996
Benzyl alcohol		0.810	0.858	0.825	0.880
bis (2-Chloroethoxy) methane		0.498	0.457	0.476	0.447
1,1'-Biphenyl		1.403	1.402	1.338	1.376
bis (2-Chloroethyl) ether		1.463	1.427	1.437	1.466
bis (2-Chloroisopropyl) ether		2.027	2.064	1.840	1.932
Bis (2-ethylhexyl) phthalate		1.099	1.174	1.100	1.101
4-Bromophenyl-phenylether		0.283	0.264	0.237	0.258
Butylbenzylphthalate		0.793	0.856	0.888	0.863
Carbazole		1.053	1.108	1.022	1.023
4-Chloroaniline		0.431	0.397	0.430	0.433
Caprolactam		0.109	0.096	0.116	0.116
4-Chloro-3-methylphenol		0.291	0.262	0.287	0.280
2-Chloronaphthalene		1.067	1.133	1.081	1.104
2-Chlorophenol		1.091	1.130	1.011	1.110
4-Chlorophenyl-phenylether		0.518	0.557	0.524	0.533
Chrysene		0.948	1.004	0.933	0.997
Dibenz (a, h) anthracene		0.715	0.737	0.773	0.839
Dibenzofuran		1.352	1.494	1.371	1.406
1,4-Dichlorobenzene		1.382	1.334	1.250	1.266
1,2-Dichlorobenzene		1.292	1.248	1.120	1.174
1,3-Dichlorobenzene		1.436	1.409	1.364	1.367
2,4-Dichlorophenol		0.321	0.294	0.311	0.309
Diethylphthalate		1.297	1.385	1.402	1.319
2,4-Dimethylphenol		0.281	0.236	0.285	0.264
Dimethylphthalate		1.478	1.488	1.402	1.438
Di-n-butylphthalate		1.802	1.706	1.528	1.549

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
4,6-Dinitro-2-methylphenol		0.181	0.174	0.191	0.196
2,4-Dinitrophenol		0.171	0.212	0.214	0.212
2,4-Dinitrotoluene		0.402	0.460	0.421	0.456
2,6-Dinitrotoluene		0.370	0.389	0.393	0.393
Di-n-octylphthalate		2.166	2.117	2.197	2.059
1,2-Diphenylhydrazine		1.206	1.043	0.997	1.026
Fluoranthene		1.151	1.052	0.990	0.998
Fluorene		1.105	1.238	1.134	1.146
Hexachlorobenzene		0.267	0.242	0.242	0.258
Hexachlorobutadiene		0.196	0.174	0.187	0.180
Hexachlorocyclopentadiene		0.281	0.296	0.281	0.297
Hexachloroethane		0.607	0.626	0.575	0.601
Indeno (1,2,3-cd) pyrene		0.688	0.753	0.757	0.836
Isophorone		0.861	0.749	0.811	0.816
2-Methylnaphthalene		0.513	0.472	0.520	0.513
1-Methylnaphthalene		0.512	0.444	0.495	0.490
4-Methylphenol		1.108	1.082	1.036	1.096
2-Methylphenol		1.087	1.092	1.056	1.168
Naphthalene		0.910	0.812	0.852	0.785
3-Methylphenol		1.108	1.082	1.036	1.096
2-Nitroaniline		0.360	0.395	0.384	0.406
3-Nitroaniline		0.431	0.443	0.416	0.444
4-Nitroaniline		0.321	0.394	0.364	0.395
Nitrobenzene		0.450	0.401	0.399	0.398
2-Nitrophenol		0.272	0.234	0.272	0.269
4-Nitrophenol		0.228	0.236	0.249	0.256
N-Nitroso-di-methylamine		0.674	0.671	0.675	0.647
N-Nitrosodiphenylamine		0.766	0.656	0.654	0.634
N-Nitroso-di-n-propylamine		0.870	0.874	0.810	0.860
Pentachlorophenol		0.194	0.185	0.196	0.205
Phenanthrene		1.151	1.034	1.015	1.040
Phenol		1.524	1.463	1.428	1.439
Pyrene		1.216	1.250	1.240	1.184
Pyridine		1.759	1.786	1.764	1.769
1,2,4,5-Tetrachlorobenzene		0.278	0.243	0.262	0.252
1,2,4-Trichlorobenzene		0.354	0.328	0.343	0.324
2,4,5-Trichlorophenol		0.369	0.411	0.416	0.419

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
=====	=====	=====	=====	=====	=====
2,4,6-Trichlorophenol		0.370	0.395	0.369	0.384
=====	=====	=====	=====	=====	=====
2-Fluorophenol		1.275	1.290	1.134	1.190
Phenol-d6		1.483	1.427	1.370	1.376
Nitrobenzene-d5		0.432	0.365	0.446	0.414
2-Fluorobiphenyl		1.277	1.288	1.279	1.278
2,4,6-Tribromophenol		0.146	0.138	0.134	0.137
Terphenyl-d14		0.793	0.924	0.913	0.849

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
Acenaphthene	1.017	1.002	0.987
Acenaphthylene	1.426	1.322	1.353
Acetophenone	1.097	1.090	1.050
Aniline	1.472	1.413	1.498
Anthracene	1.038	0.994	0.985
Benzoic acid	0.289	0.298	
Benzo (a) anthracene	1.028	0.978	0.985
Benzo (b) fluoranthene	1.110	1.092	1.086
Benzo (k) fluoranthene	1.114	1.156	1.150
Benzo (g, h, i) perylene	0.810	0.702	0.812
Benzo (a) pyrene	0.977	0.968	0.958
Benzyl alcohol	0.798	0.857	0.834
bis(2-Chloroethoxy)methane	0.440	0.406	0.398
1,1'-Biphenyl	1.253	1.202	
bis(2-Chloroethyl) ether	1.443		
bis(2-Chloroisopropyl) ether			
Bis(2-ethylhexyl)phthalate	1.054	1.028	1.053
4-Bromophenyl-phenylether	0.269	0.269	0.254
Butylbenzylphthalate	0.807	0.820	0.818
Carbazole	1.036	0.998	1.009
4-Chloroaniline	0.402	0.367	0.386
Caprolactam	0.114	0.102	0.110
4-Chloro-3-methylphenol	0.267	0.251	0.270
2-Chloronaphthalene	0.996	0.982	0.998
2-Chlorophenol	1.022	1.044	1.024
4-Chlorophenyl-phenylether	0.529	0.520	0.519
Chrysene	0.911	0.959	0.904
Dibenz (a, h) anthracene	0.780	0.705	0.768
Dibenzofuran	1.369	1.241	1.292
1,4-Dichlorobenzene	1.217	1.146	1.139
1,2-Dichlorobenzene	1.114	1.066	1.058
1,3-Dichlorobenzene	1.284	1.276	1.248
2,4-Dichlorophenol	0.310	0.282	0.274
Diethylphthalate	1.296	1.256	1.294
2,4-Dimethylphenol	0.260	0.255	0.243
Dimethylphthalate	1.427	1.310	1.380
Di-n-butylphthalate	1.640	1.483	1.492

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
2,4,6-Trichlorophenol	0.361	0.361	0.349
2-Fluorophenol	1.128	1.056	1.055
Phenol-d6	1.311	1.217	1.254
Nitrobenzene-d5	0.416	0.389	0.415
2-Fluorobiphenyl	1.277	1.144	1.153
2,4,6-Tribromophenol	0.145	0.136	0.136
Terphenyl-d14	0.826	0.833	0.821

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: ENA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF1: CALB001 RF2: CALB002 RF5: CALB005
RF10: CALB010 RF20: CALB020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Atrazine	0.184	0.191	0.200	0.236	0.214
Benzaldehyde	1.154	1.185	1.280	1.324	1.156
Benzidine	0.359	0.481	0.590	0.761	0.705
3,3'-Dichlorobenzidine	0.247	0.299	0.343	0.373	0.357
2,3,4,6-Tetrachlorophenol	0.150	0.186	0.186	0.233	0.232

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF80: CALB080 RF90: RF100: CALB100

COMPOUND	RF80	RF90	RF100
Atrazine	0.199		0.194
Benzaldehyde			
Benzidine			
3,3'-Dichlorobenzidine	0.415		
2,3,4,6-Tetrachlorophenol	0.258		0.243

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.121	50.00	51.34		AVRG	2.7	25.0
Acenaphthylene	1.532	1.727	50.00	56.37		AVRG	12.7	25.0
Aniline	1.657	1.765	50.00	53.28		AVRG	6.6	25.0
Anthracene	1.066	1.183	50.00	55.46		AVRG	10.9	25.0
Atrazine	0.200	0.191	50.00	0.0000		AVRG	-4.5	25.0
Benzaldehyde	1.134	0.946	50.00	0.0000		AVRG	-16.6	25.0
Benzoic acid	0.239	0.252	50.00	45.95		2ORDR	-8.1	25.0
Benzo (a) anthracene	1.031	1.150	50.00	55.78		AVRG	11.6	25.0
Benzo (b) fluoranthene	1.057	1.102	50.00	52.09		AVRG	4.2	25.0
Benzo (k) fluoranthene	1.109	1.163	50.00	52.43		AVRG	4.9	25.0
Benzo (g, h, i) perylene	0.782	0.829	50.00	52.98		AVRG	6.0	25.0
Benzo (a) pyrene	0.935	1.038	50.00	55.52		AVRG	11.0	25.0
Benzyl alcohol	0.839	0.810	50.00	48.26		AVRG	-3.5	25.0
1,1'-Biphenyl	1.478	1.402	50.00	0.0000		AVRG	-5.1	25.0
bis (2-Chloroethoxy) methane	0.493	0.481	50.00	48.78		AVRG	-2.4	25.0
bis (2-Chloroethyl) ether	1.652	1.326	50.00	45.46		LINR	-9.1	25.0
bis (2-Chloroisopropyl) ether	2.260	2.091	50.00	46.27		AVRG	-7.5	25.0
Bis (2-ethylhexyl) phthalate	1.048	1.134	50.00	54.05		AVRG	8.1	25.0
4-Bromophenyl-phenylether	0.273	0.243	50.00	44.49		AVRG	-11.0	25.0
Butylbenzylphthalate	0.812	0.912	50.00	56.20		AVRG	12.4	25.0
4-Chloroaniline	0.420	0.447	50.00	53.18		AVRG	6.4	25.0
4-Chloro-3-methylphenol	0.278	0.292	50.00	52.45		AVRG	4.9	25.0
2-Chloronaphthalene	1.144	1.234	50.00	53.94		AVRG	7.9	25.0
2-Chlorophenol	1.197	1.251	50.00	57.25		2ORDR	14.5	25.0
4-Chlorophenyl-phenylether	0.561	0.561	50.00	50.04		AVRG	0.1	25.0
Chrysene	0.976	1.112	50.00	57.00		AVRG	14.0	25.0
Dibenz (a, h) anthracene	0.737	0.775	50.00	52.58		AVRG	5.2	25.0
Dibenzofuran	1.491	1.439	50.00	48.25		AVRG	-3.5	25.0
1,2-Dichlorobenzene	1.313	1.313	50.00	54.16		2ORDR	8.3	25.0
1,4-Dichlorobenzene	1.383	1.274	50.00	46.06		AVRG	-7.9	25.0
1,3-Dichlorobenzene	1.513	1.396	50.00	48.94		2ORDR	-2.1	25.0
2,4-Dichlorophenol	0.311	0.304	50.00	48.78		AVRG	-2.4	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.247	50.00	44.55		AVRG	-10.9	25.0
2,4-Dimethylphenol	0.277	0.331	50.00	59.78		AVRG	19.6	25.0
Dimethylphthalate	1.490	1.386	50.00	46.54		AVRG	-6.9	25.0
Di-n-butylphthalate	1.672	1.620	50.00	48.44		AVRG	-3.1	25.0
4,6-Dinitro-2-methylphenol	0.156	0.200	50.00	55.35		2ORDR	10.7	25.0
2,4-Dinitrophenol	0.167	0.200	50.00	51.09	0.050	2ORDR	2.2	25.0
2,4-Dinitrotoluene	0.416	0.387	50.00	46.57		AVRG	-6.8	25.0
2,6-Dinitrotoluene	0.366	0.372	50.00	50.76		AVRG	1.5	25.0
Di-n-octylphthalate	1.870	2.025	50.00	46.98		LINR	-6.0	25.0
1,2-Diphenylhydrazine	1.106	1.109	50.00	50.13		AVRG	0.3	25.0
Fluoranthene	1.086	1.166	50.00	53.69		AVRG	7.4	25.0
Fluorene	1.196	1.174	50.00	49.08		AVRG	-1.8	25.0
Hexachlorobenzene	0.264	0.271	50.00	51.38		AVRG	2.8	25.0
Hexachlorobutadiene	0.189	0.185	50.00	48.92		AVRG	-2.2	25.0
Hexachlorocyclopentadiene	0.284	0.298	50.00	52.34	0.050	AVRG	4.7	25.0
Hexachloroethane	0.632	0.578	50.00	45.72		AVRG	-8.6	25.0
Indeno(1,2,3-cd)pyrene	0.725	0.760	50.00	52.43		AVRG	4.9	25.0
Isophorone	0.835	0.779	50.00	46.69		AVRG	-6.6	25.0
1-Methylnaphthalene	0.485	0.478	50.00	49.29		AVRG	-1.4	25.0
2-Methylnaphthalene	0.514	0.512	50.00	49.76		AVRG	-0.5	25.0
Naphthalene	0.928	0.939	50.00	50.61		AVRG	1.2	25.0
4-Methylphenol	1.092	1.161	50.00	53.17		AVRG	6.3	25.0
3-Methylphenol	1.093	1.161	50.00	53.13		AVRG	6.2	25.0
2-Methylphenol	1.125	1.075	50.00	47.79		AVRG	-4.4	25.0
2-Nitroaniline	0.381	0.394	50.00	51.59		AVRG	3.2	25.0
3-Nitroaniline	0.398	0.368	50.00	46.28		AVRG	-7.4	25.0
4-Nitroaniline	0.327	0.314	50.00	44.05		2ORDR	-11.9	25.0
Nitrobenzene	0.431	0.441	50.00	51.21		AVRG	2.4	25.0
2-Nitrophenol	0.260	0.262	50.00	50.29		AVRG	0.6	25.0
4-Nitrophenol	0.224	0.232	50.00	51.60	0.050	AVRG	3.2	25.0
N-Nitroso-di-methylamine	0.665	0.562	50.00	42.23		AVRG	-15.5	25.0
N-Nitrosodiphenylamine (1)	0.689	0.636	50.00	46.12		AVRG	-7.8	25.0
N-Nitroso-di-n-propylamine	0.895	0.841	50.00	46.95	0.050	AVRG	-6.1	25.0
Pentachlorophenol	0.178	0.211	50.00	52.84		LINR	5.7	25.0
Phenanthrene	1.096	1.143	50.00	52.15		AVRG	4.3	25.0
Phenol	1.639	1.684	50.00	51.35		AVRG	2.7	25.0

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.342	50.00	55.57		AVRG	11.1	25.0
Pyridine	1.797	1.712	50.00	47.63		AVRG	-4.7	25.0
1,2,4-Trichlorobenzene	0.350	0.300	50.00	42.76		AVRG	-14.5	25.0
2,4,5-Trichlorophenol	0.397	0.419	50.00	52.74		AVRG	5.5	25.0
2,4,6-Trichlorophenol	0.382	0.390	50.00	51.00		AVRG	2.0	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0014

Lab File ID: ICVEX Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzidine	0.608	0.902	50.00	65.92		LINR	31.8	25.0 <
3,3'-Dichlorobenzidine	0.342	0.458	50.00	66.98		AVRG	34.0	25.0 <

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0202

Lab File ID: ICV03 Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzaldehyde	1.134	0.944	50.00	41.60		AVRG	-16.8	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969
 Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0126
 Lab File ID: ICV02 Init. Calib. Date(s): 07/24/08 07/28/08
 Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetophenone	1.286	1.030	50.00	40.60		2ORDR	-18.8	25.0
Atrazine	0.200	0.217	50.00	54.28		AVRG	8.6	25.0
1,1'-Biphenyl	1.478	1.424	50.00	48.19		AVRG	-3.6	25.0
Caprolactam	0.103	0.128	50.00	59.13		2ORDR	18.2	25.0
1,2,4,5-Tetrachlorobenzene	0.259	0.265	50.00	51.14		AVRG	2.3	25.0
2,3,4,6-Tetrachlorophenol	0.218	0.259	50.00	52.88		LINR	5.8	25.0

Handwritten signature
8-5-08

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: BNA1 Calibration Date: 10/07/08 Time: 0908
 Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 07/28/08
 Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.095	50.00	50.17		AVRG	0.3	20.0
Acenaphthylene	1.532	1.417	50.00	46.26		AVRG	-7.5	
Acetophenone	1.286	1.379	50.00	57.61		2ORDR	15.2	
Anthracene	1.066	0.995	50.00	46.64		AVRG	-6.7	
Atrazine	0.200	0.226	50.00	56.46		AVRG	12.9	
Benzaldehyde	1.134	1.132	50.00	49.89		AVRG	-0.2	
Benzo (a) anthracene	1.031	1.085	50.00	52.63		AVRG	5.3	
Benzo (b) fluoranthene	1.057	1.060	50.00	50.14		AVRG	0.3	
Benzo (k) fluoranthene	1.109	1.118	50.00	50.43		AVRG	0.9	
Benzo (g, h, i) perylene	0.782	0.718	50.00	45.89		AVRG	-8.2	
Benzo (a) pyrene	0.935	0.994	50.00	53.17		AVRG	6.3	20.0
bis (2-Chloroethoxy) methane	0.493	0.484	50.00	49.01		AVRG	-2.0	
1,1'-Biphenyl	1.478	1.232	50.00	41.66		AVRG	-16.7	
bis (2-Chloroethyl) ether	1.652	1.646	50.00	56.41		LINR	12.8	
bis (2-Chloroisopropyl) ether	2.260	2.252	50.00	49.84		AVRG	-0.3	
Bis (2-ethylhexyl) phthalate	1.048	1.327	50.00	63.26		AVRG	26.5	
4-Bromophenyl-phenylether	0.273	0.269	50.00	49.21		AVRG	-1.6	
Butylbenzylphthalate	0.812	1.016	50.00	62.61		AVRG	25.2	
Carbazole	1.086	0.976	50.00	44.94		AVRG	-10.1	
4-Chloroaniline	0.420	0.452	50.00	53.81		AVRG	7.6	
Caprolactam	0.103	0.142	50.00	65.17		2ORDR	30.3	
4-Chloro-3-methylphenol	0.278	0.295	50.00	53.10		AVRG	6.2	20.0
2-Chloronaphthalene	1.144	1.018	50.00	44.46		AVRG	-11.1	
2-Chlorophenol	1.197	1.149	50.00	52.11		2ORDR	4.2	
4-Chlorophenyl-phenylether	0.561	0.514	50.00	45.87		AVRG	-8.3	
Chrysene	0.976	0.966	50.00	49.50		AVRG	-1.0	
Dibenz (a, h) anthracene	0.737	0.673	50.00	45.64		AVRG	-8.7	
Dibenzofuran	1.491	1.453	50.00	48.72		AVRG	-2.6	
3,3'-Dichlorobenzidine	0.342	0.318	50.00	46.53		AVRG	-6.9	
2,4-Dichlorophenol	0.311	0.326	50.00	52.33		AVRG	4.6	20.0
Diethylphthalate	1.399	1.528	50.00	54.62		AVRG	9.2	
2,4-Dimethylphenol	0.277	0.348	50.00	62.82		AVRG	25.6	
Dimethylphthalate	1.490	1.473	50.00	49.43		AVRG	-1.1	
Di-n-butylphthalate	1.672	1.849	50.00	55.30		AVRG	10.6	
4,6-Dinitro-2-methylphenol	0.156	0.187	50.00	52.10		2ORDR	4.2	
2,4-Dinitrophenol	0.167	0.205	50.00	52.10	0.050	2ORDR	4.2	
2,4-Dinitrotoluene	0.416	0.489	50.00	58.81		AVRG	17.6	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Lab File ID: DF1008B1 DFTPP Injection Date: 10/08/08
 Instrument ID: BNA1 DFTPP Injection Time: 0940

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	69.6
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	43.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	16.4
365	Greater than 1.0% of mass 198	1.40
441	Present, but less than mass 443	6.9
442	Greater than 40.0% of mass 198	44.4
443	17.0 - 23.0% of mass 442	9.0 (20.2)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050S	10/08/08	1001
02	SBLK1007BS1	SBLK1007BS1	S1BS1007	10/08/08	1038
03	SBLK1007BS1L	SBLK1007BS1LCS	S1LS1007	10/08/08	1114
04	01SBDIT01	0810033-01	1003301	10/08/08	1910
05	01SBDIT02	0810033-02	1003302	10/08/08	1946
06	01SBDIT03	0810033-03	1003303	10/08/08	2023
07					
08					
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12					
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15					
16					
17					
18					
19					
20					
21					
22					

FORM 2
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK1003BS1	52	62	62	62	65	60			0
02	SBLK1003BS1L	61	63	70	64	80	75			0
03	01SS01701	63	71	75	62	70	84			0
04	01SS42001	67	75	90	64	78	92			0
05	01SS01401	60	69	71	74	82	75			0
06	01SS01401 DU	61	68	72	60	71	80			0
07	01SS01501	66	75	77	70	83	80			0
08	01SS02401	66	76	77	67	81	78			0
09	01SS02501	55	67	68	68	76	81			0
10	01SS13701	56	62	68	68	71	74			0
11	01SS13801	60	68	75	65	81	87			0
12	01SS13901	45	56	70	55	64	79			0
13	01SS13901 DU	60	70	79	71	77	91			0
14	01SS02501MS	62	67	70	69	79	76			0
15	01SS02501MSD	67	71	73	63	83	92			0
16	SBLK1007BS1	63	73	73	65	70	72			0
17	SBLK1007BS1L	72	75	72	66	74	70			0
18	01SBDIT01	47	57	61	51	67	67			0
19	01SBDIT02	58	65	72	58	68	69			0
20	01SBDIT03	68	77	74	61	70	65			0
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	EL QC LIMITS	SPIKE CONC (UG/KG)
S1 (2FP) = 2-Fluorophenol	(25-110)	6700
S2 (PHL) = Phenol-d6	(30-110)	6700
S3 (NBZ) = Nitrobenzene-d5	(30-110)	3300
S4 (FBP) = 2-Fluorobiphenyl	(35-110)	3300
S5 (TBP) = 2,4,6-Tribromophenol	(30-115)	6700
S6 (TPH) = Terphenyl-d14	(40-120)	3300

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
Acenaphthene	3733	0.0000	3088	83	45-110
Acenaphthylene	3733	0.0000	3645	98	45-105
Acetophenone	3733	0.0000	2278	61	35-110
Anthracene	3733	0.0000	3070	82	55-105
Atrazine	3733	0.0000	2805	75	55-105
Benzaldehyde	3733	0.0000	1945	52	10-160
Benzo (a) anthracene	3733	0.0000	3426	92	50-110
Benzo (b) fluoranthene	3733	0.0000	3789	102	45-115
Benzo (k) fluoranthene	3733	0.0000	3823	102	45-125
Benzo (g, h, i) perylene	3733	0.0000	2362	63	40-125
Benzo (a) pyrene	3733	0.0000	3963	106	50-110
bis (2-Chloroethoxy) meth	3733	0.0000	2884	77	45-110
1,1'-Biphenyl	3733	0.0000	2746	74	45-110
bis (2-Chloroethyl) ether	3733	0.0000	2811	75	40-105
bis (2-Chloroisopropyl) e	3733	0.0000	2975	80	20-115
Bis (2-ethylhexyl) phthal	3733	54.71	4150	110	45-125
4-Bromophenyl-phenyleth	3733	0.0000	2316	62	45-115
Butylbenzylphthalate	3733	0.0000	3975	106	50-125
Carbazole	3733	0.0000	2713	73	45-115
4-Chloroaniline	3733	0.0000	2869	77	10- 95
Caprolactam	3733	0.0000	3641	98	50-110
4-Chloro-3-methylphenol	3733	0.0000	3128	84	45-115
2-Chloronaphthalene	3733	0.0000	3010	81	45-105
2-Chlorophenol	3733	0.0000	3096	83	45-105
4-Chlorophenyl-phenylet	3733	0.0000	3069	82	45-110
Chrysene	3733	0.0000	3443	92	55-110
Dibenz (a, h) anthracene	3733	0.0000	2500	67	40-125
Dibenzofuran	3733	0.0000	3116	83	50-105

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
3,3'-Dichlorobenzidine	3733	0.0000	2346	63	19-130
2,4-Dichlorophenol	3733	0.0000	2909	78	45-110
Diethylphthalate	3733	0.0000	3393	91	50-115
2,4-Dimethylphenol	3733	0.0000	3786	101	30-105
Dimethylphthalate	3733	0.0000	2861	77	50-110
Di-n-butylphthalate	3733	0.0000	3033	81	55-110
4,6-Dinitro-2-methylphe	3733	0.0000	3096	83	30-135
2,4-Dinitrophenol	3733	0.0000	3378	90	15-130
2,4-Dinitrotoluene	3733	0.0000	3422	92	50-115
2,6-Dinitrotoluene	3733	0.0000	3392	91	50-110
Di-n-octylphthalate	3733	0.0000	4659	125	40-130
Fluoranthene	3733	0.0000	2897	78	55-115
Fluorene	3733	0.0000	3380	90	50-110
Hexachlorobenzene	3733	0.0000	3031	81	45-120
Hexachlorobutadiene	3733	0.0000	2495	67	30-110
Hexachlorocyclopentadie	3733	0.0000	717.3	19	10-110
Hexachloroethane	3733	0.0000	1860	50	35-110
Indeno(1,2,3-cd)pyrene	3733	0.0000	2598	70	40-120
Isophorone	3733	0.0000	2767	74	45-110
2-Methylnaphthalene	3733	0.0000	3077	82	40-110
2-Methylphenol	3733	0.0000	2769	74	40-105
4-Methylphenol	3733	0.0000	3084	83	40-105
Naphthalene	3733	0.0000	2788	75	40-105
2-Nitroaniline	3733	0.0000	3808	102	45-120
3-Nitroaniline	3733	0.0000	3171	85	25-110
4-Nitroaniline	3733	0.0000	3210	86	35-115
Nitrobenzene	3733	0.0000	2781	74	40-115
2-Nitrophenol	3733	0.0000	2986	80	40-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
4-Nitrophenol	3733	0.0000	3579	96	15-140
N-Nitrosodiphenylamine	3733	0.0000	2431	65	50-115
N-Nitroso-di-n-prop. (1)	3733	0.0000	2877	77	40-115
Pentachlorophenol	3733	0.0000	2936	79	25-120
Phenanthrene	3733	0.0000	2954	79	50-110
Phenol	3733	0.0000	2774	74	40-100
Pyrene	3733	0.0000	3768	101	45-125
1,2,4,5-Tetrachlorobenz	3733	0.0000	3061	82	50-150
2,4,5-Trichlorophenol	3733	0.0000	3275	88	50-110
2,4,6-Trichlorophenol	3733	0.0000	3066	82	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	3733	3034	81	2	30	45-110
Acenaphthylene	3733	3516	94	4	30	45-105
Acetophenone	3733	2397	64	5	30	35-110
Anthracene	3733	3070	82	0	30	55-105
Atrazine	3733	2863	77	2	30	55-105
Benzaldehyde	3733	1964	53	1	30	10-160
Benzo (a) anthracene	3733	3685	99	7	30	50-110
Benzo (b) fluoranthene	3733	3640	98	4	30	45-115
Benzo (k) fluoranthene	3733	3662	98	4	30	45-125
Benzo (g, h, i) perylene	3733	2205	59	7	30	40-125
Benzo (a) pyrene	3733	3669	98	8	30	50-110
bis (2-Chloroethoxy) meth 1, 1' -Biphenyl	3733	2905	78	1	30	45-110
bis (2-Chloroethyl) ether	3733	2588	69	6	30	45-110
bis (2-Chloroisopropyl) e	3733	3432	92	20	30	40-105
Bis (2-ethylhexyl) phthal	3733	3124	84	5	30	20-115
4-Bromophenyl-phenyleth	3733	4690	124	12	30	45-125
4-Bromophenyl-phenyleth	3733	2409	64	4	30	45-115
Butylbenzylphthalate	3733	4665	125	16	30	50-125
Carbazole	3733	2773	74	2	30	45-115
4-Chloroaniline	3733	3021	81	5	30	10- 95
Caprolactam	3733	4042	108	10	30	50-110
4-Chloro-3-methylphenol	3733	3184	85	2	30	45-115
2-Chloronaphthalene	3733	2852	76	5	30	45-105
2-Chlorophenol	3733	3239	87	4	30	45-105
4-Chlorophenyl-phenylet	3733	2877	77	6	30	45-110
Chrysene	3733	3321	89	4	30	55-110
Dibenz (a, h) anthracene	3733	2316	62	8	30	40-125
Dibenzofuran	3733	3039	81	2	30	50-105

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
3,3'-Dichlorobenzidine	3733	2024	54	15	30	19-130
2,4-Dichlorophenol	3733	3003	80	3	30	45-110
Diethylphthalate	3733	3029	81	11	30	50-115
2,4-Dimethylphenol	3733	3735	100	1	30	30-105
Dimethylphthalate	3733	2704	72	6	30	50-110
Di-n-butylphthalate	3733	3115	83	3	30	55-110
4,6-Dinitro-2-methylphe	3733	3323	89	7	30	30-135
2,4-Dinitrophenol	3733	3242	87	4	30	15-130
2,4-Dinitrotoluene	3733	3294	88	4	30	50-115
2,6-Dinitrotoluene	3733	2990	80	12	30	50-110
Di-n-octylphthalate	3733	5133	138*	10	30	40-130
Fluoranthene	3733	2817	75	3	30	55-115
Fluorene	3733	3087	83	9	30	50-110
Hexachlorobenzene	3733	3009	81	1	30	45-120
Hexachlorobutadiene	3733	2561	69	3	30	30-110
Hexachlorocyclopentadie	3733	480.6	13	40*	30	10-110
Hexachloroethane	3733	2018	54	8	30	35-110
Indeno(1,2,3-cd)pyrene	3733	2314	62	12	30	40-120
Isophorone	3733	2626	70	5	30	45-110
2-Methylnaphthalene	3733	3028	81	2	30	40-110
2-Methylphenol	3733	2973	80	7	30	40-105
4-Methylphenol	3733	3147	84	2	30	40-105
Naphthalene	3733	2878	77	3	30	40-105
2-Nitroaniline	3733	3345	90	13	30	45-120
3-Nitroaniline	3733	3063	82	3	30	25-110
4-Nitroaniline	3733	2894	78	10	30	35-115
Nitrobenzene	3733	2854	76	2	30	40-115
2-Nitrophenol	3733	2953	79	1	30	40-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07
 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
4-Nitrophenol	3733	3453	92	4	30	15-140
N-Nitrosodiphenylamine	3733	2706	72	11	30	50-115
N-Nitroso-di-n-prop. (1)	3733	2885	77	0	30	40-115
Pentachlorophenol	3733	3195	86	8	30	25-120
Phenanthrene	3733	2870	77	3	30	50-110
Phenol	3733	2970	80	7	30	40-100
Pyrene	3733	4621	124	20	30	45-125
1,2,4,5-Tetrachlorobenz	3733	3224	86	5	30	50-150
2,4,5-Trichlorophenol	3733	3012	81	8	30	50-110
2,4,6-Trichlorophenol	3733	2917	78	5	30	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 1 out of 66 outside limits
 Spike Recovery: 1 out of 132 outside limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: SBLK1003BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	3333	0.0000	2773	83	45-110
Acenaphthylene	3333	0.0000	3159	95	45-105
Acetophenone	3333	0.0000	1940	58	35-110
Anthracene	3333	0.0000	2930	88	55-105
Atrazine	3333	0.0000	2937	88	55-105
Benzaldehyde	3333	0.0000	1906	57	10-160
Benzo (a) anthracene	3333	0.0000	3152	94	50-110
Benzo (b) fluoranthene	3333	0.0000	3281	98	45-115
Benzo (k) fluoranthene	3333	0.0000	2978	89	45-125
Benzo (g, h, i) perylene	3333	0.0000	3225	97	40-125
Benzo (a) pyrene	3333	0.0000	3099	93	50-110
bis (2-Chloroethoxy) meth	3333	0.0000	2769	83	45-110
1,1'-Biphenyl	3333	0.0000	2293	69	45-110
bis (2-Chloroethyl) ether	3333	0.0000	2699	81	40-105
bis (2-Chloroisopropyl) e	3333	0.0000	2483	74	20-115
Bis (2-ethylhexyl) phthal	3333	59.65	3489	103	45-125
4-Bromophenyl-phenyleth	3333	0.0000	2059	62	45-115
Butylbenzylphthalate	3333	0.0000	3684	110	50-125
Carbazole	3333	0.0000	2386	72	45-115
4-Chloroaniline	3333	0.0000	2928	88	10- 95
Caprolactam	3333	0.0000	3671	110	50-110
4-Chloro-3-methylphenol	3333	0.0000	3158	95	45-115
2-Chloronaphthalene	3333	0.0000	2471	74	45-105
2-Chlorophenol	3333	0.0000	2958	89	45-105
4-Chlorophenyl-phenylet	3333	0.0000	2639	79	45-110
Chrysene	3333	0.0000	2845	85	55-110
Dibenz (a, h) anthracene	3333	0.0000	3044	91	40-125
Dibenzofuran	3333	0.0000	2722	82	50-105

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: SBLK1003BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
3,3'-Dichlorobenzidine	3333	0.0000	2654	80	19-130
2,4-Dichlorophenol	3333	0.0000	2614	78	45-110
Diethylphthalate	3333	0.0000	2691	81	50-115
2,4-Dimethylphenol	3333	0.0000	2854	86	30-105
Dimethylphthalate	3333	0.0000	2545	76	50-110
Di-n-butylphthalate	3333	0.0000	2603	78	55-110
4,6-Dinitro-2-methylphe	3333	0.0000	3240	97	30-135
2,4-Dinitrophenol	3333	0.0000	3241	97	15-130
2,4-Dinitrotoluene	3333	0.0000	3008	90	50-115
2,6-Dinitrotoluene	3333	0.0000	2869	86	50-110
Di-n-octylphthalate	3333	0.0000	3300	99	40-130
Fluoranthene	3333	0.0000	2719	82	55-115
Fluorene	3333	0.0000	2814	84	50-110
Hexachlorobenzene	3333	0.0000	2511	75	45-120
Hexachlorobutadiene	3333	0.0000	2231	67	30-110
Hexachlorocyclopentadie	3333	0.0000	2357	71	10-110
Hexachloroethane	3333	0.0000	2171	65	35-110
Indeno (1,2,3-cd) pyrene	3333	0.0000	3253	98	40-120
Isophorone	3333	0.0000	2689	81	45-110
2-Methylnaphthalene	3333	0.0000	2956	89	40-110
2-Methylphenol	3333	0.0000	2402	72	40-105
4-Methylphenol	3333	0.0000	2505	75	40-105
Naphthalene	3333	0.0000	2522	76	40-105
2-Nitroaniline	3333	0.0000	3209	96	45-120
3-Nitroaniline	3333	0.0000	2910	87	25-110
4-Nitroaniline	3333	0.0000	3228	97	35-115
Nitrobenzene	3333	0.0000	2495	75	40-115
2-Nitrophenol	3333	0.0000	2612	78	40-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: SBLK1003BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
4-Nitrophenol	3333	0.0000	3124	94	15-140
N-Nitrosodiphenylamine	3333	0.0000	2391	72	50-115
N-Nitroso-di-n-prop. (1)	3333	0.0000	2489	75	40-115
Pentachlorophenol	3333	0.0000	2740	82	25-120
Phenanthrene	3333	0.0000	2538	76	50-110
Phenol	3333	0.0000	2513	75	40-100
Pyrene	3333	0.0000	3120	94	45-125
1,2,4,5-Tetrachlorobenz	3333	0.0000	2875	86	50-150
2,4,5-Trichlorophenol	3333	0.0000	2687	81	50-110
2,4,6-Trichlorophenol	3333	0.0000	2779	83	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 0 out of 66 outside limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: SBLK1007BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	3333	0.0000	2691	81	45-110
Acenaphthylene	3333	0.0000	3245	97	45-105
Acetophenone	3333	0.0000	2126	64	35-110
Anthracene	3333	0.0000	2567	77	55-105
Atrazine	3333	0.0000	2456	74	55-105
Benzaldehyde	3333	0.0000	2205	66	10-160
Benzo (a) anthracene	3333	0.0000	2760	83	50-110
Benzo (b) fluoranthene	3333	0.0000	2720	82	45-115
Benzo (k) fluoranthene	3333	0.0000	2507	75	45-125
Benzo (g, h, i) perylene	3333	0.0000	2977	89	40-125
Benzo (a) pyrene	3333	0.0000	2824	85	50-110
bis (2-Chloroethoxy) meth	3333	0.0000	2707	81	45-110
1,1'-Biphenyl	3333	0.0000	2366	71	45-110
bis (2-Chloroethyl) ether	3333	0.0000	2700	81	40-105
bis (2-Chloroisopropyl) e	3333	0.0000	2785	84	20-115
Bis (2-ethylhexyl) phthal	3333	49.71	3557	105	45-125
4-Bromophenyl-phenyleth	3333	0.0000	1936	58	45-115
Butylbenzylphthalate	3333	0.0000	3405	102	50-125
Carbazole	3333	0.0000	2149	64	45-115
4-Chloroaniline	3333	0.0000	2824	85	10- 95
Caprolactam	3333	0.0000	3548	106	50-110
4-Chloro-3-methylphenol	3333	0.0000	2938	88	45-115
2-Chloronaphthalene	3333	0.0000	2577	77	45-105
2-Chlorophenol	3333	0.0000	3064	92	45-105
4-Chlorophenyl-phenylet	3333	0.0000	2501	75	45-110
Chrysene	3333	0.0000	2761	83	55-110
Dibenz (a, h) anthracene	3333	0.0000	2826	85	40-125
Dibenzofuran	3333	0.0000	2839	85	50-105

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: SBLK1007BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
3,3'-Dichlorobenzidine	3333	0.0000	2719	82	19-130
2,4-Dichlorophenol	3333	0.0000	2757	83	45-110
Diethylphthalate	3333	0.0000	2829	85	50-115
2,4-Dimethylphenol	3333	0.0000	3097	93	30-105
Dimethylphthalate	3333	0.0000	2530	76	50-110
Di-n-butylphthalate	3333	0.0000	2688	81	55-110
4,6-Dinitro-2-methylphe	3333	0.0000	2768	83	30-135
2,4-Dinitrophenol	3333	0.0000	2795	84	15-130
2,4-Dinitrotoluene	3333	0.0000	2853	86	50-115
2,6-Dinitrotoluene	3333	0.0000	2720	82	50-110
Di-n-octylphthalate	3333	0.0000	2937	88	40-130
Fluoranthene	3333	0.0000	2482	74	55-115
Fluorene	3333	0.0000	2676	80	50-110
Hexachlorobenzene	3333	0.0000	2432	73	45-120
Hexachlorobutadiene	3333	0.0000	2330	70	30-110
Hexachlorocyclopentadie	3333	0.0000	2475	74	10-110
Hexachloroethane	3333	0.0000	2420	73	35-110
Indeno(1,2,3-cd)pyrene	3333	0.0000	3176	95	40-120
Isophorone	3333	0.0000	2547	76	45-110
2-Methylnaphthalene	3333	0.0000	2806	84	40-110
2-Methylphenol	3333	0.0000	2557	77	40-105
4-Methylphenol	3333	0.0000	2847	85	40-105
Naphthalene	3333	0.0000	2426	73	40-105
2-Nitroaniline	3333	0.0000	2974	89	45-120
3-Nitroaniline	3333	0.0000	2909	87	25-110
4-Nitroaniline	3333	0.0000	2852	86	35-115
Nitrobenzene	3333	0.0000	2517	76	40-115
2-Nitrophenol	3333	0.0000	2573	77	40-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: SBLK1007BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
4-Nitrophenol	3333	0.0000	2906	87	15-140
N-Nitrosodiphenylamine	3333	0.0000	2152	64	50-115
N-Nitroso-di-n-prop. (1)	3333	0.0000	2736	82	40-115
Pentachlorophenol	3333	0.0000	2320	70	25-120
Phenanthrene	3333	0.0000	2388	72	50-110
Phenol	3333	0.0000	2805	84	40-100
Pyrene	3333	0.0000	2868	86	45-125
1,2,4,5-Tetrachlorobenz	3333	0.0000	2973	89	50-150
2,4,5-Trichlorophenol	3333	0.0000	2625	79	50-110
2,4,6-Trichlorophenol	3333	0.0000	2686	80	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 0 out of 0 outside limits
 Spike Recovery: 0 out of 66 outside limits

COMMENTS: _____

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID (Standard): CCV050 Date Analyzed: 10/07/08

Instrument ID: BNA1 Time Analyzed: 0908

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1247917	4.93	3948018	6.12	2034745	8.95
UPPER LIMIT	2495834	5.43	7896036	6.62	4069490	9.45
LOWER LIMIT	623959	4.43	1974009	5.62	1017373	8.45
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK1003BS1	1316434	4.93	4022724	6.11	2084125	8.94
02 SBLK1003BS1L	1699768	4.94	4858005	6.12	2731243	8.95
03 01SS01701	1501902	4.93	4309206	6.11	2592712	8.94
04 01SS42001	1555797	4.93	4130292	6.11	2674367	8.94
05 01SS01401	1410784	4.94	4053423	6.11	2138269	8.94
06 01SS01401 DU	1346017	4.94	3961125	6.11	2232993	8.94
07 01SS01501	1431053	4.93	4148047	6.12	2319808	8.94
08 01SS02401	1386218	4.93	3918857	6.12	2211233	8.94
09 01SS02501	1396007	4.93	4287312	6.12	2249460	8.94
10 01SS13701	1501861	4.94	4742946	6.11	2354835	8.95
11 01SS13801	1576360	4.94	4513946	6.11	2371541	8.94
12 01SS13901	1462035	4.94	3907706	6.12	2416367	8.95
13 01SS13901 DU	1383283	4.94	4066309	6.11	2264186	8.95
14 01SS02501MS	1324271	4.94	4132625	6.12	2071357	8.96
15 01SS02501MSD	1294035	4.94	4066960	6.12	2243530	8.95
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012

Lab File ID (Standard): CCV050 Date Analyzed: 10/07/08

Instrument ID: BNA1 Time Analyzed: 0908

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2908426	12.54	2323766	20.04	1983139	24.16
UPPER LIMIT	5816852	13.04	4647532	20.54	3966278	24.66
LOWER LIMIT	1454213	12.04	1161883	19.54	991570	23.66
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK1003BS1	2954243	12.52	2467074	20.02	1824544	24.14
02 SBLK1003BS1L	3931759	12.55	2982931	20.05	2432999	24.16
03 01SS01701	3302960	12.53	2104801	20.02	1444243	24.13
04 01SS42001	3598377	12.53	2337771	20.02	1608917	24.14
05 01SS01401	2942231	12.53	2287109	20.02	1760660	24.14
06 01SS01401 DU	3072003	12.53	2133907	20.02	1759193	24.15
07 01SS01501	3150487	12.53	2600922	20.02	2030486	24.14
08 01SS02401	2989326	12.53	2189064	20.03	1294973	24.14
09 01SS02501	3255191	12.53	2000322	20.03	1162032	24.14
10 01SS13701	3572968	12.54	2498291	20.03	1539309	24.14
11 01SS13801	3592812	12.54	2734833	20.03	2019424	24.15
12 01SS13901	3357489	12.54	2461702	20.02	1749660	24.15
13 01SS13901 DU	3110914	12.54	2397767	20.03	1595314	24.14
14 01SS02501MS	3200094	12.55	2284538	20.06	1363015	24.16
15 01SS02501MSD	3159350	12.55	1815200	20.05	1118906	24.15
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Lab File ID (Standard): CCV050S Date Analyzed: 10/08/08
 Instrument ID: BNA1 Time Analyzed: 1001

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1201967	4.94	3825133	6.12	1961187	8.94
UPPER LIMIT	2403934	5.44	7650266	6.62	3922374	9.44
LOWER LIMIT	600984	4.44	1912567	5.62	980594	8.44
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK1007BS1	1322282	4.93	4080424	6.12	2310560	8.94
02 SBLK1007BS1L	1294040	4.94	4123297	6.12	2167387	8.94
03 01SBDIT01	1489862	4.94	4290244	6.12	2404500	8.93
04 01SBDIT02	1443074	4.94	4164854	6.11	2448911	8.94
05 01SBDIT03	1405810	4.93	4237146	6.11	2436868	8.93
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Lab File ID (Standard): CCV050S Date Analyzed: 10/08/08
 Instrument ID: BNA1 Time Analyzed: 1001

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2984548	12.53	2221828	20.03	1916476	24.15
UPPER LIMIT	5969096	13.03	4443656	20.53	3832952	24.65
LOWER LIMIT	1492274	12.03	1110914	19.53	958238	23.65
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK1007BS1	3247476	12.52	2419039	20.02	2198689	24.14
02 SBLK1007BS1L	3404880	12.53	2593803	20.04	2360867	24.15
03 01SBDIT01	3545620	12.52	2610207	20.02	2122209	24.15
04 01SBDIT02	3619724	12.52	2504695	20.02	2109487	24.14
05 01SBDIT03	3721477	12.52	2940487	20.02	2435617	24.15
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21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/07/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.60 S2 : 10.53			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	AB/SUR 200#7	10/07/08	1527	4.61	10.53
02	AB/SUR 100#7	10/07/08	1545	4.61	10.53
03	AB/SUR 50 #7	10/07/08	1604	4.61	10.53
04	AB/SUR 25 #7	10/07/08	1622	4.61	10.53
05	AB/SUR 10 #7	10/07/08	1640	4.61	10.53
06	AB/SUR 5 #71	10/07/08	1659	4.61	10.53
07	AB/SUR 1 #71	10/07/08	1717	4.60	10.53
08	AB ICV 100#7	10/07/08	1736		
09	CHLOR 5PPB #	10/07/08	1754		
10	TOX 100PPB #	10/07/08	1813		
11	1660 2500 #7	10/07/08	1831		
12	1660 1000 #7	10/07/08	1849		
13	1660 750 #73	10/07/08	1908		
14	1660 500 #73	10/07/08	1926		
15	1660 100 #73	10/07/08	1944		
16	1660 50 #739	10/07/08	2003		
17	1660 25 #739	10/07/08	2021		
18	1660 ICV #73	10/07/08	2039		
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32					

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF5: 008F0801 RF1: 009F0901

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
Aldrin	9781.600	9316.000	AVRG	9406.28071	3.5
Alpha-BHC	10079.800	9449.000	AVRG	10093.0593	3.8
Alpha-Chlordane	10251.600	9928.000	AVRG	9176.14143	8.1
Beta-BHC	5533.600	5577.000	AVRG	4655.05929	14.4
4,4'-DDD	10259.800	7863.000	AVRG	7915.71643	14.7
4,4'-DDE	10086.000	8321.000	AVRG	8754.84786	7.8
4,4'-DDT	11157.200	8454.000	AVRG	8514.16000	15.2
Delta-BHC	10495.000	9448.000	AVRG	9547.05571	5.2
Dieldrin	10118.400	9202.000	AVRG	9194.61000	5.6
Endosulfan I	9536.400	9093.000	AVRG	8530.29929	7.6
Endosulfan II	12460.000	10260.000	AVRG	9170.76286	19.7
Endosulfan Sulfate	10238.400	9134.000	AVRG	8054.84571	16.1
Endrin	7181.800	6585.000	AVRG	6752.75429	4.2
Endrin Aldehyde	7378.200	7441.000	AVRG	6520.19286	10.6
Endrin Ketone	12454.200	10388.000	AVRG	9634.16357	15.9
Gamma-BHC	10396.400	9554.000	AVRG	9725.46214	3.9
Gamma-Chlordane	10455.800	9868.000	AVRG	9347.48786	7.3
Heptachlor	12327.400	11349.000	AVRG	10421.5550	11.1
Heptachlor Epoxide	10880.000	10182.000	AVRG	9399.78929	9.8
Methoxychlor	5577.200	4586.000	AVRG	4342.78500	15.6
TCMX	8509.200	8993.000	AVRG	7733.77286	10.0
DCB	9282.600	9264.000	AVRG	7578.75214	17.8

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF200: 003F0301 RF100: 004F0401 RF50: 005F0501
RF25: 006F0601 RF10: 007F0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
Aldrin	8786.365	9637.900	9451.580	9590.320	9280.200
Alpha-BHC	X9992.955	X10586.280	X10311.360	X10385.320	X9846.700
Alpha-Chlordane	8014.450	8875.040	8814.280	9115.120	9234.500
Beta-BHC	Q3888.635	Q4169.020	Q4205.780	Q4446.680	Q4764.700
4,4'-DDD	6631.275	7274.880	7294.460	7732.400	8354.200
4,4'-DDE	7888.195	8639.660	8607.620	8812.560	8928.900
4,4'-DDT	7112.210	7844.930	7878.840	8250.040	8901.900
Delta-BHC	8802.430	9489.120	9521.600	9582.840	9490.400
Dieldrin	8347.490	9195.040	9070.980	9202.360	9226.000
Endosulfan I	7485.535	8277.940	8253.000	8522.520	8543.700
Endosulfan II	7091.300	7893.340	8067.620	8718.480	9704.600
Endosulfan Sulfate	6470.450	7184.070	7271.140	7706.560	8379.300
Endrin	6263.150	6857.990	6782.520	6847.520	6751.300
Endrin Aldehyde	5540.260	6197.850	6107.600	6384.840	6591.600
Endrin Ketone	7771.645	8640.100	8748.460	9312.640	10124.100
Gamma-BHC	9131.425	9827.930	9661.660	9830.120	9676.700
Gamma-Chlordane	8271.105	9128.670	9026.760	9274.480	9407.600
Heptachlor	8805.765	9714.940	9785.760	10300.720	10667.300
Heptachlor Epoxide	8047.305	8931.360	8905.160	9323.600	9529.100
Methoxychlor	3492.675	3887.620	3957.240	4280.760	4618.000
TCMX	6817.240	7259.530	7230.960	7522.080	7804.400
DCB	5915.095	6478.890	6658.180	7333.400	8119.100

JJ
10-10-08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT1: 003F0301 RT2: 004F0401 RT3: 005F0501
RT4: 006F0601 RT5: 007F0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	7.170	7.171	7.170	7.170	7.170
Alpha-BHC	5.770	5.774	5.780	5.770	5.770
Alpha-Chlordane	8.060	8.061	8.060	8.060	8.060
Beta-BHC	6.320	6.319	6.320	6.320	6.320
4,4'-DDD	8.900	8.897	8.900	8.900	8.900
4,4'-DDE	8.260	8.256	8.260	8.260	8.260
4,4'-DDT	9.300	9.294	9.300	9.300	9.290
Delta-BHC	6.600	6.599	6.600	6.600	6.600
Dieldrin	8.460	8.464	8.470	8.460	8.460
Endosulfan I	8.130	8.131	8.130	8.130	8.130
Endosulfan II	9.020	9.019	9.020	9.020	9.020
Endosulfan Sulfate	9.480	9.476	9.480	9.480	9.480
Endrin	8.750	8.749	8.750	8.750	8.750
Endrin Aldehyde	9.180	9.181	9.180	9.180	9.180
Endrin Ketone	10.100	10.099	10.100	10.100	10.100
Gamma-BHC	6.120	6.124	6.130	6.120	6.120
Gamma-Chlordane	7.970	7.967	7.970	7.970	7.970
Heptachlor	6.780	6.777	6.780	6.780	6.780
Heptachlor Epoxide	7.660	7.662	7.670	7.660	7.660
Methoxychlor	9.890	9.894	9.900	9.900	9.890
TCMX	5.300	5.303	5.310	5.300	5.300
DCB	11.790	11.787	11.790	11.790	11.790

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT6: 008F0801 RT7: 009F0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
Aldrin	7.170	7.170	7.170	7.141	7.201
Alpha-BHC	5.770	5.770	5.772	5.744	5.804
Alpha-Chlordane	8.060	8.060	8.060	8.031	8.091
Beta-BHC	6.320	6.320	6.320	6.289	6.349
4,4'-DDD	8.900	8.900	8.900	8.867	8.927
4,4'-DDE	8.260	8.260	8.259	8.226	8.286
4,4'-DDT	9.290	9.300	9.296	9.264	9.324
Delta-BHC	6.600	6.600	6.600	6.569	6.629
Dieldrin	8.460	8.460	8.462	8.434	8.494
Endosulfan I	8.130	8.130	8.130	8.101	8.161
Endosulfan II	9.020	9.020	9.020	8.989	9.049
Endosulfan Sulfate	9.480	9.480	9.479	9.446	9.506
Endrin	8.750	8.750	8.750	8.719	8.779
Endrin Aldehyde	9.180	9.180	9.180	9.151	9.211
Endrin Ketone	10.100	10.100	10.100	10.069	10.129
Gamma-BHC	6.120	6.120	6.122	6.094	6.154
Gamma-Chlordane	7.970	7.970	7.970	7.937	7.997
Heptachlor	6.780	6.780	6.780	6.747	6.807
Heptachlor Epoxide	7.660	7.660	7.662	7.632	7.692
Methoxychlor	9.890	9.900	9.895	9.864	9.924
TCMX	5.300	5.300	5.302	5.274	5.334
DCB	11.790	11.790	11.790	11.759	11.819

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGAI6865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
=====	=====	=====	=====	=====	=====
Aldrin	AVRG		13562.4757		9.2
Alpha-BHC	AVRG		16148.4193		8.0
Alpha-Chlordane	AVRG		12750.4614		11.5
Beta-BHC	AVRG		7069.13714		15.9
4,4'-DDD	AVRG		10980.7157		17.0
4,4'-DDE	AVRG		11863.0329		10.0
4,4'-DDT	AVRG		11125.0171		18.2
Delta-BHC	AVRG		13304.8443		8.5
Dieldrin	AVRG		12970.5436		9.5
Endosulfan I	AVRG		11672.9014		10.5
Endosulfan II	2ORDR	0.00000000	7.746e-005	1.836e-011	1.000
Endosulfan Sulfate	AVRG		10926.9057		18.6
Endrin	AVRG		9624.21429		8.1
Endrin Aldehyde	AVRG		9590.17357		16.3
Endrin Ketone	2ORDR	0.00000000	6.926e-005	1.458e-011	1.000
Gamma-BHC	AVRG		14554.1764		10.0
Gamma-Chlordane	AVRG		12791.9643		10.4
Heptachlor	AVRG		13510.0500		11.8
Heptachlor Epoxide	AVRG		12669.4657		12.0
Methoxychlor	AVRG		5769.19286		18.6
=====	=====	=====	=====	=====	=====
TCMX	AVRG		12221.9229		12.2
DCB	AVRG		8864.45214		19.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF5: 008R0801 RF1: 009R0901

COMPOUND	RF5	RF1
=====	=====	=====
Aldrin	15220.200	14425.000
Alpha-BHC	17933.600	16946.000
Alpha-Chlordane	14559.000	14376.000
Beta-BHC	8503.800	8437.000
4,4'-DDD	14262.400	12034.000
4,4'-DDE	13833.400	12032.000
4,4'-DDT	14988.800	11295.000
Delta-BHC	14991.200	13095.000
Dieldrin	14510.200	14043.000
Endosulfan I	13138.000	12996.000
Endosulfan II	16446.200	14107.000
Endosulfan Sulfate	14109.400	12763.000
Endrin	10663.800	9909.000
Endrin Aldehyde	11060.200	12069.000
Endrin Ketone	18708.400	16412.000
Gamma-BHC	16618.800	15720.000
Gamma-Chlordane	14562.200	14031.000
Heptachlor	15717.800	14629.000
Heptachlor Epoxide	14570.800	14156.000
Methoxychlor	7457.400	6653.000
=====	=====	=====
TCMX	13619.600	14458.000
DCB	10985.600	10902.000

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF200: 003R0301 RF100: 004R0401 RF50: 005R0501
RF25: 006R0601 RF10: 007R0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
Aldrin	11333.410	12915.820	13166.780	13816.920	14059.200
Alpha-BHC	13918.745	15384.690	15672.280	16486.520	16697.100
Alpha-Chlordane	10365.320	11871.650	12122.340	12766.320	13192.600
Beta-BHC	5530.830	6257.930	6394.740	6892.360	7467.300
4,4'-DDD	8421.950	9823.160	10037.480	10784.320	11501.700
4,4'-DDE	9895.590	11325.020	11478.360	12090.160	12386.700
4,4'-DDT	8605.170	9827.690	10189.640	11005.920	11962.900
Delta-BHC	11399.010	12796.060	13004.520	13703.920	14144.200
Dieldrin	10786.935	12294.510	12552.600	13138.160	13468.400
Endosulfan I	9590.560	11022.930	11227.220	11736.600	11999.000
Endosulfan II	9027.145	10491.200	10952.840	11937.360	13382.400
Endosulfan Sulfate	8209.830	9443.070	9830.640	10588.200	11544.200
Endrin	8143.850	9303.390	9505.360	9928.400	9915.700
Endrin Aldehyde	7421.285	8624.410	8751.800	9402.720	9801.800
Endrin Ketone	10117.020	11705.180	12312.600	13502.040	15185.300
Gamma-BHC	12214.015	13614.340	13915.120	14718.160	15078.800
Gamma-Chlordane	10563.750	12039.000	12279.560	12847.040	13221.200
Heptachlor	10855.760	12498.050	12888.740	13693.000	14288.000
Heptachlor Epoxide	10160.810	11654.670	12118.000	12766.880	13259.100
Methoxychlor	X 4304.070	X 4963.140	X 5187.000	X 5640.840	X 6178.900
TCMX	10147.480	11104.160	11381.720	12158.000	12684.500
DCB	6671.265	7485.200	7783.740	8666.360	9557.000

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FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT1: 003R0301 RT2: 004R0401 RT3: 005R0501
RT4: 006R0601 RT5: 007R0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	6.080	6.085	6.090	6.090	6.090
Alpha-BHC	5.060	5.057	5.060	5.060	5.060
Alpha-Chlordane	6.960	6.958	6.960	6.960	6.960
Beta-BHC	5.660	5.658	5.660	5.660	5.660
4,4'-DDD	7.790	7.788	7.790	7.790	7.790
4,4'-DDE	7.150	7.153	7.150	7.150	7.150
4,4'-DDT	8.100	8.103	8.100	8.110	8.100
Delta-BHC	5.900	5.902	5.900	5.900	5.900
Dieldrin	7.320	7.318	7.320	7.320	7.320
Endosulfan I	7.020	7.020	7.020	7.020	7.020
Endosulfan II	7.970	7.967	7.970	7.970	7.970
Endosulfan Sulfate	8.450	8.447	8.450	8.450	8.450
Endrin	7.620	7.622	7.620	7.620	7.620
Endrin Aldehyde	8.150	8.155	8.160	8.160	8.160
Endrin Ketone	9.040	9.038	9.040	9.040	9.040
Gamma-BHC	5.370	5.370	5.370	5.370	5.370
Gamma-Chlordane	6.900	6.898	6.900	6.900	6.900
Heptachlor	5.780	5.782	5.780	5.780	5.780
Heptachlor Epoxide	6.590	6.593	6.590	6.600	6.590
Methoxychlor	8.740	8.745	8.750	8.750	8.750
TCMX	4.610	4.606	4.610	4.610	4.610
DCB	10.530	10.528	10.530	10.530	10.530

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT6: 008R0801 RT7: 009R0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
Aldrin	6.090	6.080	6.086	6.055	6.115
Alpha-BHC	5.060	5.050	5.058	5.027	5.087
Alpha-Chlordane	6.960	6.960	6.960	6.928	6.988
Beta-BHC	5.660	5.660	5.660	5.628	5.688
4,4'-DDD	7.790	7.790	7.790	7.758	7.818
4,4'-DDE	7.150	7.160	7.152	7.123	7.183
4,4'-DDT	8.100	8.110	8.103	8.073	8.133
Delta-BHC	5.900	5.900	5.900	5.872	5.932
Dieldrin	7.320	7.320	7.320	7.288	7.348
Endosulfan I	7.020	7.020	7.020	6.990	7.050
Endosulfan II	7.970	7.970	7.970	7.937	7.997
Endosulfan Sulfate	8.450	8.450	8.450	8.417	8.477
Endrin	7.620	7.620	7.620	7.592	7.652
Endrin Aldehyde	8.160	8.160	8.158	8.125	8.185
Endrin Ketone	9.040	9.040	9.040	9.008	9.068
Gamma-BHC	5.370	5.370	5.370	5.340	5.400
Gamma-Chlordane	6.900	6.900	6.900	6.868	6.928
Heptachlor	5.780	5.780	5.780	5.752	5.812
Heptachlor Epoxide	6.590	6.590	6.592	6.563	6.623
Methoxychlor	8.750	8.750	8.748	8.715	8.775
TCMX	4.610	4.600	4.608	4.575	4.635
DCB	10.530	10.530	10.530	10.502	10.562

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

COMPOUND	CURVE	COEFFICIENTS		%RSD
		A0	A1	OR R ²
PCB-1016	LINR	0.00000000	369.140650	0.998
(2)	LINR	0.00000000	123.408708	0.995
(3)	LINR	0.00000000	190.427129	0.997
(4)	LINR	0.00000000	188.562101	0.997
(5)	LINR	0.00000000	159.146312	0.995
PCB-1260	AVRG		919.157057	5.1
(2)	AVRG		559.711514	13.8
(3)	AVRG		604.286143	9.6
(4)	AVRG		428.621133	11.0
(5)	AVRG		233.072352	5.1

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF200: 013F1301 RF100: 014F1401 RF50: 015F1501
RF25: 016F1601 RF10: 017F1701

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X 362.709	384.199	X 392.968	398.036	X 457.570
(2)	1119.988	129.969	135.815	140.242	178.360
(3)	186.168	200.284	204.620	211.486	248.910
(4)	184.930	195.289	202.321	208.634	253.330
(5)	154.789	167.305	174.891	180.908	237.640
PCB-1260	874.958	X 887.443	892.704	X 885.534	950.180
(2)	485.376	503.969	509.740	513.386	591.010
(3)	549.300	560.319	568.692	563.792	635.500
(4)	379.086	391.363	400.777	400.182	457.400
(5)	221.711	225.257	225.907	229.302	257.230

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FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MP-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF5: 018F1801 RF1: 019F1901

COMPOUND	RF5	RF1
PCB-1016	512.100	X 556.680
(2)	219.980	X 265.480
(3)	283.720	310.320
(4)	299.260	312.440
(5)	299.020	300.040
PCB-1260	X 940.320	1002.960
(2)	623.620	690.880
(3)	651.720	700.680
(4)	468.300	503.240
(5)	236.420	235.680

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT1: 013F1301 RT2: 014F1401 RT3: 015F1501
RT4: 016F1601 RT5: 017F1701

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	6.640	6.643	6.640	6.640	6.640
(2)	5.720	5.714	5.710	5.720	5.710
(3)	6.090	6.089	6.090	6.090	6.090
(4)	6.830	6.826	6.830	6.830	6.830
(5)	6.950	6.944	6.940	6.950	6.940
PCB-1260	10.050	10.048	10.050	10.050	10.050
(2)	8.910	8.908	8.910	8.910	8.910
(3)	9.260	9.258	9.260	9.260	9.260
(4)	9.360	9.363	9.360	9.360	9.360
(5)	11.160	11.163	11.160	11.160	11.160

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT6: 018F1801 RT7: 019F1901

COMPOUND	RT6	RT7	MEAN	RT WINDOW	
			RT	FROM	TO
PCB-1016	6.640	6.640	6.640	6.613	6.673
(2)	5.720	5.710	5.715	5.684	5.744
(3)	6.090	6.090	6.090	6.059	6.119
(4)	6.830	6.830	6.829	6.796	6.856
(5)	6.950	6.950	6.946	6.914	6.974
PCB-1260	10.050	10.050	10.050	10.018	10.078
(2)	8.910	8.910	8.910	8.878	8.938
(3)	9.260	9.260	9.260	9.228	9.288
(4)	9.360	9.360	9.360	9.333	9.393
(5)	11.160	11.160	11.160	11.133	11.193

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
PCB-1016	2ORDR	0.00000000	1.742e-003	2.289e-010	1.000
(2)	2ORDR	0.00000000	4.382e-003	2.24e-009	1.000
(3)	2ORDR	0.00000000	2.578e-003	8.554e-010	1.000
(4)	2ORDR	0.00000000	3.094e-003	8.579e-010	1.000
(5)	2ORDR	0.00000000	2.865e-003	1.06e-009	1.000
PCB-1260	AVRG		1267.38122		8.6
(2)	AVRG		691.563543		14.0
(3)	AVRG		816.948029		15.0
(4)	AVRG		465.285648		6.0
(5)	AVRG		302.557562		8.9

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF5: 018R1801 RF1: 019R1901

COMPOUND	RF5	RF1
PCB-1016	φ694.700	φ782.680
(2)	309.080	376.960
(3)	515.140	603.040
(4)	411.940	479.920
(5)	χ 458.900	561.720
PCB-1260	1339.840	1431.560
(2)	776.680	847.040
(3)	920.920	1020.560
(4)	490.660	511.960
(5)	321.420	χ 337.080

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF200: 013R1301 RF100: 014R1401 RF50: 015R1501
RF25: 016R1601 RF10: 017R1701

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	494.127	527.488	552.019	559.362	629.500
(2)	184.793	203.366	211.577	219.824	271.440
(3)	309.101	338.582	361.781	374.708	454.870
(4)	272.146	294.022	306.611	314.242	356.930
(5)	277.884	x308.384	321.473	y 334.456	397.940
PCB-1260	1123.867	1183.436	1214.489	1225.186	1353.290
(2)	575.669	621.196	640.268	648.042	732.050
(3)	678.575	726.717	747.820	758.964	865.080
(4)	442.945	443.973	447.865	442.296	477.300
(5)	x 272.528	281.008	x 283.233	290.284	x 332.350

J.H. 10-10-08 *J.J. 10-10-08*

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT1: 013R1301 RT2: 014R1401 RT3: 015R1501
RT4: 016R1601 RT5: 017R1701

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	5.770	5.769	5.770	5.770	5.770
(2)	4.970	4.970	4.970	4.970	4.970
(3)	5.280	5.282	5.280	5.280	5.280
(4)	5.940	5.939	5.940	5.940	5.940
(5)	6.010	6.005	6.010	6.010	6.010
PCB-1260	8.810	8.807	8.810	8.810	8.810
(2)	7.470	7.470	7.470	7.470	7.470
(3)	7.730	7.729	7.730	7.730	7.730
(4)	9.220	9.217	9.220	9.220	9.220
(5)	9.880	9.882	9.880	9.880	9.890

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT6: 018R1801 RT7: 019R1901

COMPOUND	RT6	RT7	MEAN	RT WINDOW	
			RT	FROM	TO
PCB-1016	5.770	5.770	5.770	5.739	5.799
(2)	4.970	4.970	4.970	4.940	5.000
(3)	5.280	5.280	5.280	5.252	5.312
(4)	5.940	5.940	5.940	5.909	5.969
(5)	6.000	6.010	6.008	5.975	6.035
PCB-1260	8.810	8.810	8.810	8.777	8.837
(2)	7.470	7.470	7.470	7.440	7.500
(3)	7.730	7.730	7.730	7.699	7.759
(4)	9.220	9.220	9.220	9.187	9.247
(5)	9.880	9.890	9.883	9.852	9.912

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 10/10/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #	RT #
01	AB/SUR 100 #	10/10/08	0917			
02	1660 1000 #7	10/10/08	0935			
03	CHLOR 5PPB #	10/10/08	1046			
04	TOX 100PPB #	10/10/08	1104			
05	AB/SUR ICV#	10/10/08	1122			
06	PS1BLK1006 PS1BLK1006	10/10/08	1141			
07	PS1BLK1006LC PS1BLK1006LC	10/10/08	1159			
08	PS1BLK1006LC PS1BLK1006LC	10/10/08	1218			
09	01SS01701 0810010-01	10/10/08	1236			
10	01SS01701DL 0810010-01DL	10/10/08	1254			
11	01SS42001 0810010-02	10/10/08	1313			
12	01SS01401 0810010-03	10/10/08	1331			
13	01SS01401 DU 0810010-04	10/10/08	1350			
14	01SS01501 0810010-05	10/10/08	1408			
15	01SS02401 0810010-06	10/10/08	1427			
16	01SS02501 0810010-07	10/10/08	1445			
17	01SS02501DL 0810010-07DL	10/10/08	1503			
18	01SS02501MS 0810010-07MS	10/10/08	1522			
19	01SS02501MSD 0810010-07MS	10/10/08	1540			
20	AB/SUR 100 #	10/10/08	1559			
21	1660 1000 #7	10/10/08	1617			
22	01SS02501MS 0810010-07MS	10/10/08	1636			
23	01SS02501MSD 0810010-07MS	10/10/08	1654			
24	01SS13701 0810010-08	10/10/08	1713			
25	01SS13801 0810010-09	10/10/08	1731			
26	01SS13901 0810010-10	10/10/08	1750			
27	01SS13901 DU 0810010-11	10/10/08	1808			
28	01SBDIT01 0810033-01	10/10/08	1827			
29	01SBDIT02 0810033-02	10/10/08	1845			
30	01SBDIT03 0810033-03	10/10/08	1903			
31	AB/SUR 100 #	10/10/08	1922			
32	1660 1000 #7	10/10/08	1940			

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 10.13.08
 10.13.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 09:17
 Lab File ID: 003F0301.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	MIN %D	MAX %D
\$ 36 TCMX	7734	7586	0.010	-1.9	15.0
3 Alpha-BHC	10093	X 11205	0.010	11.0	15.0
23 Gamma-BHC	9725	6 10096	0.010	3.8	15.0
5 Beta-BHC	4655	4305	0.010	-7.5	15.0
15 Delta-BHC	9547	9853	0.010	3.2	15.0
25 Heptachlor	10422	9467	0.010	-9.2	15.0
2 Aldrin	9406	10056	0.010	6.9	15.0
26 Heptachlor Epoxide	9400	9343	0.010	-0.6	15.0
24 Gamma-Chlordane	9347	9419	0.010	0.8	15.0
4 Alpha-Chlordane	9176	9117	0.010	-0.6	15.0
17 Endosulfan I	8530	8713	0.010	2.1	15.0
13 4,4'-DDE	8755	8766	0.010	0.1	15.0
16 Dieldrin	9195	9557	0.010	3.9	15.0
20 Endrin	6753	7424	0.010	9.9	15.0
12 4,4'-DDD	7916	7468	0.010	-5.7	15.0
18 Endosulfan II	9171	8216	0.010	-10.4	15.0
21 Endrin Aldehyde	6520	6498	0.010	-0.3	15.0
14 4,4'-DDT	8514	7649	0.010	-10.2	15.0
19 Endosulfan Sulfate	8055	7471	0.010	-7.2	15.0
27 Methoxychlor	4343	3812	0.010	-12.2	15.0
22 Endrin Ketone	9634	8800	0.010	-8.7	15.0
\$ 37 DCB	7579	6637	0.010	-12.4	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 09:35
 Lab File ID: 004F0401.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
29 PCB-1016(1)	1000	x 1036	0.010	-3.6	15.0	
(2)	1000	1036	0.010	-3.6	15.0	
(3)	1000	1036	0.010	-3.6	15.0	
(4)	1000	1036	0.010	-3.6	15.0	
(5)	1000	1036	0.010	-3.6	15.0	
(6)	1000	1036	0.010	-3.6	15.0	
35 PCB-1260(1)	919	φ 851	0.010	-7.4	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	560	489	0.010	-12.7	15.0	
(4)	604	540	0.010	-10.6	15.0	
(5)	429	380	0.010	-11.4	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	233	213	0.010	-8.4	15.0	

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 10/10/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 1104

LAB FILE ID: RF5: 006F0601 RF1: 012F1201

~~———— SINGLE POINT ————~~*

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	361.410		AVRG	361.410000	0.0
(2)	125.650		AVRG	125.650000	0.0
(3)	312.880		AVRG	312.880000	0.0
(4)	142.770		AVRG	142.770000	0.0
(5)	146.700		AVRG	146.700000	0.0
=====	=====	=====	=====	=====	=====

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 15:59
 Lab File ID: 022F2201.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	MAX
\$ 36 TCMX	7734	7550	0.010	15.0
3 Alpha-BHC	10093	11330	0.010	15.0
23 Gamma-BHC	9725	X 10244	0.010	15.0
5 Beta-BHC	4655	4405	0.010	15.0
15 Delta-BHC	9547	10242	0.010	15.0
25 Heptachlor	10422	9581	0.010	15.0
2 Aldrin	9406	9906	0.010	15.0
26 Heptachlor Epoxide	9400	9182	0.010	15.0
24 Gamma-Chlordane	9347	9269	0.010	15.0
4 Alpha-Chlordane	9176	8988	0.010	15.0
17 Endosulfan I	8530	8612	0.010	15.0
13 4,4'-DDE	8755	8905	0.010	15.0
16 Dieldrin	9195	9448	0.010	15.0
20 Endrin	6753	7518	0.010	15.0
12 4,4'-DDD	7916	7766	0.010	15.0
18 Endosulfan II	9171	8340	0.010	15.0
21 Endrin Aldehyde	6520	6476	0.010	15.0
14 4,4'-DDT	8514	6982	0.010	15.0
19 Endosulfan Sulfate	8055	7597	0.010	15.0
27 Methoxychlor	4343	3629	0.010	15.0
22 Endrin Ketone	9634	8040	0.010	15.0
\$ 37 DCB	7579	6982	0.010	15.0

208
 Low
 Low

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 16:17
 Lab File ID: 023F2301.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	x 1094	0.010	-9.4	15.0
(2)	1000	1094	0.010	-9.4	15.0
(3)	1000	1094	0.010	-9.4	15.0
(4)	1000	1094	0.010	-9.4	15.0
(5)	1000	1094	0.010	-9.4	15.0
(6)	1000	1094	0.010	-9.4	15.0
35 PCB-1260(1)	919	919	0.010	0.0	15.0
(2)	++++	++++	0.010	++++	15.0|<-
(3)	560	φ 523	0.010	-6.5	15.0
(4)	604	583	0.010	-3.6	15.0
(5)	429	403	0.010	-5.9	15.0
(6)	++++	++++	0.010	++++	15.0|<-
(7)	++++	++++	0.010	++++	15.0|<-
(8)	233	231	0.010	-0.8	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

J.H. 10.13.08
 10.13.08

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 19:22
 Lab File ID: 033F3301.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	7734	7868	0.010	1.7	15.0
3 Alpha-BHC	10093	11608	0.010	15.0	15.0
23 Gamma-BHC	9725	10422	0.010	7.2	15.0
5 Beta-BHC	4655	4592	0.010	-1.4	15.0
15 Delta-BHC	9547	9427	0.010	-1.3	15.0
25 Heptachlor	10422	9754	0.010	-6.4	15.0
2 Aldrin	9406	10116	0.010	7.5	15.0
26 Heptachlor Epoxide	9400	9354	0.010	-0.5	15.0
24 Gamma-Chlordane	9347	9493	0.010	1.6	15.0
4 Alpha-Chlordane	9176	9230	0.010	0.6	15.0
17 Endosulfan I	8530	8957	0.010	5.0	15.0
13 4,4'-DDE	8755	x 10213	0.010	16.7	15.0
16 Dieldrin	9195	9704	0.010	5.5	15.0
20 Endrin	6753	7583	0.010	12.3	15.0
12 4,4'-DDD	7916	8188	0.010	3.4	15.0
18 Endosulfan II	9171	8241	0.010	-10.1	15.0
21 Endrin Aldehyde	6520	6618	0.010	1.5	15.0
14 4,4'-DDT	8514	6697	0.010	-21.3	15.0
19 Endosulfan Sulfate	8055	7248	0.010	-10.0	15.0
27 Methoxychlor	4343	3477	0.010	-19.8	15.0
22 Endrin Ketone	9634	7930	0.010	-17.7	15.0
\$ 37 DCB	7579	6542	0.010	-13.7	15.0

High 20/0

High 20/0

Low 20/0

Empirical Laboratories, LLC

10-13-08

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 19:40
 Lab File ID: 034F3401.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
29 PCB-1016(1)	1000	1103	0.010	-10.3	15.0	
(2)	1000	1103	0.010	-10.3	15.0	
(3)	1000	1103	0.010	-10.3	15.0	
(4)	1000	1103	0.010	-10.3	15.0	
(5)	1000	1103	0.010	-10.3	15.0	
(6)	1000	1103	0.010	-10.3	15.0	
35 PCB-1260(1)	919	X 908	0.010	-1.2	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	560	Φ 526	0.010	-6.0	15.0	
(4)	604	579	0.010	-4.1	15.0	
(5)	429	399	0.010	-7.0	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	233	224	0.010	-3.9	15.0	

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS42001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-02 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	7.11	7.08	7.14	0.4747	
	2	6.02	6.00	6.06	0.1618	98.3
4,4'-DDT	1	9.23	9.20	9.26	0.3072	
	2	8.03	8.01	8.07	0.4118	29.1
Endosulfan ID	1	8.97	8.92	8.98	1.575	
	2	7.88	7.87	7.93	1.618	2.7
Gamma-Chlordane	1	7.90	7.87	7.93	0.2336	
	2	6.83	6.81	6.87	0.6975	99.6
Methoxychlor	1	9.86	9.80	9.86	0.2898	
	2	8.68	8.65	8.71	0.6482	76.4
	1					
	2					
	1					
	2					
	1					
	2					

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/10/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
CLIENT	LAB	DATE	TIME	RT	RT
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	#	#
=====					
01	AB/SUR 100 #	10/10/08	0917		
02	1660 1000 #7	10/10/08	0935		
03	CHLOR 5PPB #	10/10/08	1046		
04	TOX 100PPB #	10/10/08	1104		
05	AB/SUR ICV#	10/10/08	1122		
06	PS1BLK1006	10/10/08	1141		
07	PS1BLK1006LC	10/10/08	1159		
08	PS1BLK1006LC	10/10/08	1218		
09	01SS01701	10/10/08	1236		
10	01SS01701DL	10/10/08	1254		
11	01SS42001	10/10/08	1313		
12	01SS01401	10/10/08	1331		
13	01SS01401 DU	10/10/08	1350		
14	01SS01501	10/10/08	1408		
15	01SS02401	10/10/08	1427		
16	01SS02501	10/10/08	1445		
17	01SS02501DL	10/10/08	1503		
18	01SS02501MS	10/10/08	1522		
19	01SS02501MSD	10/10/08	1540		
20	AB/SUR 100 #	10/10/08	1559		
21	1660 1000 #7	10/10/08	1617		
22	01SS02501MS	10/10/08	1636		
23	01SS02501MSD	10/10/08	1654		
24	01SS13701	10/10/08	1713		
25	01SS13801	10/10/08	1731		
26	01SS13901	10/10/08	1750		
27	01SS13901 DU	10/10/08	1808		
28	01SBDIT01	10/10/08	1827		
29	01SBDIT02	10/10/08	1845		
30	01SBDIT03	10/10/08	1903		
31	AB/SUR 100 #	10/10/08	1922		
32	1660 1000 #7	10/10/08	1940		

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 10.13.08
 10.13.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 09:17
 Lab File ID: 003R0301.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12222	11833	0.010	-3.2	15.0
3 Alpha-BHC	16148	15817	0.010	-2.1	15.0
23 Gamma-BHC	14554	x 14114	0.010	-3.0	15.0
5 Beta-BHC	7069	6548	0.010	-7.4	15.0
25 Heptachlor	13510	12387	0.010	-8.3	15.0
15 Delta-BHC	13305	phi 13058	0.010	-1.9	15.0
2 Aldrin	13562	13532	0.010	-0.2	15.0
26 Heptachlor Epoxide	12669	12168	0.010	-4.0	15.0
24 Gamma-Chlordane	12792	12213	0.010	-4.5	15.0
4 Alpha-Chlordane	12750	12073	0.010	-5.3	15.0
17 Endosulfan I	11673	11462	0.010	-1.8	15.0
13 4,4'-DDE	11863	11355	0.010	-4.3	15.0
16 Dieldrin	12971	12646	0.010	-2.5	15.0
20 Endrin	9624	9968	0.010	3.6	15.0
12 4,4'-DDD	10981	9696	0.010	-11.7	15.0
18 Endosulfan II	100	105	0.010	-4.6	15.0
14 4,4'-DDT	11125	9629	0.010	-13.4	15.0
21 Endrin Aldehyde	9590	9137	0.010	-4.7	15.0
19 Endosulfan Sulfate	10927	9802	0.010	-10.3	15.0
27 Methoxychlor	5769	4938	0.010	-14.4	15.0
22 Endrin Ketone	100	103	0.010	-3.2	15.0
\$ 37 DCB	8864	7543	0.010	-14.9	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 09:35
 Lab File ID: 004R0401.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	MIN %D	MAX %D
29 PCB-1016(1)	1000	✓ 999	0.010	0.1	15.0
(2)	1000	999	0.010	0.1	15.0
(3)	1000	999	0.010	0.1	15.0
(4)	1000	999	0.010	0.1	15.0
(5)	1000	999	0.010	0.1	15.0
(6)	1000	999	0.010	0.1	15.0
35 PCB-1260(1)	1267	1134	0.010	-10.5	15.0
(2)	692	610	0.010	-11.9	15.0
(3)	817	Φ 708	0.010	-13.3	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	465	412	0.010	-11.4	15.0
(8)	303	265	0.010	-12.3	15.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 10/10/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 1104

LAB FILE ID: RF5: 006R0601 RF1: 012R1201

~~★~~ SINGLE POINT ~~★~~

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	493.810		AVRG	493.810000	0.0
(2)	⊕ 157.800		AVRG	157.800000	0.0
(3)	254.810		AVRG	254.810000	0.0
(4)	422.400		AVRG	422.400000	0.0
(5)	x 229.790		AVRG	229.790000	0.0

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 15:59
 Lab File ID: 022R2201.D Init. Cal. Date(s): ~~22-SEP-2006~~ 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12222	<i>q</i> 11844	0.010	-3.1	15.0
3 Alpha-BHC	16148	16033	0.010	-0.7	15.0
23 Gamma-BHC	14554	14347	0.010	-1.4	15.0
5 Beta-BHC	7069	6644	0.010	-6.0	15.0
25 Heptachlor	13510	12576	0.010	-6.9	15.0
15 Delta-BHC	13305	13727	0.010	3.2	15.0
2 Aldrin	13562	13481	0.010	-0.6	15.0
26 Heptachlor Epoxide	12669	12174	0.010	-3.9	15.0
24 Gamma-Chlordane	12792	12300	0.010	-3.8	15.0
4 Alpha-Chlordane	12750	<i>x</i> 12082	0.010	-5.2	15.0
17 Endosulfan I	11673	11729	0.010	0.5	15.0
13 4,4'-DDE	11863	11911	0.010	0.4	15.0
16 Dieldrin	12971	12882	0.010	-0.7	15.0
20 Endrin	9624	10388	0.010	7.9	15.0
12 4,4'-DDD	10981	10954	0.010	-0.2	15.0
18 Endosulfan II	100	108	0.010	-7.9	15.0
<u>14 4,4'-DDT</u>	11125	9131	0.010	<u>-17.9</u>	15.0
21 Endrin Aldehyde	9590	9534	0.010	-0.6	15.0
19 Endosulfan Sulfate	10927	10420	0.010	-4.6	15.0
27 Methoxychlor	5769	5021	0.010	-13.0	15.0
22 Endrin Ketone	100	107	0.010	-6.8	15.0
\$ 37 DCB	8864	8159	0.010	-8.0	15.0

low to

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 16:17
 Lab File ID: 023R2301.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
29 PCB-1016 (1)	1000	X 1050	0.010	-5.0
(2)	1000	1050	0.010	-5.0
(3)	1000	1050	0.010	-5.0
(4)	1000	1050	0.010	-5.0
(5)	1000	1050	0.010	-5.0
(6)	1000	1050	0.010	-5.0
35 PCB-1260 (1)	1267	Φ 1217	0.010	-4.0
(2)	692	650	0.010	-6.0
(3)	817	770	0.010	-5.8
(4)	++++	++++	0.010	15.0
(5)	++++	++++	0.010	15.0
(6)	++++	++++	0.010	15.0
(7)	465	466	0.010	0.2
(8)	303	291	0.010	-3.9

J.H. 10-13-08
 10-13-08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 19:22
 Lab File ID: 033R3301.D Init. Cal. Date(s): 22-SEP-2006 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RF	RF100	MIN	MAX
	RRF		RRF	%D
\$ 36 TCMX	12222	12123	0.010	-0.8
3 Alpha-BHC	16148	16155	0.010	0.0
23 Gamma-BHC	14554	14370	0.010	-1.3
5 Beta-BHC	7069	6685	0.010	-5.4
25 Heptachlor	13510	12773	0.010	-5.5
15 Delta-BHC	13305	12402	0.010	-6.8
2 Aldrin	13562	13398	0.010	-1.2
26 Heptachlor Epoxide	12669	12133	0.010	-4.2
24 Gamma-Chlordane	12792	12311	0.010	-3.8
4 Alpha-Chlordane	12750	12085	0.010	-5.2
17 Endosulfan I	11673	11431	0.010	-2.1
13 4,4'-DDE	11863	11677	0.010	-1.6
16 Dieldrin	12971	12670	0.010	-2.3
20 Endrin	9624	10593	0.010	10.1
12 4,4'-DDD	10981	10899	0.010	-0.7
18 Endosulfan II	100	105	0.010	-5.2
14 4,4'-DDT	11125	8638	0.010	-22.4
21 Endrin Aldehyde	9590	8832	0.010	-7.9
19 Endosulfan Sulfate	10927	9371	0.010	-14.2
27 Methoxychlor	5769	4639	0.010	-19.6
22 Endrin Ketone	100	99	0.010	0.8
\$ 37 DCB	8864	7309	0.010	-17.5

Low
 Low 20%
 Low 20%

10.13.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 10-OCT-2008 19:40
 Lab File ID: 034R3401.D Init. Cal. Date(s): ~~22-SEP-2006~~ 10-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 11:04
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\101008.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	1040	0.010	-4.0	15.0
(2)	1000	1040	0.010	-4.0	15.0
(3)	1000	1040	0.010	-4.0	15.0
(4)	1000	1040	0.010	-4.0	15.0
(5)	1000	1040	0.010	-4.0	15.0
(6)	1000	1040	0.010	-4.0	15.0
35 PCB-1260(1)	1267	X 1189	0.010	-6.2	15.0
(2)	692	638	0.010	-7.7	15.0
(3)	817	760	0.010	-7.0	15.0
(4)	++++	++++	0.010	++++	15.0|<-
(5)	++++	++++	0.010	++++	15.0|<-
(6)	++++	++++	0.010	++++	15.0|<-
(7)	465	448	0.010	-3.7	15.0
(8)	303	279	0.010	-7.8	15.0

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Column: RTX-CLP ID: 0.32 (mm) Cont. Calib. Date(s): 09/26/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.52		S2 : 11.99	
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #
01	1660/D #7391	09/26/08	1235	5.52	11.99
02	1660/D #7391	09/26/08	1254	5.52	11.99
03	1660/D #7391	09/26/08	1312	5.52	11.99
04	1660/D #7391	09/26/08	1330	5.52	11.99
05	1660/D #7391	09/26/08	1349	5.52	11.99
06	1660/D #7391	09/26/08	1407	5.52	11.99
07	1660/D #7391	09/26/08	1425	5.52	11.99
08	1660/ICV #73	09/26/08	1444		
09	AR 1254 #715	09/26/08	1502		
10	AR 1254 #715	09/26/08	1521		
11	AR 1254 #715	09/26/08	1539		
12	AR 1254 #715	09/26/08	1557		
13	AR 1254 #715	09/26/08	1616		
14	AR 1254 #715	09/26/08	1634		
15	AR 1254 #715	09/26/08	1652		
16	AR1254/ICV #	09/26/08	1711		
17	AR 1248 #733	09/26/08	1729		
18	AR 1248 #733	09/26/08	1748		
19	AR 1248 #733	09/26/08	1806		
20	AR 1248 #733	09/26/08	1824		
21	AR 1248 #733	09/26/08	1843		
22	AR 1248 #733	09/26/08	1901		
23	AR 1248 #733	09/26/08	1919		
24	AR1248/ICV #	09/26/08	1938		
25	AR1242 #7227	09/26/08	1956		
26	AR1242 #7227	09/26/08	2014		
27	AR1242 #7227	09/26/08	2033		
28	AR1242 #7227	09/26/08	2051		
29	AR1242 #7227	09/26/08	2110		
30	AR1242 #7227	09/26/08	2128		
31	AR1242 #7227	09/26/08	2146		
32	AR1242/ICV #	09/26/08	2205		

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Column: RTX-CLPII ID: 0.32 (mm) Cont. Calib. Date(s): 09/26/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.61		S2 : 10.51	
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	1660/D #7391	09/26/08	1235	4.61	10.51
02	1660/D #7391	09/26/08	1254	4.61	10.51
03	1660/D #7391	09/26/08	1312	4.61	10.51
04	1660/D #7391	09/26/08	1330	4.61	10.51
05	1660/D #7391	09/26/08	1349	4.61	10.51
06	1660/D #7391	09/26/08	1407	4.61	10.51
07	1660/D #7391	09/26/08	1425	4.61	10.51
08	1660/ICV #73	09/26/08	1444		
09	AR 1254 #715	09/26/08	1502		
10	AR 1254 #715	09/26/08	1521		
11	AR 1254 #715	09/26/08	1539		
12	AR 1254 #715	09/26/08	1557		
13	AR 1254 #715	09/26/08	1616		
14	AR 1254 #715	09/26/08	1634		
15	AR 1254 #715	09/26/08	1652		
16	AR1254/ICV #	09/26/08	1711		
17	AR 1248 #733	09/26/08	1729		
18	AR 1248 #733	09/26/08	1748		
19	AR 1248 #733	09/26/08	1806		
20	AR 1248 #733	09/26/08	1824		
21	AR 1248 #733	09/26/08	1843		
22	AR 1248 #733	09/26/08	1901		
23	AR 1248 #733	09/26/08	1919		
24	AR1248/ICV #	09/26/08	1938		
25	AR1242 #7227	09/26/08	1956		
26	AR1242 #7227	09/26/08	2014		
27	AR1242 #7227	09/26/08	2033		
28	AR1242 #7227	09/26/08	2051		
29	AR1242 #7227	09/26/08	2110		
30	AR1242 #7227	09/26/08	2128		
31	AR1242 #7227	09/26/08	2146		
32	AR1242/ICV #	09/26/08	2205		

S1 = TCMX QC LIMITS
 (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R^2
PCB-1016	1379.860	1438.440	AVRG	1217.15159	12.1
(2)	771.920	846.640	AVRG	660.157200	17.4
(3)	745.560	819.880	AVRG	642.272857	19.2
(4)	1035.580	1138.600	AVRG	919.861267	13.9
(5)	626.360	685.960	AVRG	533.635600	20.2
PCB-1260	2151.480	2127.240	AVRG	2051.84424	4.6
(2)	1273.600	1293.360	AVRG	1115.73312	11.2
(3)	1445.120	1481.680	AVRG	1266.97165	11.1
(4)	551.800	518.520	AVRG	498.504562	6.2
(5)	1203.720	1205.360	AVRG	1056.48439	10.2
TCMX	27334.800	30564.000	AVRG	24979.0643	11.6
DCB	14367.800	13027.000	AVRG	12186.7388	9.8

} 16.7%
OK

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RF200: 002F0201 RF50: 003F0301 RF40: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1016	1106.835	1125.537	1092.225	1097.614	1279.550
(2)	559.726	572.162	578.728	586.134	705.790
(3)	528.304	547.590	549.104	558.462	747.010
(4)	816.509	824.475	829.023	835.772	959.070
(5)	430.213	449.216	452.704	463.166	627.830
PCB-1260	2015.190	1964.401	2021.319	1925.390	2157.890
(2)	1024.547	1032.568	1005.075	1027.462	1153.520
(3)	1209.181	1183.363	1136.757	1154.120	1258.580
(4)	473.554	481.463	468.641	478.674	516.880
(5)	986.486	986.849	956.873	979.562	1076.540
TCMX	22888.470	22653.560	23561.920	23794.000	24056.700
DCB	10983.945	11189.960	11400.907	11923.360	12414.200

09/26/08
MW

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: _____

Lab Code: EL Case No.: _____ SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RT1: 002F0201 RT2: 003F0301 RT3: 004F0401
 RT4: 005F0501 RT5: 006F0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	6.870	6.866	6.870	6.870	6.870
(2)	6.310	6.311	6.310	6.310	6.310
(3)	6.530	6.528	6.530	6.530	6.530
(4)	6.840	6.841	6.840	6.840	6.840
(5)	7.170	7.168	7.170	7.170	7.170
PCB-1260	10.260	10.263	10.260	10.260	10.260
(2)	8.790	8.795	8.800	8.790	8.800
(3)	9.120	9.126	9.130	9.130	9.130
(4)	9.650	9.653	9.650	9.650	9.660
(5)	9.860	9.861	9.860	9.860	9.860
TCMX	5.520	5.521	5.520	5.520	5.520
DCB	11.990	11.991	11.990	11.990	11.990

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R^2
PCB-1016	4023.580	4475.000	AVRG	3605.68994	14.6
(2)	1552.400	1814.480	AVRG	1299.01158	23.3
(3)	2343.800	2634.640	AVRG	1995.85431	20.5
(4)	1884.600	2082.840	AVRG	1831.76796	11.2
(5)	1989.380	2272.960	AVRG	1789.77733	18.0
PCB-1260	7279.320	7042.360	AVRG	6778.41540	5.8
(2)	4105.580	4144.480	AVRG	3874.07872	5.1
(3)	4107.680	3895.560	AVRG	4027.99340	3.3
(4)	4058.220	4091.440	AVRG	3607.04251	11.5
(5)	1653.280	1598.560	AVRG	1573.61070	3.1
TCMX	81108.600	74844.000	AVRG	70948.5133	9.4
DCB	47214.800	41932.000	AVRG	38985.2671	12.4

AVG
17.5%
OK

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLP11 ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RF200: 002R0201 RF50: 003R0301 RF40: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1016	2944.598	3238.776	3300.832	3430.114	3826.930
(2)	965.234	1083.712	1121.215	1158.610	1397.430
(3)	1481.163	1710.045	1751.344	1839.928	2210.060
(4)	1535.826	1701.128	1738.297	1782.454	2097.230
(5)	1390.962	1555.588	1600.481	1649.500	2069.570
PCB-1260	6088.371	6503.905	6690.060	6909.082	6935.810
(2)	3568.672	3844.456	3828.947	3858.646	3767.770
(3)	4057.931	4188.485	4077.124	4073.564	3795.610
(4)	2979.284	3345.270	3367.740	3543.554	3863.790
(5)	1494.111	1577.837	1549.103	1576.304	1566.080
TCMX	60472.420	65394.040	70214.133	71583.400	73023.000
DCB	32611.970	35144.420	36604.800	38612.480	40776.400

JS 10.6.08
Column

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	5.780	5.775	5.770	5.770	5.770
(2)	4.990	4.986	4.990	4.990	4.990
(3)	5.300	5.300	5.300	5.300	5.300
(4)	5.950	5.951	5.950	5.950	5.950
(5)	6.010	6.011	6.010	6.010	6.010
PCB-1260	8.790	8.795	8.800	8.790	8.800
(2)	7.890	7.890	7.890	7.890	7.890
(3)	8.100	8.103	8.100	8.100	8.110
(4)	8.160	8.166	8.170	8.170	8.170
(5)	8.590	8.595	8.600	8.600	8.600
TCMX	4.610	4.613	4.610	4.610	4.610
DCB	10.510	10.508	10.510	10.510	10.510

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA38029

Instrument ID: ECD4 Calibration Date(s): 09/26/08 09/26/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1235 1425

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	5.780	5.770	5.774	5.745	5.805
(2)	4.990	4.990	4.989	4.958	5.018
(3)	5.300	5.300	5.300	5.268	5.328
(4)	5.950	5.950	5.950	5.922	5.982
(5)	6.010	6.010	6.010	5.980	6.040
PCB-1260	8.800	8.800	8.796	8.770	8.830
(2)	7.890	7.890	7.890	7.865	7.925
(3)	8.110	8.110	8.105	8.080	8.140
(4)	8.170	8.170	8.168	8.138	8.198
(5)	8.600	8.600	8.598	8.570	8.630
TCMX	4.610	4.610	4.610	4.583	4.643
DCB	10.510	10.510	10.510	10.480	10.540

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Column: RTX-CLP ID: 0.32 (mm) Cont. Calib. Date(s): 10/04/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		1242 2500 74	10/04/08	1053		
02		1242 1000 74	10/04/08	1111		
03		1242 750 740	10/04/08	1130		
04		1242 500 740	10/04/08	1148		
05		1242 100 740	10/04/08	1206		
06		1242 50 7406	10/04/08	1225		
07		1242 25 7406	10/04/08	1243		
08						
09						
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32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Column: RTX-CLPII ID: 0.32 (mm) Cont. Calib. Date(s): 10/04/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	1242 2500 74	10/04/08	1053		
02	1242 1000 74	10/04/08	1111		
03	1242 750 740	10/04/08	1130		
04	1242 500 740	10/04/08	1148		
05	1242 100 740	10/04/08	1206		
06	1242 50 7406	10/04/08	1225		
07	1242 25 7406	10/04/08	1243		
08					
09					
10					
11					
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13					
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27					
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29					
30					
31					
32					

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1242	1113.680	1096.800	AVRG	967.759086	10.4
(2)	494.500	503.760	AVRG	385.002010	22.0
(3)	375.160	376.760	AVRG	303.349571	17.6
(4)	587.560	606.600	AVRG	495.738162	15.3
(5)	768.860	707.280	AVRG	614.261505	15.5

Av3 = 16.2

*BM
80ct08*

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RF200: 002F0201 RF50: 003F0301 RF40: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1242	872.174	889.584	893.244	922.352	986.480
(2)	300.480	320.923	327.963	340.118	407.270
(3)	245.650	265.145	270.768	279.474	310.490
(4)	416.773	437.777	444.201	461.116	516.140
(5)	513.839	542.464	551.369	571.278	644.740

JJ
10.8.08

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279.

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RT1: 002F0201 RT2: 003F0301 RT3: 004F0401
RT4: 005F0501 RT5: 006F0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1242	6.840	6.840	6.840	6.840	6.840
(2)	5.910	5.905	5.900	5.900	5.900
(3)	6.320	6.317	6.320	6.320	6.320
(4)	6.500	6.500	6.500	6.500	6.500
(5)	6.910	6.910	6.910	6.910	6.910

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RT6: 007F0701 RT7: 008F0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1242	6.840	6.840	6.840	6.811	6.871
(2)	5.910	5.910	5.905	5.876	5.936
(3)	6.320	6.320	6.319	6.288	6.348
(4)	6.500	6.500	6.500	6.471	6.531
(5)	6.910	6.910	6.910	6.881	6.941

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1242	3381.040	3155.360	AVRG	2910.50637	10.3
(2)	1499.980	1320.560	AVRG	1118.23564	20.7
(3)	2050.920	2003.240	AVRG	1658.49459	18.0
(4)	1899.880	1769.000	AVRG	1549.99972	15.7
(5)	2074.440	1602.400	AVRG	1533.45283	17.2

Av = 16.4

*Bm
8/06/08*

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLPIT ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RF200: 002R0201 RF50: 003R0301 RF40: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1242	2473.016	2701.593	2821.364	2844.212	2996.960
(2)	827.015	945.914	1001.671	1059.460	1173.050
(3)	1240.099	1445.682	1508.853	1586.338	1774.330
(4)	1194.352	1369.239	1443.107	1508.870	1665.550
(5)	1245.919	1379.681	1427.092	1466.438	1538.200

7.6.8
-2-

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1242	5.770	5.775	5.780	5.770	5.770
(2)	4.990	4.987	4.990	4.990	4.990
(3)	5.300	5.300	5.300	5.300	5.300
(4)	5.500	5.497	5.500	5.500	5.500
(5)	5.950	5.950	5.950	5.950	5.950

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA17279

Instrument ID: ECD4 Calibration Date(s): 10/04/08 10/04/08

Column: RTX-CLPII ID: 0.32 (mm) Calibration Time(s): 1053 1243

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1242	5.780	5.780	5.775	5.746	5.806
(2)	4.990	4.990	4.990	4.958	5.018
(3)	5.300	5.300	5.300	5.271	5.331
(4)	5.500	5.500	5.500	5.468	5.528
(5)	5.950	5.950	5.950	5.923	5.983

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 10/13/08
 Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 5.49 S2 : 11.96						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====						
01		1660 1000#73	10/13/08	1005	5.49	11.96
02		1242 1000 #7	10/13/08	1100		
03	01SBDIT02	0810033-02	10/13/08	1118	5.49	11.97
04		1660 1000#73	10/13/08	1137	5.48	11.96
05		1242 1000 #7	10/13/08	1232		
06	01SBDIT02DL	0810033-02DL	10/13/08	1422	5.49	11.97
07		1242 1000 #7	10/13/08	1440		
08		1660 1000 #7	10/13/08	1458	5.48	11.96
09						
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30						
31						
32						

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

Empirical Laboratories, LLC

J.H. 10-16-08
B.M.
101408

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 10:05
 Lab File ID: 002F0201.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000#7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1217	1113	0.010	-8.5	15.0
(2)	660	569	0.010	-13.8	15.0
(3)	642	546	0.010	-14.9	15.0
(4)	920	843	0.010	-8.3	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	534	450	0.010	-15.6	15.0
35 PCB-1260(1)	2052	X 2000	0.010	-2.5	15.0
(2)	1116	1062	0.010	-4.8	15.0
(3)	1267	1212	0.010	-4.3	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	499	501	0.010	0.5	15.0
(6)	1056	1004	0.010	-4.9	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	++++	++++	0.010	++++	15.0
\$ 36 TCMX	24979	23390	0.010	-6.4	15.0
\$ 37 DCB	12187	12672	0.010	4.0	15.0

Ave: 12.2x

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
10/14/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 11:00
 Lab File ID: 005F0501.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1242 1000 #7406 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
32 PCB-1242 (1)	968	923	0.010	-4.6	15.0
(2)	385	X 314	0.010	-18.5	15.0
(3)	303	261	0.010	-14.1	15.0
(4)	496	437	0.010	-11.8	15.0
(5)	614	534	0.010	-13.0	15.0
(6)	++++	++++	0.010	++++	15.0 <-

Ave 12.4

J.H. 10.10.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

B.M.
10/14/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 11:37
 Lab File ID: 007F0701.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000#7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1217	1134	0.010	-6.8	15.0
(2)	660	562	0.010	-14.8	15.0
(3)	642	542	0.010	-15.7	15.0
(4)	920	815	0.010	-11.4	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	534	437	0.010	-18.1	15.0
35 PCB-1260(1)	2052	X 2049	0.010	-0.2	15.0
(2)	1116	1029	0.010	-7.8	15.0
(3)	1267	1180	0.010	-6.9	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	499	452	0.010	-9.4	15.0
(6)	1056	967	0.010	-8.5	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	++++	++++	0.010	++++	15.0
\$ 36 TCMX	24979	22769	0.010	-8.8	15.0
\$ 37 DCB	12187	13010	0.010	6.8	15.0

Ave 13.4x

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

*BM
101408*

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 12:32
 Lab File ID: 010F1001.D Init. Cal. Date(s): ~~26-SEP-2008~~ 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1242 1000 #7226 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
-----	-----	-----	-----	-----	-----
32 PCB-1242 (1)	968	939	0.010	-3.0	15.0
(2)	385	X 319	0.010	-17.0	15.0 <-
(3)	303	257	0.010	-15.4	15.0 <-
(4)	496	439	0.010	-11.5	15.0
(5)	614	538	0.010	-12.4	15.0
(6)	++++	++++	0.010	++++	15.0 <-

*Ave-11.9**

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
10/14/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 14:40
Lab File ID: 012F1201.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
Analysis Type: Init. Cal. Times: 12:35 12:43
Lab Sample ID: 1242 1000 #7226 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
32 PCB-1242(1)	968	914	0.010	-5.5	15.0
(2)	385	X 315	0.010	-18.1	15.0<-
(3)	303	256	0.010	-15.6	15.0<-
(4)	496	432	0.010	-12.8	15.0
(5)	614	528	0.010	-14.0	15.0
(6)	****	****	0.010	****	15.0<-

Ave-15.2 x

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
101408

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 14:58
 Lab File ID: 013F1301.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1217	1211	0.010	-0.5	15.0
(2)	660	601	0.010	-8.9	15.0
(3)	642	580	0.010	-9.7	15.0
(4)	920	899	0.010	-2.3	15.0
(5)	++++	++++	0.010	++++	15.0 <-
(6)	534	484	0.010	-9.4	15.0
35 PCB-1260(1)	2052	2116	0.010	3.1	15.0
(2)	1116	1117	0.010	0.1	15.0
(3)	1267	1309	0.010	3.3	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	499	512	0.010	2.7	15.0
(6)	1056	X 1054	0.010	-0.3	15.0
(7)	++++	++++	0.010	++++	15.0 <-
(8)	++++	++++	0.010	++++	15.0 <-
\$ 36 TCMX	24979	24251	0.010	-2.9	15.0
\$ 37 DCB	12187	12441	0.010	2.1	15.0

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/13/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.61 S2 : 10.49			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====					
01		1660 1000#73	10/13/08	1005	4.61 10.49
02		1242 1000 #7	10/13/08	1100	
03	01SBDIT02	0810033-02	10/13/08	1118	4.62 10.50
04		1660 1000#73	10/13/08	1137	4.61 10.49
05		1242 1000 #7	10/13/08	1232	
06	01SBDIT02DL	0810033-02DL	10/13/08	1422	4.62 10.50
07		1242 1000 #7	10/13/08	1440	
08		1660 1000 #7	10/13/08	1458	4.61 10.49
09					
10					
11					
12					
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32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 10.14.08
BM
10/14/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 10:05
 Lab File ID: 002R0201.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000#7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	3606	3417	0.010	-5.2	15.0
(2)	1299	1123	0.010	-13.6	15.0
(3)	1996	1748	0.010	-12.4	15.0
(4)	++++	++++	0.010	++++	15.0|<-
(5)	1832	1755	0.010	-4.2	15.0
(6)	1790	1620	0.010	-9.5	15.0
35 PCB-1260(1)	6778	X 6783	0.010	0.1	15.0
(2)	++++	++++	0.010	++++	15.0|<-
(3)	3874	3967	0.010	2.4	15.0
(4)	4028	4523	0.010	12.3	15.0
(5)	3607	3327	0.010	-7.8	15.0
(6)	1574	1654	0.010	5.1	15.0
(7)	++++	++++	0.010	++++	15.0|<-
(8)	++++	++++	0.010	++++	15.0|<-
\$ 36 TCMX	70949	72579	0.010	2.3	15.0
\$ 37 DCB	38985	39596	0.010	1.6	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
10/10/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 11:00
 Lab File ID: 005R0501.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1242 1000 #7406 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
32 PCB-1242 (1)	2911	2993	0.010	2.8	15.0
(2)	1118	* 1039	0.010	-7.0	15.0
(3)	1658	1562	0.010	-5.8	15.0
(4)	1550	1491	0.010	-3.8	15.0
(5)	1533	1522	0.010	-0.7	15.0
(6)	****	****	0.010	****	15.0 <-

J.H. 10.14.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
10/14/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 11:37
 Lab File ID: 007R0701.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000#7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	3606	3556	0.010	-1.4	15.0
(2)	1299	1185	0.010	-8.8	15.0
(3)	1996	1821	0.010	-8.8	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	1832	1777	0.010	-3.0	15.0
(6)	1790	1591	0.010	-11.1	15.0
35 PCB-1260(1)	6778	X 6598	0.010	-2.7	15.0
(2)	++++	++++	0.010	++++	15.0 <-
(3)	3874	3754	0.010	-3.1	15.0
(4)	4028	4234	0.010	5.1	15.0
(5)	3607	3070	0.010	-14.9	15.0
(6)	1574	1542	0.010	-2.0	15.0
(7)	++++	++++	0.010	++++	15.0 <-
(8)	++++	++++	0.010	++++	15.0 <-
\$ 36 TCMX	70949	73862	0.010	4.1	15.0
\$ 37 DCB	38985	38091	0.010	-2.3	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
101408

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 12:32
Lab File ID: 010R1001.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
Analysis Type: Init. Cal. Times: 12:35 12:43
Lab Sample ID: 1242 1000 #7226 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	MIN %D	MAX %D
32 PCB-1242(1)	2911	2997	0.010	3.0	15.0
(2)	1118	X 1057	0.010	-5.4	15.0
(3)	1658	1621	0.010	-2.3	15.0
(4)	1550	1487	0.010	-4.0	15.0
(5)	1533	1515	0.010	-1.2	15.0
(6)	++++	++++	0.010	++++	15.0 <-

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
10/10/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 14:40
Lab File ID: 012R1201.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
Analysis Type: Init. Cal. Times: 12:35 12:43
Lab Sample ID: 1242 1000 #7226 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
32 PCB-1242 (1)	2911	2739	0.010	-5.9	15.0
(2)	1118	979	0.010	-12.5	15.0
(3)	1658	1453	0.010	-12.4	15.0
(4)	1550	1366	0.010	-11.9	15.0
(5)	1533	X 1376	0.010	-10.3	15.0
(6)	++++	++++	0.010	++++	15.0 <-

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
101408

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 14:58
 Lab File ID: 013R1301.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	3606	3680	0.010	2.1	15.0
(2)	1299	1202	0.010	-7.5	15.0
(3)	1996	1838	0.010	-7.9	15.0
(4)	++++	++++	0.010	++++	15.0|<-
(5)	1832	1895	0.010	3.4	15.0
(6)	1790	1710	0.010	-4.5	15.0
35 PCB-1260(1)	6778	6845	0.010	1.0	15.0
(2)	++++	++++	0.010	++++	15.0|<-
(3)	3874	4144	0.010	7.0	15.0
(4)	4028	4321	0.010	7.3	15.0
(5)	3607	3354	0.010	-7.0	15.0
(6)	1574	X 1681	0.010	6.8	15.0
(7)	++++	++++	0.010	++++	15.0|<-
(8)	++++	++++	0.010	++++	15.0|<-
\$ 36 TCMX	70949	75328	0.010	6.2	15.0
\$ 37 DCB	38985	38202	0.010	-2.0	15.0

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 10-10-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 10-7-08
 Lab Sample ID (PEM): _____ Time Analyzed: 15:08

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	±D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): Ø Endrin & breakdown (1): Ø
 Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 10-10-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 10-7-08
 Lab Sample ID (PEM): _____ Time Analyzed: 15:08

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): Ø Endrin & breakdown (1): Ø
 Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 10-7-08
 EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 10-10-08
 Lab Sample ID (PEM): _____ Time Analyzed: 08:59

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): ∅ Endrin & breakdown (1): ∅
 Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 10.7.08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 10.10.08
 Lab Sample ID (PEM): _____ Time Analyzed: 08:59

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	±D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): ∅ Endrin & breakdown (1): ∅
 Combined & breakdown (1): NA

FORM 2
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PS1BLK1006	81	83	83	83			0
02	PS1BLK1006LC	77	74	76	74			0
03	PS1BLK1006LC	76	79	79	80			0
04	01SS01701	81	82	77	76			0
05	01SS01701DL	85D	93D	90D	91D			0
06	01SS42001	86	85	78	76			0
07	01SS01401	69	70	67	66			0
08	01SS01401 DU	80	79	72	70			0
09	01SS01501	76	77	77	75			0
10	01SS02401	64	66	66	61			0
11	01SS02501	60	62	60	56			0
12	01SS02501DL	66D	73D	82D	72D			0
13	01SS02501MS	75	73	68	65			0
14	01SS02501MSD	78	75	75	71			0
15	01SS02501MS	87	88	83	79			0
16	01SS02501MSD	91	92	85	84			0
17	01SS13701	67	68	68	65			0
18	01SS13801	54	57	60	59			0
19	01SS13901	66	67	72	70			0
20	01SS13901 DU	64	66	71	70			0
21	01SBDIT01	85	87	85	84			0
22	01SBDIT02	137*	136*	124	52			2
23	01SBDIT03	64	65	69	65			0
24								
25								
26								
27								
28								
29								
30								

	EL	SPIKE	
S1	= TCMX	QC LIMITS	CONC (ug/Kg)
S2	= DCB	(30-120)	17
		(35-140)	17

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	01SBDIT02	97	65	64	52			0
02	01SBDIT02DL	128D	74D	94D	76D			0
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								



		EL	SPIKE
		QC LIMITS	CONC (ug/Kg)
S1	= TCMX	(30-120)	21
S2	= DCB	(35-140)	21

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: PS1BLK1006

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aldrin	33.33	0.0000	31.36	94	45-140
Alpha-BHC	33.33	0.0000	31.14	93	60-125
Alpha-Chlordane	33.33	0.0000	29.20	88	65-120
Beta-BHC	33.33	0.0000	27.78	83	60-125
4,4'-DDD	33.33	0.0000	28.22	85	30-135
4,4'-DDE	33.33	0.0000	30.39	91	70-125
4,4'-DDT	33.33	0.0000	27.94	84	45-140
Delta-BHC	33.33	0.0000	31.63	95	55-130
Dieldrin	33.33	0.0000	30.78	92	65-125
Endosulfan I	33.33	0.0000	30.28	91	15-135
Endosulfan II	33.33	0.0000	30.75	92	35-140
Endosulfan Sulfate	33.33	0.0000	27.51	82	60-135
Endrin	33.33	0.0000	33.52	100	60-135
Endrin Aldehyde	33.33	0.0000	27.43	82	35-145
Endrin Ketone	33.33	0.0000	31.00	93	65-135
Gamma-BHC	33.33	0.0000	30.50	92	60-125
Gamma-Chlordane	33.33	0.0000	30.08	90	65-125
Heptachlor	33.33	0.0000	27.98	84	50-140
Heptachlor Epoxide	33.33	0.0000	29.64	89	65-130
Methoxychlor	33.33	0.0000	28.27	85	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 20 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: PS1BLK1006

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
PCB-1016	166.7	0.0000	153.9	92	40-140
PCB-1260	166.7	0.0000	130.2	78	60-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aldrin	37.33	0.2877	33.48	89	45-140
Alpha-BHC	37.33	0.0000	33.87	91	60-125
Alpha-Chlordane	37.33	0.2306	29.82	79	65-120
Beta-BHC	37.33	0.0000	29.31	78	60-125
4,4'-DDD	37.33	0.0000	29.24	78	30-135
4,4'-DDE	37.33	0.0000	31.35	84	70-125
4,4'-DDT	37.33	3.435	30.94	74	45-140
Delta-BHC	37.33	0.0000	34.33	92	55-130
<u>Dieldrin</u>	37.33	422.6	1004	1557*	65-125
Endosulfan I	37.33	0.0000	31.25	84	15-135
Endosulfan II	37.33	0.0000	31.40	84	35-140
Endosulfan Sulfate	37.33	0.0000	29.57	79	60-135
Endrin	37.33	0.0000	36.29	97	60-135
Endrin Aldehyde	37.33	0.0000	29.16	78	35-145
Endrin Ketone	37.33	0.0000	32.03	86	65-135
Gamma-BHC	37.33	0.0000	33.21	89	60-125
Gamma-Chlordane	37.33	0.0000	30.62	82	65-125
Heptachlor	37.33	0.0000	29.78	80	50-140
Heptachlor Epoxide	37.33	0.4717	29.70	78	65-130
Methoxychlor	37.33	0.0000	29.51	79	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	37.33	35.19	93	5	30	45-140
Alpha-BHC	37.33	35.75	96	5	30	60-125
Alpha-Chlordane	37.33	32.12	85	7	30	65-120
Beta-BHC	37.33	31.21	84	6	30	60-125
4,4'-DDD	37.33	30.34	81	4	30	30-135
4,4'-DDE	37.33	33.68	90	7	30	70-125
4,4'-DDT	37.33	34.27	83	10	30	45-140
Delta-BHC	37.33	36.45	98	6	30	55-130
Dieldrin	37.33	523.6	270*	63*	30	65-125
Endosulfan I	37.33	33.47	90	7	30	15-135
Endosulfan II	37.33	33.48	90	6	30	35-140
Endosulfan Sulfate	37.33	31.74	85	7	30	60-135
Endrin	37.33	38.39	103	6	30	60-135
Endrin Aldehyde	37.33	29.62	79	2	30	35-145
Endrin Ketone	37.33	34.08	91	6	30	65-135
Gamma-BHC	37.33	35.14	94	6	30	60-125
Gamma-Chlordane	37.33	32.72	88	7	30	65-125
Heptachlor	37.33	31.37	84	5	30	50-140
Heptachlor Epoxide	37.33	31.06	82	4	30	65-130
Methoxychlor	37.33	31.22	84	6	30	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 20 outside limits

Spike Recovery: 2 out of 40 outside limits

COMMENTS: _____

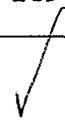
FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
PCB-1016	186.6	0.0000	179.4	96	40-140
PCB-1260	186.6	0.0000	149.9	80	60-130



COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
PCB-1016	186.6	202.8	109	12	50	40-140
PCB-1260	186.6	158.3	85	5	50	60-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PS1BLK1006

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Lab Sample ID: PS1BLK1006 Lab File ID: 008F0801
 Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SOXH
 Sulfur Cleanup (Y/N) N Date Extracted: 10/06/08
 Date Analyzed (1): 10/10/08 Date Analyzed (2): 10/10/08
 Time Analyzed (1): 1141 Time Analyzed (2): 1141
 Instrument ID (1): ECD3 Instrument ID (2): ECD3
 Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PS1BLK1006LC	PS1BLK1006LCS	10/10/08	10/10/08
02	PS1BLK1006LC	PS1BLK1006LCS	10/10/08	10/10/08
03	01SS01701	0810010-01	10/10/08	10/10/08
04	01SS01701DL	0810010-01DL	10/10/08	10/10/08
05	01SS42001	0810010-02	10/10/08	10/10/08
06	01SS01401	0810010-03	10/10/08	10/10/08
07	01SS01401 DU	0810010-04	10/10/08	10/10/08
08	01SS01501	0810010-05	10/10/08	10/10/08
09	01SS02401	0810010-06	10/10/08	10/10/08
10	01SS02501	0810010-07	10/10/08	10/10/08
11	01SS02501DL	0810010-07DL	10/10/08	10/10/08
12	01SS02501MS	0810010-07MS	10/10/08	10/10/08
13	01SS02501MSD	0810010-07MSD	10/10/08	10/10/08
14	01SS02501MS	0810010-07MS	10/10/08	10/10/08
15	01SS02501MSD	0810010-07MSD	10/10/08	10/10/08
16	01SS13701	0810010-08	10/10/08	10/10/08
17	01SS13801	0810010-09	10/10/08	10/10/08
18	01SS13901	0810010-10	10/10/08	10/10/08
19	01SS13901 DU	0810010-11	10/10/08	10/10/08
20	01SBDIT01	0810033-01	10/10/08	10/10/08
21	01SBDIT02	0810033-02	10/10/08	10/10/08
22	01SBDIT03	0810033-03	10/10/08	10/10/08
23				
24				
25				
26				

COMMENTS: _____

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PS1BLK1006

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: PS1BLK1006

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 008F0801

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/06/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/10/08 11:41

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.11	0.33	U
319-84-6-----	Alpha-BHC	0.11	0.33	U
5103-71-9-----	Alpha-Chlordane	0.11	0.33	U
319-85-7-----	Beta-BHC	0.11	0.33	U
72-54-8-----	4,4'-DDD	0.17	0.67	U
72-55-9-----	4,4'-DDE	0.17	0.67	U
50-29-3-----	4,4'-DDT	0.17	0.67	U
319-86-8-----	Delta-BHC	0.11	0.33	U
60-57-1-----	Dieldrin	0.17	0.67	U
959-98-8-----	Endosulfan I	0.11	0.33	U
33213-65-9----	Endosulfan II	0.17	0.67	U
1031-07-8-----	Endosulfan Sulfate	0.17	0.67	U
72-20-8-----	Endrin	0.17	0.67	U
7421-93-4-----	Endrin Aldehyde	0.17	0.67	U
53494-70-5----	Endrin Ketone	0.17	0.67	U
58-89-9-----	Gamma-BHC	0.11	0.33	U
5103-74-2-----	Gamma-Chlordane	0.11	0.33	U
76-44-8-----	Heptachlor	0.11	0.33	U
1024-57-3-----	Heptachlor Epoxide	0.11	0.33	U
72-43-5-----	Methoxychlor	0.11	0.33	U
8001-35-2-----	Toxaphene	11	33	U
12674-11-2----	PCB-1016	4.2	17	U
11104-28-2----	PCB-1221	4.2	17	U
11141-16-5----	PCB-1232	4.2	17	U
53469-21-9----	PCB-1242	4.2	17	U
12672-29-6----	PCB-1248	4.2	17	U
11097-69-1----	PCB-1254	4.2	17	U
11096-82-5----	PCB-1260	4.2	17	U

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBEDIT01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-01 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.00	7.97	8.03	<u>1.556</u>	
	2	6.88	6.86	6.92	1.306	17.5
Beta-BHC	1	6.24	6.24	6.30	<u>0.3205</u>	
	2	5.60	5.58	5.64	0.8537	90.8
4,4'-DDE	1	8.19	8.17	8.23	0.2761	
	2	7.09	7.06	7.12	<u>0.3482</u>	23.1
4,4'-DDT	1	9.23	9.20	9.26	0.7187	
	2	8.04	8.01	8.07	<u>0.7303</u>	1.6
Dieldrin	1	8.40	8.37	8.43	0.3744	
	2	7.25	7.22	7.28	<u>0.4314</u>	14.1
Endosulfan II	1	8.97	8.92	8.98	<u>0.5103</u>	
	2	7.88	7.87	7.93	0.4644	9.4
Gamma-Chlordane	1	7.90	7.87	7.93	0.4552	
	2	6.84	6.81	6.87	<u>0.6478</u>	34.9
Heptachlor Epoxide	1	7.62	7.57	7.63	<u>0.3314</u>	
	2	6.52	6.50	6.56	0.2815	16.3

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-02 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	7.10	7.08	7.14	<u>2.972</u>	
	2	6.04	6.00	6.06	21.30	151.0
Alpha-BHC	1	5.72	5.69	5.75	<u>4.174</u>	
	2	5.00	4.98	5.04	2.803	39.3
Beta-BHC	1	6.27	6.24	6.30	35.59	
	2	5.61	5.58	5.64	<u>62.86</u>	55.4
4,4'-DDD	1	8.83	8.81	8.87	<u>1.505</u>	
	2	7.71	7.69	7.75	8.039	136.9
4,4'-DDT	1	9.24	9.20	9.26	<u>1.407</u>	
	2	8.01	8.01	8.07	3.747	90.8
Delta-BHC	1	6.57	6.51	6.57	<u>33.70</u>	
	2	5.83	5.82	5.88	29.40	13.6
Dieldrin	1	8.39	8.37	8.43	<u>0.8547</u>	
	2	7.24	7.22	7.28	11.46	172.2
Endosulfan II	1	8.95	8.92	8.98	<u>4.399</u>	
	2	7.90	7.87	7.93	3.670	18.1

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-02 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Endosulfan Sulfate	1	9.38	9.38	9.44	1.198	
	2	8.38	8.35	8.41	1.518	23.6
Endrin	1	8.67	8.65	8.71	6.297	
	2	7.54	7.52	7.58	7.600	18.8
Endrin Aldehyde	1	9.11	9.09	9.15	7.659	
	2	8.06	8.06	8.12	11.51	40.2
Endrin Ketone	1	10.04	10.00	10.06	1.277	
	2	8.99	8.94	9.00	4.166	106.2
Gamma-BHC	1	6.07	6.04	6.10	52.36	
	2	5.32	5.29	5.35	10.16	135.0
Gamma-Chlordane	1	7.89	7.87	7.93	7.398	
	2	6.84	6.81	6.87	267.7	189.2
Heptachlor	1	6.73	6.69	6.75	15.56	
	2	5.72	5.69	5.75	73.34	130.0
Heptachlor Epoxide	1	7.58	7.57	7.63	17.56	
	2	6.52	6.50	6.56	6.210	95.5

FORM 10
 PCB IDENTIFICATION SUMMARY
 FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBDIT02

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-02 Date(s) Analyzed: 10/13/08 10/13/08

Instrument ID (1): ECD4 Instrument ID (2): ECD4

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
PCB-1242	1	6.84	6.80	6.86	1762		
	2	5.90	5.87	5.93	849.5		
COLUMN 1	4	6.50	6.46	6.52	1989	1575	
	5	6.91	6.87	6.93	1700		
COLUMN 2	1	5.79	5.74	5.80	1801	1226	24.9
	2	4.99	4.96	5.02	1000		
	3	5.30	5.27	5.33	730.8		
	4	5.50	5.47	5.53	1603		
	5	5.97	5.92	5.98	994.1		
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM 10
 PCB IDENTIFICATION SUMMARY
 FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBDIT02DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-02DL Date(s) Analyzed: 10/13/08 10/13/08

Instrument ID (1): ECD4 Instrument ID (2): ECD4

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
PCB-1242	1	6.84	6.80	6.86	2274	2404 # 11/18/08	
	2	5.91	5.87	5.93	1083		
COLUMN 1	4	6.50	6.46	6.52	2600	2074	
	5	6.90	6.87	6.93	2337		
COLUMN 2	1	5.78	5.74	5.80	1988	1316	44.7
	2	4.99	4.96	5.02	1029		
	3	5.30	5.27	5.33	865.2		
	4	5.50	5.47	5.53	1622		
	5	5.96	5.92	5.98	1078		
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SBDIT03

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810033-03 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.00	7.97	8.03	0.1787	
	2	6.91	6.86	6.92	1.272	150.7
Beta-BHC	1	6.24	6.24	6.30	0.6621	
	2	5.62	5.58	5.64	0.1687	118.8
Endosulfan Sulfate	1	9.41	9.38	9.44	0.4603	
	2	8.40	8.35	8.41	0.3799	19.1
Gamma-Chlordane	1	7.90	7.87	7.93	0.2015	
	2	6.83	6.81	6.87	0.9122	127.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS01401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-03 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Delta-BHC	1	6.52	6.51	6.57	0.5896	
	2	5.83	5.82	5.88	0.2637	76.4
Dieldrin	1	8.40	8.37	8.43	0.5500	
	2	7.25	7.22	7.28	1.044	62.0
Endosulfan II	1	8.95	8.92	8.98	3.117	
	2	7.87	7.87	7.93	1.388	76.8
Heptachlor Epoxide	1	7.60	7.57	7.63	0.5572	
	2	6.50	6.50	6.56	0.4091	30.6
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS01401 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Lab Sample ID: 0810010-04 Date(s) Analyzed: 10/10/08 10/10/08
 Instrument ID (1): ECD3 Instrument ID (2): ECD3
 Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDT	1	9.23	9.20	9.26	0.3240	
	2	8.04	8.01	8.07	0.2935	9.9
Delta-BHC	1	6.52	6.51	6.57	0.6972	
	2	5.83	5.82	5.88	0.1800	117.9
Dieldrin	1	8.40	8.37	8.43	0.5345	
	2	7.25	7.22	7.28	0.6991	26.7
Endosulfan II	1	8.96	8.92	8.98	0.3493	
	2	7.88	7.87	7.93	0.3283	6.2
Endosulfan Sulfate	1	9.40	9.38	9.44	0.2934	
	2	8.38	8.35	8.41	0.2081	34.0
Heptachlor Epoxide	1	7.60	7.57	7.63	0.6129	
	2	6.51	6.50	6.56	0.3026	67.8
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS01501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-05 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDE	1	8.19	8.17	8.23	0.5880	
	2	7.09	7.06	7.12	0.8634	37.9
4,4'-DDT	1	9.23	9.20	9.26	0.2326	
	2	8.04	8.01	8.07	0.5728	84.5
Dieldrin	1	8.40	8.37	8.43	1.430	
	2	7.25	7.22	7.28	1.438	0.6
Methoxychlor	1	9.86	9.80	9.86	0.5296	
	2	8.68	8.65	8.71	0.7974	40.4
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS01701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-01 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	7.09	7.08	7.14	6.286	
	2	6.02	6.00	6.06	4.182	40.2
Methoxychlor	1	9.86	9.80	9.86	126.9	
	2	8.68	8.65	8.71	99.02	24.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS01701DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-01DL Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	7.09	7.08	7.14	7.239	
	2	6.02	6.00	6.06	5.166	33.4
Methoxychlor	1	9.86	9.80	9.86	135.6	
	2	8.68	8.65	8.71	102.9	27.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS02401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-06 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.00	7.97	8.03	4.900	
	2	6.89	6.86	6.92	3.747	26.7
Beta-BHC	1	6.24	6.24	6.30	0.6217	
	2	5.59	5.58	5.64	0.1886	106.9
4,4'-DDE	1	8.19	8.17	8.23	0.7277	
	2	7.09	7.06	7.12	0.9700	28.5
4,4'-DDT	1	9.23	9.20	9.26	1.302	
	2	8.04	8.01	8.07	1.540	16.7
Gamma-Chlordane	1	7.90	7.87	7.93	2.158	
	2	6.83	6.81	6.87	3.452	46.1
Heptachlor Epoxide	1	7.60	7.57	7.63	0.9372	
	2	6.52	6.50	6.56	1.221	26.3
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS02501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-07 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	7.11	7.08	7.14	0.2769	
	2	6.03	6.00	6.06	0.2877	3.8
Alpha-Chlordane	1	8.00	7.97	8.03	0.1854	
	2	6.88	6.86	6.92	0.2306	21.7
4,4'-DDT	1	9.23	9.20	9.26	0.3447	
	2	8.01	8.01	8.07	3.435	163.5
Dieldrin	1	8.40	8.37	8.43	422.6	
	2	7.25	7.22	7.28	347.5	19.5
Heptachlor Epoxide	1	7.60	7.57	7.63	0.4717	
	2	6.52	6.50	6.56	0.2498	61.5
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS02501DL

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-07DL Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	8.40	8.37	8.43	465.2	
	2	7.25	7.22	7.28	439.7	5.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS13701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-08 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.00	7.97	8.03	0.3057	
	2	6.88	6.86	6.92	0.3199	4.5
4,4'-DDT	1	9.23	9.20	9.26	0.3124	
	2	8.04	8.01	8.07	0.2899	7.5
Dieldrin	1	8.40	8.37	8.43	0.2576	
	2	7.25	7.22	7.28	0.3597	33.1
Endosulfan II	1	8.97	8.92	8.98	0.3026	
	2	7.88	7.87	7.93	0.1969	42.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS13901 DUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: 0810010-11 Date(s) Analyzed: 10/10/08 10/10/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	6.24	6.24	6.30	0.4363	
	2	5.59	5.58	5.64	0.1766	84.7
Gamma-BHC	1	6.09	6.04	6.10	0.2312	
	2	5.34	5.29	5.35	0.1498	42.7
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	3.726e-003	1.881e-008	0.998
2,4-DB	AVRG		114.021120		14.5
2,4,5-TP (Silvex)	AVRG		1133.33079		13.8
2,4,5-T	AVRG		975.652824		9.0
Dalapon	AVRG		245.988281		19.7
Dicamba	2ORDR	0.00000000	1.068e-003	7.161e-009	0.997
Dichloroprop	2ORDR	0.00000000	4.964e-003	2.471e-008	0.998
Dinoseb	2ORDR	0.00000000	1.455e-003	3.815e-009	0.999
MCPA	2ORDR	0.00000000	1.03834247	1.22e-005	0.995
MCPP	2ORDR	0.00000000	1.62362803	2.058e-005	0.997
DCAA	AVRG		200.701051		19.4

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
2,4-D	266.187	304.718
2,4-DB	125.548	133.184
2,4,5-TP (Silvex)	1243.636	1386.282
2,4,5-T	1048.212	1017.725
Dalapon	286.169	329.155
Dicamba	1033.592	1171.981
Dichloroprop	214.956	258.999
Dinoseb	703.866	844.725
MCPA	1.068	1.417
MCPP	0.676	0.817
DCAA	242.075	248.505

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RF100: 003F0201 RF50: 004F0201 RF40: 005F0201
RF25: 006F0201 RF20: 007F0201

COMPOUND	RF100	RF50	RF40	RF25	RF20
2,4-D	155.466	180.121	191.170	218.766	238.691
2,4-DB	87.598	101.315	107.197	114.204	129.101
2,4,5-TP (Silvex)	926.655	1006.396	1049.680	1118.625	1202.041
2,4,5-T	828.129	912.202	946.802	989.830	1086.670
Dalapon	193.021	207.084	212.577	241.198	252.714
Dicamba	664.604	722.708	754.126	873.714	915.227
Dichloroprop	127.142	143.293	151.158	173.734	185.882
Dinoseb	445.301	506.376	532.295	576.477	648.279
MCPA	0.590	0.661	0.696	0.820	0.892
MCPP	0.416	0.458	0.479	0.557	0.592
DCAA	146.230	166.702	175.184	207.175	219.036

Chrom
10.13.08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RT1: 003F0201 RT2: 004F0201 RT3: 005F0201
RT4: 006F0201 RT5: 007F0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	15.903	15.907	15.913	15.917	15.920
2,4-DB	17.960	17.963	17.967	17.973	17.973
2,4,5-TP (Silvex)	17.023	17.027	17.030	17.033	17.033
2,4,5-T	17.370	17.380	17.390	17.400	17.403
Dalapon	5.220	5.217	5.227	5.227	5.223
Dicamba	14.317	14.317	14.323	14.320	14.323
Dichloroprop	15.560	15.560	15.567	15.567	15.567
Dinoseb	19.030	19.030	19.033	19.033	19.033
MCPA	14.990	14.973	14.977	14.970	14.970
MCPP	14.727	14.713	14.713	14.707	14.707
DCAA	13.980	13.983	13.990	13.993	13.997

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RT6: 008F0201 RT7: 009F0201

COMPOUND	RT6	RT7	MEAN	RT WINDOW	
			RT	FROM	TO
2,4-D	15.937	15.953	15.921	15.923	15.983
2,4-DB	17.993	18.013	17.977	17.983	18.043
2,4,5-TP (Silvex)	17.043	17.047	17.034	17.017	17.077
2,4,5-T	17.443	17.467	17.408	17.437	17.497
Dalapon	5.233	5.233	5.226	5.203	5.263
Dicamba	14.327	14.330	14.322	14.300	14.360
Dichloroprop	15.573	15.580	15.568	15.550	15.610
Dinoseb	19.037	19.037	19.033	19.007	19.067
MCPA	14.970	14.970	14.974	14.940	15.000
MCPP	14.707	14.707	14.712	14.677	14.737
DCAA	14.010	14.023	13.997	13.993	14.053

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		395.995192		18.2
2,4-DB	AVRG		212.150594		14.3
2,4,5-TP (Silvex)	AVRG		1851.94837		8.4
2,4,5-T	AVRG		1609.49308		10.3
Dalapon	AVRG		477.032808		13.4
Dicamba	AVRG		1297.33737		8.4
Dichloroprop	AVRG		368.149794		18.2
Dinoseb	AVRG		1267.77945		13.8
MCPA	2ORDR	0.00000000	0.12879385	5.544e-006	0.994
MCPP	2ORDR	0.00000000	9.757e-002	9.799e-006	0.997
DCAA	AVRG		324.021879		16.9

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	477.650	492.974
2,4-DB	252.099	230.844
2,4,5-TP (Silvex)	1935.514	1765.201
2,4,5-T	1756.831	1595.484
Dalapon	545.345	575.222
Dicamba	1421.176	1405.187
Dichloroprop	449.332	445.474
Dinoseb	1477.708	1420.119
MCPA	3.461	4.656
MCPP	2.951	4.123
DCAA	384.185	399.991

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	278.773	385.979	362.961	390.275	383.354
2,4-DB	154.672	224.881	203.803	215.032	203.723
2,4,5-TP (Silvex)	1624.703	2109.575	1895.590	1886.383	1746.673
2,4,5-T	1311.628	1823.075	1628.933	1624.678	1525.822
Dalapon	391.686	437.341	437.939	477.632	474.064
Dicamba	1102.334	1334.694	1254.538	1312.782	1250.651
Dichloroprop	256.366	345.850	331.976	369.847	378.203
Dinoseb	941.658	1337.777	1217.731	1258.458	1221.006
MCPA	1.259	1.829	1.862	2.252	2.364
MCPP	0.987	1.420	1.485	1.859	1.972
DCAA	237.245	309.130	296.637	324.356	316.608

10.13.08
Alan

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RT1: 003R0201 RT2: 004R0201 RT3: 005R0201
RT4: 006R0201 RT5: 007R0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.710	16.710	16.707	16.707	16.707
2,4-DB	18.710	18.710	18.707	18.707	18.707
2,4,5-TP (Silvex)	17.730	17.730	17.727	17.727	17.727
2,4,5-T	18.173	18.173	18.170	18.170	18.170
Dalapon	5.637	5.647	5.640	5.640	5.640
Dicamba	15.153	15.153	15.153	15.150	15.150
Dichloroprop	16.270	16.270	16.267	16.267	16.267
Dinoseb	19.030	19.030	19.027	19.027	19.027
MCPA	15.790	15.780	15.773	15.767	15.767
MCPP	15.410	15.400	15.393	15.387	15.387
DCAA	14.850	14.853	14.850	14.847	14.850

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RT6: 008R0201 RT7: 009R0201

COMPOUND	RT6	RT7	MEAN	RT WINDOW	
			RT	FROM	TO
2,4-D	16.707	16.713	16.709	16.683	16.743
2,4-DB	18.707	18.710	18.708	18.680	18.740
2,4,5-TP (Silvex)	17.723	17.730	17.728	17.700	17.760
2,4,5-T	18.167	18.173	18.171	18.143	18.203
Dalapon	5.643	5.650	5.642	5.620	5.680
Dicamba	15.147	15.153	15.151	15.123	15.183
Dichloroprop	16.263	16.270	16.268	16.240	16.300
Dinoseb	19.023	19.027	19.027	18.997	19.057
MCPA	15.760	15.763	15.771	15.733	15.793
MCPP	15.380	15.387	15.392	15.357	15.417
DCAA	14.847	14.853	14.850	14.823	14.883

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 09-OCT-2008 22:57
 Lab File ID: 011F0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: Init. Cal. Times: 17:26 00:20
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	X 255	0.010	3.5	15.0
\$ 12 DCAA	201	213	0.010	6.1	15.0
6 Dicamba	18.81500	20.33191	0.010	-8.1	15.0
10 MCPP	18779	20207	0.010	-7.6	15.0
9 MCPA	18691	20547	0.010	-9.9	15.0
7 Dichloroprop	189	212	0.010	-12.3	15.0
1 2,4-D	188	206	0.010	-9.6	15.0
3 2,4,5-TP (Silvex)	1133	1214	0.010	7.2	15.0
4 2,4,5-T	976	1104	0.010	13.2	15.0
2 2,4-DB	114	131	0.010	14.6	15.0
8 Dinoseb	94.51800	107	0.010	-13.4	15.0

09/10/08

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-OCT-2008 07:22
Lab File ID: 024F0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
Analysis Type: Init. Cal. Times: 17:26 00:20
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	X 262	0.010	6.4	15.0
\$ 12 DCAA	201	204	0.010	1.8	15.0
6 Dicamba	18.81500	19.45554	0.010	-3.4	15.0
10 MCPP	18779	19428	0.010	-3.5	15.0
9 MCPA	18691	19338	0.010	-3.5	15.0
7 Dichloroprop	189	201	0.010	-6.6	15.0
1 2,4-D	188	187	0.010	0.8	15.0
3 2,4,5-TP (Silvex)	1133	1135	0.010	0.1	15.0
4 2,4,5-T	976	990	0.010	1.4	15.0
2 2,4-DB	114	117	0.010	3.0	15.0
8 Dinoseb	94.51800	98.90883	0.010	-4.6	15.0

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-OCT-2008 09:58
Lab File ID: 028F0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
Analysis Type: Init. Cal. Times: 17:26 00:20
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151F.m

COMPOUND	RRF	RF20	MIN	MAX	
			RRF	%D	%D
5 Dalapon	246	X 280	0.010	13.8	15.0
\$ 12 DCAA	201	223	0.010	11.0	15.0
6 Dicamba	18.81500	21.39337	0.010	-13.7	15.0
10 MCPP	18779	21094	0.010	-12.3	15.0
9 MCPA	18691	20710	0.010	-10.8	15.0
7 Dichloroprop	189	216	0.010	-14.6	15.0
1 2,4-D	188	201	0.010	-6.6	15.0
3 2,4,5-TP (Silvex)	1133	1188	0.010	4.8	15.0
4 2,4,5-T	976	1026	0.010	5.2	15.0
2 2,4-DB	114	122	0.010	6.6	15.0
8 Dinoseb	94.51800	101	0.010	-7.1	15.0

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J.H. 10.14.08

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-OCT-2008 18:20
 Lab File ID: 037F0101.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: Init. Cal. Times: 17:26 00:20
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151F.m

Comment

COMPOUND	RRF	RF20	MIN	RRF	%D	MAX
5 Dalapon	246	X 265	0.010	7.9	15.0	
12 DCAA	201	204	0.010	1.7	15.0	
6 Dicamba	18.81500	19.37607	0.010	-3.0	15.0	
10 MCPP	18779	19488	0.010	-3.8	15.0	
9 MCPA	18691	19226	0.010	-2.9	15.0	
7 Dichloroprop	189	200	0.010	-6.0	15.0	
1 2,4-D	188	184	0.010	2.1	15.0	
3 2,4,5-TP (Silvex)	1133	1117	0.010	-1.4	15.0	
4 2,4,5-T	976	962	0.010	-1.4	15.0	
2 2,4-DB	114	114	0.010	-0.1	15.0	
8 Dinoseb	94.51800	93.24729	0.010	1.3	15.0	

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012
 Column: RTX-CLP2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/09/08 - 10/10/08
 Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION S1 : 14.85						
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #	
01						
	<u>HERB/DCAA #7</u>	10/09/08	<u>2336</u>	14.85		
02	HS1BLK1003	10/10/08	0015	14.86		
03	HS1BLK1003LC	10/10/08	0053	14.86		
04	01SS01701	10/10/08	0132	14.86		
05	01SS42001	10/10/08	0211	14.86		
06	01SS01401	10/10/08	0250	14.86		
07	01SS01401 DU	10/10/08	0329	14.86		
08	01SS01501	10/10/08	0408	14.86		
09	01SS02401	10/10/08	0447	14.86		
10	01SS02501	10/10/08	0526	14.86		
11	01SS02501MS	10/10/08	0604	14.86		
12	01SS02501MSD	10/10/08	0643	14.86		
13	01SS13701	10/10/08	0722	14.86		
14	<u>HERB/DCAA #7</u>	10/10/08	<u>0801</u>	14.85		
15	01SS13801	10/10/08	0840	14.85		
16	01SS13901	10/10/08	0919	14.85		
17	01SS13901 DU	10/10/08	0958	14.85		
18	<u>HERB/DCAA #7</u>	10/10/08	<u>1038*</u>	14.85		
19	HS1BLK1009	10/10/08	1343	14.85		
20	HS1BLK1009LC	10/10/08	1422	14.84		
21	HS1BLK1009LC	10/10/08	1501	14.84		
22	01SBDIT01	10/10/08	1700	14.83		
23	01SBDIT02	10/10/08	1739	14.83		
24	01SBDIT03	10/10/08	1820	14.84		
25	<u>HERB/DCAA #7</u>	10/10/08	<u>1859</u>	14.84		
26						
27						
28						
29						
30						
31						
32						

S1 = DCAA

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

J.H. 10.10.08

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 09-OCT-2008 23:36
Lab File ID: 011R0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
Analysis Type: Init. Cal. Times: 18:05 00:59
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
5 Dalapon	477	X 507	0.010	6.4	15.0	
\$ 12 DCAA	324	368	0.010	13.5	15.0	
6 Dicamba	1297	1446	0.010	11.4	15.0	
10 MCPP	18779	18928	0.010	-0.8	15.0	
9 MCPA	18691	18797	0.010	-0.6	15.0	
7 Dichloroprop	368	410	0.010	11.3	15.0	
1 2,4-D	396	466	0.010	17.7	15.0 <-	
3 2,4,5-TP (Silvex)	1852	2199	0.010	18.7	15.0 <-	
4 2,4,5-T	1609	1958	0.010	21.7	15.0 <-	
2 2,4-DB	212	257	0.010	21.0	15.0 <-	
8 Dinoseb	1268	1534	0.010	21.0	15.0 <-	

Answer

} HIGH

J.H. 10-16-08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-OCT-2008 08:01
 Lab File ID: 024R0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: Init. Cal. Times: 18:05 00:59
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	477	832	0.010	11.6	15.0
\$ 12 DCAA	324	385	0.010	18.8	15.0
6 Dicamba	1297	1532	0.010	18.1	15.0
10 MCPP	18779	19735	0.010	-5.1	15.0
9 MCPA	18691	19491	0.010	-4.3	15.0
7 Dichloroprop	368	432	0.010	17.4	15.0
1 2,4-D	396	488	0.010	23.3	15.0
3 2,4,5-TP (Silvex)	1852	2275	0.010	22.8	15.0
4 2,4,5-T	1609	2038	0.010	26.6	15.0
2 2,4-DE	212	265	0.010	25.1	15.0
8 Dinoseb	1268	1573	0.010	24.0	15.0

10/16/08

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J.H. 10.16.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-OCT-2008 10:38
Lab File ID: 028R0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
Analysis Type: Init. Cal. Times: 18:05 00:59
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\100908.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	MAX %D
5 Dalapon	477	X 543	0.010	13.8 | 15.0
12 DCAA	324	391	0.010	20.6 | 15.0 <-
6 Dicamba	1297	1563	0.010	20.5 | 15.0 <-
10 MCPP	18779	20230	0.010	-7.7 | 15.0
9 MCPA	18691	20023	0.010	-7.1 | 15.0
7 Dichloroprop	368	440	0.010	19.5 | 15.0 <-
1 2,4-D	396	497	0.010	25.5 | 15.0 <-
3 2,4,5-TP (Silvex)	1852	2327	0.010	25.6 | 15.0 <-
4 2,4,5-T	1609	2078	0.010	29.1 15.0 <-
2 2,4-DB	212	270	0.010	27.4 15.0 <-
8 Dinoseb	1268	1610	0.010	27.0 15.0 <-

10/16/08

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FORM 3
SOIL HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: HS1BLK1009

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
2,4-D	33.33	0.0000	37.61	113	35-145
2,4,5-TP (Silvex)	33.33	0.0000	32.61	98	45-125
2,4,5-T	33.33	0.0000	35.60	107	45-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-D	33.33	34.77	104	8	30	35-145
2,4,5-TP (Silvex)	33.33	32.16	96	1	30	45-125
2,4,5-T	33.33	33.79	101	5	30	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM 3
SOIL HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: HS1BLK1003

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
2,4-D	33.33	0.0000	31.76	95	35-145
2,4,5-TP (Silvex)	33.33	0.0000	28.34	85	45-125
2,4,5-T	33.33	0.0000	30.58	92	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
SOIL HERB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix Spike - Client Sample No.: 01SS02501 Lab Sample ID: 0810010-07

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
2,4-D	37.33	0.0000	56.46	151*	35-145
2,4,5-TP (Silvex)	37.33	0.0000	53.12	142*	45-125
2,4,5-T	37.33	0.0000	50.92	136*	45-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
2,4-D	37.33	49.28	132	14	30	35-145
2,4,5-TP (Silvex)	37.33	48.35	130*	9	30	45-125
2,4,5-T	37.33	49.04	131	4	30	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 4 out of 6 outside limits

COMMENTS: _____

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HS1BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: HS1BLK1003 Lab File ID: 012F0201

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SONC

Sulfur Cleanup (Y/N) N Date Extracted: 10/03/08

Date Analyzed (1): 10/09/08 Date Analyzed (2): 10/10/08

Time Analyzed (1): 2336 Time Analyzed (2): 0015

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HS1BLK1003LC	HS1BLK1003LCS	10/10/08	10/10/08
02	01SS01701	0810010-01	10/10/08	10/10/08
03	01SS42001	0810010-02	10/10/08	10/10/08
04	01SS01401	0810010-03	10/10/08	10/10/08
05	01SS01401 DU	0810010-04	10/10/08	10/10/08
06	01SS01501	0810010-05	10/10/08	10/10/08
07	01SS02401	0810010-06	10/10/08	10/10/08
08	01SS02501	0810010-07	10/10/08	10/10/08
09	01SS02501MS	0810010-07MS	10/10/08	10/10/08
10	01SS02501MSD	0810010-07MSD	10/10/08	10/10/08
11	01SS13701	0810010-08	10/10/08	10/10/08
12	01SS13801	0810010-09	10/10/08	10/10/08
13	01SS13901	0810010-10	10/10/08	10/10/08
14	01SS13901 DU	0810010-11	10/10/08	10/10/08
15				
16				
17				
18				
19				
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23				
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25				
26				

COMMENTS: _____

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HS1BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: HS1BLK1003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 012F0201

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/09/08 23:36

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	8.3	17	U
93-72-1-----	2,4,5-TP (Silvex)	0.83	1.7	U
93-76-5-----	2,4,5-T	0.83	1.7	U

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HS1BLK1009

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Lab Sample ID: HS1BLK1009 Lab File ID: 029F0101

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SONC

Sulfur Cleanup (Y/N) N Date Extracted: 10/09/08

Date Analyzed (1): 10/10/08 Date Analyzed (2): 10/10/08

Time Analyzed (1): 1309 Time Analyzed (2): 1343

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HS1BLK1009LC	HS1BLK1009LCS	10/10/08	10/10/08
02	HS1BLK1009LC	HS1BLK1009LCSD	10/10/08	10/10/08
03	01SBDIT01	0810033-01	10/10/08	10/10/08
04	01SBDIT02	0810033-02	10/10/08	10/10/08
05	01SBDIT03	0810033-03	10/10/08	10/10/08
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HS1BLK1009

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-012

Matrix: (soil/water) SOIL Lab Sample ID: HS1BLK1009

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 029F0101

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/09/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/10/08 13:09

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	8.3	17	U
93-72-1-----	2,4,5-TP (Silvex)	0.83	1.7	U
93-76-5-----	2,4,5-T	0.83	1.7	U

CLIENT	NCBC Gulfport CTO 0065	JOB NUMBER	00700
SUBJECT	Calc. Check SDG Gulfport-12		
BASED ON		DRAWING NUMBER	
BY	Joseph Kalinyak	CHECKED BY	
		APPROVED BY	
		DATE	11/19/08

VOC 4-methyl-2-pentanone Sample 015501501

$$\frac{4929}{514093} \times \frac{308 \times 5}{(0.239)(0.898)(5.6)} \approx 1.196 \mu\text{g}/\text{kg}$$

SVOC di-ethylphthalate Sample 015501501

$$\frac{65294}{2319808} \times \frac{40 \times 1000 \times 0.5}{(1.399)(0.898)(15)(0.5)} \approx 59.7 \mu\text{g}/\text{kg}$$

PCB Aroclor-1242 7 Sample 015B01102

Peak #1 $\left(\frac{105841}{968} \right) \times \frac{5 \times 5 \times 2}{(15)(2)(.881)} \approx 2274 \mu\text{g}/\text{kg}$

#2 $\left(\frac{200382}{385} \right) \times \text{"} \approx 1083 \mu\text{g}/\text{kg}$

#3 $\left(\frac{539716}{303} \right) \times \text{"} \approx 3706 \mu\text{g}/\text{kg}$

#4 $\left(\frac{619559}{496} \right) \times \text{"} \approx 2599 \mu\text{g}/\text{kg}$

#5 $\left(\frac{68980}{614} \right) \times \text{"} \approx 2338 \mu\text{g}/\text{kg}$

#6 $\left(\frac{347163}{\text{Not calcd}} \right) \times \text{"} \approx$

$$2274 + 1083 + 3706 + 2599 + 2338 \approx 2400 \mu\text{g}/\text{kg}$$

5

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\voa4.i\100208V4.b\1001005A.D
 Lab Smp Id: 0810010-05 Client Smp ID: 01SS01501
 Inj Date : 02-OCT-2008 18:05 MS Autotune Date: 22-JUL-2008 08:58
 Operator : ADM Inst ID: voa4.i
 Smp Info : 0810010-05;;5.60;;; a-vial
 Misc Info : tet.v10010;0;;;gm-all.sub;#5546
 Comment :
 Method : \\ELABNSH05\TARGET\chem\voa4.i\100208V4.b\VSOIL4.m
 Meth Date : 06-Oct-2008 08:37 jhughes Quant Type: ISTD
 Cal Date : 11-AUG-2008 20:00 Cal File: V4STD01.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: gm-all.sub
 Target Version: 4.04
 Processing Host: TARGET03_VM

Concentration Formula: $Amt * DF * 5 * Uf / (Ws * (Solids / 100))$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	unit correction factor
Ws	5.600	Weight of sample extracted (g)
Solids	89.800	Percent Solids

11/10/17
 10-6-08
 (81)

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
* 56 Fluorobenzene	96		13.299	13.288	(1.000)	514093	30.0000	
12 Acetone	43		6.382	6.361	(0.480)	4943	2.55812	2.543 (a)
20 Methylene chloride	84		7.356	7.335	(0.553)	27748	4.33128	4.306 (a)
\$ 44 Dibromofluoromethane	111		11.370	11.360	(0.855)	168400	33.4703	33.28
\$ 48 1,2-Dichloroethane-d4	102		12.148	12.137	(0.913)	30008	31.3053	31.12 (Q)
70 4-Methyl-2-pentanone	43		14.785	14.764	(1.112)	4929	1.20229	1.195 (a)
\$ 73 Toluene-d8	98		15.346	15.345	(0.923)	456476	30.2258	30.05
* 82 Chlorobenzene-d5	82		16.635	16.634	(1.000)	208424	30.0000	(Q)
\$ 95 Bromofluorobenzene	95		17.569	17.569	(1.056)	201416	32.2706	32.08
* 106 1,4-Dichlorobenzene-d4	152		18.593	18.582	(1.000)	184553	30.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-012
 Instrument ID: VOA4 Calibration Date: 10/02/08 Time: 1200
 Lab File ID: V4CCV01 Init. Calib. Date(s): 08/11/08 08/11/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1625 2000
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.149	0.151	100.0	126.2		2ORDR	26.2	
Benzene	1.170	1.225	50.00	52.34		AVRG	4.7	
Bromochloromethane	0.164	0.174	50.00	52.96		AVRG	5.9	
Bromodichloromethane	0.394	0.445	50.00	56.44		AVRG	12.9	
Bromoform	0.485	0.512	50.00	52.76	0.100	AVRG	5.5	
Bromomethane	0.281	0.339	50.00	60.33		AVRG	20.7	
2-Butanone	0.141	0.145	100.0	102.9		AVRG	2.9	
Carbon disulfide	1.071	1.131	50.00	52.79		AVRG	5.6	
Carbon tetrachloride	0.391	0.456	50.00	58.30		AVRG	16.6	
Chlorobenzene	1.918	1.986	50.00	51.77	0.300	AVRG	3.5	
Chloroethane	0.284	0.315	50.00	55.40		AVRG	10.8	
Chloroform	0.536	0.603	50.00	56.25		AVRG	12.5	20.0
Chloromethane	0.514	0.551	50.00	53.51	0.100	AVRG	7.0	
Cyclohexane	0.484	0.545	50.00	56.30		AVRG	12.6	
Dibromochloromethane	0.748	0.784	50.00	52.36		AVRG	4.7	
1,2-Dibromoethane	0.599	0.597	50.00	49.86		AVRG	-0.3	
1,1-Dichloroethane	0.588	0.660	50.00	56.12	0.100	AVRG	12.2	
1,2-Dichloroethane	0.331	0.383	50.00	57.73		AVRG	15.5	
1,1-Dichloroethene	0.312	0.338	50.00	54.29		AVRG	8.6	20.0
cis-1,2-Dichloroethene	0.342	0.367	50.00	53.56		AVRG	7.1	
trans-1,2-Dichloroethene	0.334	0.358	50.00	53.62		AVRG	7.2	
1,2-Dichloroethene (total)	0.338	0.362	100.0	107.2		AVRG	7.2	
1,2-Dichloropropane	0.308	0.318	50.00	51.58		AVRG	3.2	20.0
cis-1,3-Dichloropropene	0.445	0.488	50.00	54.78		AVRG	9.6	
trans-1,3-Dichloropropene	0.884	0.959	50.00	54.26		AVRG	8.5	
Ethylbenzene	3.299	3.552	50.00	53.83		AVRG	7.7	20.0
2-Hexanone	0.511	0.450	100.0	88.09		AVRG	-11.9	
Isopropylbenzene	2.792	2.937	50.00	52.59		AVRG	5.2	
Methyl acetate	0.200	0.220	50.00	54.88		AVRG	9.8	
Methyl cyclohexane	0.471	0.507	50.00	53.78		AVRG	7.6	
Methylene chloride	0.493	0.416	50.00	55.62		LINR	11.2	
4-Methyl-2-pentanone	0.239	0.224	100.0	93.76		AVRG	-6.2	
Methyl tert-butyl ether	0.415	0.443	50.00	53.38		AVRG	6.8	
Styrene	2.061	2.192	50.00	53.19		AVRG	6.4	
1,1,2,2-Tetrachloroethane	0.661	0.689	50.00	52.09	0.300	AVRG	4.2	
Tetrachloroethene	0.820	0.858	50.00	52.28		AVRG	4.6	
Toluene	1.779	1.845	50.00	51.85		AVRG	3.7	20.0

Data File: \\ELABNSH05\TARGET\chem\bna1.i\100708B1.b\1001005.D
 Report Date: 07-Oct-2008 18:53

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\bna1.i\100708B1.b\1001005.D
 Lab Smp Id: 0810010-05 Client Smp ID: 01SS01501
 Inj Date : 07-OCT-2008 14:38 MS Autotune Date: 24-JUL-2008 08:11
 Operator : ADM Inst ID: bna1.i
 Smp Info : 0810010-05;1;15;1000;1;UG/KG;03-OCT-2008
 Misc Info : tet.b10010;0;;;100308BS1;ppbna.sub;4525
 Comment :
 Method : \\ELABNSH05\TARGET\chem\bna1.i\100708B1.b\IXSOX1.m
 Meth Date : 07-Oct-2008 09:26 tmonteiro Quant Type: ISTD
 Cal Date : 28-JUL-2008 11:22 Cal File: CAP9C080.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ppbna.sub
 Target Version: 4.04
 Processing Host: TARGET02_VM

Concentration Formula: $Amt * DF * Uf * Vt * Vi / (Amt * Vi * (Solids/100))$

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL) (1000 low, 2
Amt	15.000	Mass of initial extraction
Vi	0.500	Volume injected (uL)
Solids	89.800	Percent Solids

M10 / 717

10-8-08
 (CA)

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng/ul)	FINAL (UG/KG)
* 1 1,4-Dichlorobenzene-d4		152	4.934	4.934	(1.000)	1431053	40.0000	
\$ 2 2-Fluorophenol		112	3.998	3.997	(0.810)	3211715	65.7620	4882
\$ 3 Phenol-d6		99	4.687	4.693	(0.950)	4105694	75.4357	5600
* 31 Naphthalene-d8		136	6.116	6.119	(1.000)	4148047	40.0000	
\$ 32 Nitrobenzene-d5		82	5.385	5.392	(0.880)	1754435	38.6498	2869
* 65 Acenaphthene-d10		164	8.939	8.946	(1.000)	2319808	40.0000	
\$ 70 2-Fluorobiphenyl		172	7.659	7.666	(0.857)	2773393	34.7496	2580
82 Diethylphthalate		149	10.048	10.086	(1.124)	65234	0.80394	59.68(a)
* 97 Phenanthrene-d10		188	12.533	12.538	(1.000)	3150487	40.0000	
\$ 102 2,4,6-Tribromophenol		330	10.767	10.787	(0.859)	878415	82.6386	6135
* 124 Chrysene-d12		240	20.024	20.036	(1.000)	2600922	40.0000	
\$ 127 Terphenyl-d14		244	17.175	17.172	(0.858)	2253638	40.1139	2978
132 Bis(2-ethylhexyl)phthalate		149	20.624	20.631	(1.030)	43927	0.64424	47.83(a)

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\011F1101.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\011R1101.D
 Inj Date : 13-OCT-2008 14:22
 Sample Info: 0810033-02;5x
 Misc Info : tet.p10033;15;5;8J06009;ug/Kg;;;06-Oct-2008
 Cal Date : 13-OCT-2008 14:52
 Operator : GM
 Inst ID : ecd4.i
 Dil Factor : 5.000000

*BM
10/14/08*

Method #1 : \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82R.m
 Sub List #1 : all3.sub
 Sub List #2 : all3.sub
 Col #1 Phase : ZB MR-1
 Col #2 Phase : ZB MR-2

Concentration Formula: $Amt * DF * Uf * Vt * 2 / (Amt * Vi * (Solids / 100))$

Name	X Value	Description
DF	5.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	5.000	Final Volume
Amt	15.000	Sample Amount
Vi	2.000	Injection Volume
Solids	80.100	Percent Solids

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/Kg)	Conc#2 (ug/Kg)	Target Range	Ratio
PCB-1242	6.843	5.780	1057847	2780777	2274	1988	80.00- 120.00	100.00
	5.905	4.989	200382	552818	1082	1029	27.23- 40.85	18.94
	6.318	5.302	539716	689653	3782	865.2	21.88- 32.82	51.02
	6.503	5.499	619559	1208602	2600	1622	37.41- 56.11	58.57
	6.902	5.955	689880	794319	2337	1078	45.86- 68.79	65.22
	7.027	6.062	347163	1573076	2074	1316	37.41- 56.11	56.57
	Average of Peak Amounts =				2299	1316		
TCMX	5.492	4.615	319827	527078	26.64	15.46		100.00(R)
DCB	11.968	10.497	114110	296802	19.48	15.84		100.00

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

BM
10/14/08

Instrument ID: ecd4.i Injection Date: 13-OCT-2008 11:00
 Lab File ID: 005F0501.D Init. Cal. Date(s): 26-SEP-2008 04-OCT-2008
 Analysis Type: Init. Cal. Times: 12:35 12:43
 Lab Sample ID: 1242 1000 #7406 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\101308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN	MAX	
	RRF	%D	%D	%D	%D
32 PCB-1242 (1)	968	923	0.010	-4.6	15.0
(2)	385	x 314	0.010	-18.5	15.0
(3)	303	261	0.010	-14.1	15.0
(4)	496	437	0.010	-11.8	15.0
(5)	614	534	0.010	-13.0	15.0
(6)	++++	++++	0.010	++++	15.0 <-

*Ave-12.4**

**NCBC GULFPORT
SOIL DATA
GULFPORT12**

FRACTION	CHEMICAL	01SS01401	UNITS	01SS01401 DUP	RPD	D
PEST/PCB	4,4'-DDT	ND	UG/KG	0.32 J	200.00	0.32
PEST/PCB	DELTA-BHC	0.26 J	UG/KG	0.18 J	36.36	0.08
PEST/PCB	DIELDRIN	0.55 J	UG/KG	0.7 J	24.00	0.15
PEST/PCB	ENDOSULFAN II	1.4	UG/KG	0.35 J	120.00	1.05
PEST/PCB	ENDOSULFAN SULFATE	ND	UG/KG	0.29 J	200.00	0.29
PEST/PCB	HEPTACHLOR EPOXIDE	0.56	UG/KG	0.3 J	60.47	0.26

2RL

Current RPD Quality Control Limit: 50 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

**NCBC GULFPORT
SOIL DATA
GULFPORT12**

FRACTION	CHEMICAL	01SS13901	UNITS	01SS13901 DUP	RPD	D
PEST/PCB	BETA-BHC	ND	UG/KG	0.18 J	200.00	0.18
PEST/PCB	GAMMA-BHC (LINDANE)	ND	UG/KG	0.23 J	200.00	0.23

} ARL

Current RPD Quality Control Limit: 50 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

TO: FISHER, R – PAGE 2
DATE: NOVEMBER 11, 2008

Laboratory Method/Preparation Blank Results

The following contaminants were detected in the laboratory method/preparation blanks at the following maximum concentrations:

<u>Analyte</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Lead ⁽¹⁾	1.90 µg/L	9.50 µg/L

⁽¹⁾ Affects all groundwater samples and 01RB090908.

An action level of 5X the maximum concentration was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Lead was qualified due to laboratory blank contamination.

Matrix Spike Recoveries

The matrix spike (MS) and matrix spike duplicate (MSD) percent recoveries (%Rs) for antimony were less than the respective lower quality control limits for the MS and MSD analyses of sample 01SS0701 affecting all soil samples. The positive and non-detected results reported for antimony were qualified as estimated, "J" and "UJ", respectively.

Notes

The rinsate blank was not used to establish blank action levels and was not qualified due to laboratory blank contamination.

The third continuing calibration verification analyzed on 09/30/08 at 20:48 yielded a %R for calcium greater than the upper quality control limit (110%) affecting sample 01RB091108. No data was qualified because calcium was reported as non-detected in sample 01RB091108.

The laboratory did not qualify non-detected cyanide results with a "U" qualifier on Form 1 reports. The Form 1 reports were corrected manually by the data validator.

Originally, the electronic data deliverable (EDD) from the laboratory did not include "U" qualifiers for non-detected cyanide results. A revised EDD was emailed to the data validator and a database specialist uploaded it thereby correcting the database.

The instrumental raw data for cyanide is expressed in units of mg/L. The data validator attempted to perform a sample result verification using those units and obtained a different final result for cyanide than the laboratory reported. The laboratory was contacted and a representative explained that the instrumental raw data units expressed as mg/L are incorrect and actually should be mg/kg. Sample result verifications for cyanide agree with the reported laboratory results when raw data units expressed as mg/kg are used in sample result verification calculations.

Executive Summary

Laboratory Performance: Lead was qualified due to laboratory blank contamination.

Other Factors Affecting Data Quality: Antimony was qualified due to matrix spike noncompliance.

TO: FISHER, R – PAGE 3
DATE: NOVEMBER 11, 2008

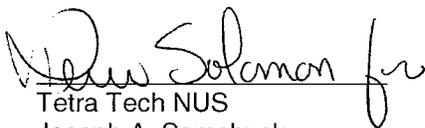
The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004 and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM and the Quality Assurance Project Plan (QAPP)."



Tetra Tech NUS
Matthew D. Kraus
Environmental Chemist



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. %RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Laboratory Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS – GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
- K = IPC Interference – included ICS %R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRDL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography, interferences, etc.)
- R = Surrogate Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $> 25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $< 30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: M

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units MG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units MG/KG
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units MG/KG
 Pct_Solids 76.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	10500		
ANTIMONY	1.1	UJ	D
ARSENIC	3.9		
BARIUM	12.8		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	222	U	
CHROMIUM	7.9		
COBALT	1.1	U	
COPPER	2.7		
IRON	5030		
LEAD	4.4		
MAGNESIUM	273		
MANGANESE	8.3		
MERCURY	0.02		
NICKEL	3.7		
POTASSIUM	222	U	
SELENIUM	0.67	U	
SILVER	0.22	U	
SODIUM	222	U	
THALLIUM	0.67	U	
VANADIUM	13.3		
ZINC	8.7		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	1770		
ANTIMONY	1.1	J	D
ARSENIC	0.61	U	
BARIUM	4.5		
BERYLLIUM	0.2	U	
CADMIUM	0.2	U	
CALCIUM	205	U	
CHROMIUM	2.2		
COBALT	1.0	U	
COPPER	1.0	U	
IRON	1010		
LEAD	3.2		
MAGNESIUM	205	U	
MANGANESE	5.2		
MERCURY	0.014	U	
NICKEL	1.0	U	
POTASSIUM	205	U	
SELENIUM	0.61	U	
SILVER	0.2	U	
SODIUM	205	U	
THALLIUM	0.61	U	
VANADIUM	2.7		
ZINC	15.9		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	2010		
ANTIMONY	1.3	UJ	D
ARSENIC	0.78	U	
BARIUM	2.0		
BERYLLIUM	0.26	U	
CADMIUM	0.26	U	
CALCIUM	261	U	
CHROMIUM	3.3		
COBALT	1.3	U	
COPPER	1.3	U	
IRON	546		
LEAD	3.2		
MAGNESIUM	261	U	
MANGANESE	1.0		
MERCURY	0.016	U	
NICKEL	1.3	U	
POTASSIUM	261	U	
SELENIUM	0.78	U	
SILVER	0.26	U	
SODIUM	261	U	
THALLIUM	0.78	U	
VANADIUM	3.5		
ZINC	1.7		

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: M

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units MG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units MG/KG
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units MG/KG
 Pct_Solids 88.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5020		
ANTIMONY	1.1	UJ	D
ARSENIC	3.5		
BARIUM	9.3		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	525		
CHROMIUM	7.7		
COBALT	1.1	U	
COPPER	3.0		
IRON	4660		
LEAD	18.4		
MAGNESIUM	211	U	
MANGANESE	15.1		
MERCURY	0.013	U	
NICKEL	1.7		
POTASSIUM	211	U	
SELENIUM	0.63	U	
SILVER	0.21	U	
SODIUM	211	U	
THALLIUM	0.63	U	
VANADIUM	9.7		
ZINC	54.8		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	4510		
ANTIMONY	1.2	UJ	D
ARSENIC	1.7		
BARIUM	11.8		
BERYLLIUM	0.24	U	
CADMIUM	0.24	U	
CALCIUM	431		
CHROMIUM	4.1		
COBALT	1.2	U	
COPPER	10.9		
IRON	2750		
LEAD	14.4		
MAGNESIUM	240	U	
MANGANESE	4.3		
MERCURY	0.052		
NICKEL	1.4		
POTASSIUM	240	U	
SELENIUM	0.72	U	
SILVER	0.24	U	
SODIUM	240	U	
THALLIUM	0.72	U	
VANADIUM	6.0		
ZINC	12.3		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	8640		
ANTIMONY	1.1	UJ	D
ARSENIC	1.3		
BARIUM	16.3		
BERYLLIUM	0.23	U	
CADMIUM	0.23	U	
CALCIUM	527		
CHROMIUM	6.8		
COBALT	1.1	U	
COPPER	16.6		
IRON	4010		
LEAD	10		
MAGNESIUM	241		
MANGANESE	21.3		
MERCURY	0.017		
NICKEL	3.1		
POTASSIUM	225	U	
SELENIUM	0.67	U	
SILVER	0.23	U	
SODIUM	225	U	
THALLIUM	0.67	U	
VANADIUM	9.6		
ZINC	15.0		

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 Pct_Solids 76.1
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.13	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.16	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 Pct_Solids 88.8
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.13	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: M

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2401
 samp_date 9/9/2008
 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	166		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	21.1		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	19300		
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	147		
LEAD	1.7	U	A
MAGNESIUM	1000	U	
MANGANESE	11.8		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	7260		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	81.9		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	38.8		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	14100		
CHROMIUM	2.3		
COBALT	5.0	U	
COPPER	5.0	U	
IRON	1170		
LEAD	1.5	U	
MAGNESIUM	2190		
MANGANESE	40.9		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	7200		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	103		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	33.9		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	62000		
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	1290		
LEAD	1.5	U	
MAGNESIUM	2050		
MANGANESE	50.9		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	6670		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: M

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	449		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	75.7		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	4740		
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	473		
LEAD	1.5	U	
MAGNESIUM	1000		
MANGANESE	7.9		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	2890		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	178		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	26.1		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	4160		
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	849		
LEAD	1.5	U	
MAGNESIUM	1000	U	
MANGANESE	6.3		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	8400		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	88.1		
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	170		
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	86800		
CHROMIUM	2.1		
COBALT	5.0	U	
COPPER	5.0	U	
IRON	28800		
LEAD	1.5	U	
MAGNESIUM	9000		
MANGANESE	475		
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	3050		
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	18300		
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: M

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	50.0	U	
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	5.0	U	
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	1000	U	
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	30.0	U	
LEAD	1.5	U	
MAGNESIUM	1000	U	
MANGANESE	3.0	U	
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	1000	U	
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

Parameter	Result	Val Qual	Qual Code
ALUMINUM	50.0	U	
ANTIMONY	5.0	U	
ARSENIC	3.0	U	
BARIUM	5.0	U	
BERYLLIUM	1.0	U	
CADMIUM	1.0	U	
CALCIUM	1000	U	
CHROMIUM	2.0	U	
COBALT	5.0	U	
COPPER	5.0	U	
IRON	86.4		
LEAD	1.5	U	
MAGNESIUM	1000	U	
MANGANESE	3.0	U	
MERCURY	0.08	U	
NICKEL	5.0	U	
POTASSIUM	1000	U	
SELENIUM	3.0	U	
SILVER	1.0	U	
SODIUM	1000	U	
THALLIUM	3.0	U	
VANADIUM	5.0	U	
ZINC	5.0	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW2201
samp_date 9/9/2008
lab_id 0809091-03
qc_type NM
Pct_Solids
DUP_OF:

nsample 01GW2301
samp_date 9/9/2008
lab_id 0809091-02
qc_type NM
Pct_Solids
DUP_OF:

nsample 01GW2401
samp_date 9/9/2008
lab_id 0809091-05
qc_type NM
Pct_Solids
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: MISC

nsample 01RB090908
samp_date 9/9/2008
lab_id 0809091-08
qc_type NM
Pct_Solids
DUP_OF:

nsample 01RB091108
samp_date 9/11/2008
lab_id 0809127-02
qc_type NM
Pct_Solids
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	UG/L	5.0	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2201

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Lab Sample ID: 0809091-03

Level (low/med): LOW Date Received: 09/10/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	166	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	21.1	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	19300			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	147			P
7439-92-1	Lead	1.7	J		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	11.8	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	7260			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2301

Lab Name: Empirical LaboratoriesContract: TetraTech NUS, I.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Matrix (soil/water): WATERLab Sample ID: 0809091-02Level (low/med): LOWDate Received: 09/10/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	81.9	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	38.8	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	14100			P
7440-47-3	Chromium	2.3	J		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	M		AS
7439-89-6	Iron	1170			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2190	J		P
7439-96-5	Manganese	40.9			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	7200			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2401

Lab Name: Empirical Laboratories

Contract: TetraTech NUS, I

Lab Code: _____

Case No.: _____

SAS No.: _____

SDG No.: Gulfport-011

Matrix (soil/water): WATER

Lab Sample ID: 0809091-05

Level (low/med): LOW

Date Received: 09/10/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	103	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	33.9	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	62000			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	1290			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2050	J		P
7439-96-5	Manganese	50.9			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6670			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____

Clarity Before: _____

Texture: _____

Color After: _____

Clarity After: _____

Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2501

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Lab Sample ID: 0809091-04

Level (low/med): LOW Date Received: 09/10/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	449			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	75.7	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4740	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	473			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	J		P
7439-96-5	Manganese	7.9	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	2890	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2601

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Lab Sample ID: 0809091-07

Level (low/med): LOW Date Received: 09/10/08

TS Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	178	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	26.1	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4160	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	849			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	6.3	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	8400			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): WATER Lab Sample ID: 0809091-06
 Level (low/med): LOW Date Received: 09/10/08
 % Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	88.1	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	170	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	86800			P
7440-47-3	Chromium	2.1	J		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	J		AS
7439-89-6	Iron	28800			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	9000			P
7439-96-5	Manganese	475			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	3050	J		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	18300			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP
-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01RB090908

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Lab Sample ID: 0809091-08

Level (low/med): LOW Date Received: 09/10/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	50.0	U		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	5.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	1000	U		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	30.0	U		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	3.0	U		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	1000	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01RB091108

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Lab Sample ID: 0809127-02

Level (low/med): LOW Date Received: 09/12/08

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	50.0	U		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	5.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	1000	U		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
57-12-5	Cyanide	5.00	U		AS
7439-89-6	Iron	86.4	J		P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	3.0	U		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	1000	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS0701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): SOLID Lab Sample ID: 0809127-03
 Level (low/med): LOW Date Received: 09/12/08
 % Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10500			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	3.9			P
7440-39-3	Barium	12.8	J		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	222	U		P
7440-47-3	Chromium	7.9			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	2.7	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	5030			P
7439-92-1	Lead	4.4			P
7439-95-4	Magnesium	273	J		P
7439-96-5	Manganese	8.3			P
7439-97-6	Mercury	0.020	J		AV
7440-02-0	Nickel	3.7	J		P
7440-09-7	Potassium	222	U		P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	222	U		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	13.3			P
7440-66-6	Zinc	8.7			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS0801

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): SOLID Lab Sample ID: 0809127-04
 Level (low/med): LOW Date Received: 09/12/08
 % Solids: 93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1770			P
7440-36-0	Antimony	1.1	J	N	P
7440-38-2	Arsenic	0.61	U		P
7440-39-3	Barium	4.5	J		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.20	U		P
7440-70-2	Calcium	205	U		P
7440-47-3	Chromium	2.2			P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.0	U		P
57-12-5	Cyanide	0.13	U		AS
7439-89-6	Iron	1010			P
7439-92-1	Lead	3.2			P
7439-95-4	Magnesium	205	U		P
7439-96-5	Manganese	5.2			P
7439-97-6	Mercury	0.014	U		AV
7440-02-0	Nickel	1.0	U		P
7440-09-7	Potassium	205	U		P
7782-49-2	Selenium	0.61	U		P
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	205	U		P
7440-28-0	Thallium	0.61	U		P
7440-62-2	Vanadium	2.7	J		P
7440-66-6	Zinc	15.9			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: Thallium MDL increased due to negative bias.

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS0901

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): SOLID Lab Sample ID: 0809127-05

Level (low/med): LOW Date Received: 09/12/08

% Solids: 76.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2010			P
7440-36-0	Antimony	1.3	U	N	P
7440-38-2	Arsenic	0.78	U		P
7440-39-3	Barium	2.0	J		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.26	U		P
7440-70-2	Calcium	261	U		P
7440-47-3	Chromium	3.3			P
7440-48-4	Cobalt	1.3	U		P
7440-50-8	Copper	1.3	U		P
57-12-5	Cyanide	0.16	U		AS
7439-89-6	Iron	546			P
7439-92-1	Lead	3.2			P
7439-95-4	Magnesium	261	U		P
7439-96-5	Manganese	1.0	J		P
7439-97-6	Mercury	0.016	U		AV
7440-02-0	Nickel	1.3	U		P
7440-09-7	Potassium	261	U		P
7782-49-2	Selenium	0.78	U		P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	261	U		P
7440-28-0	Thallium	0.78	U		P
7440-62-2	Vanadium	3.5	J		P
7440-66-6	Zinc	1.7	J		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS1001

Lab Name: Empirical LaboratoriesContract: TetraTech NUS, I

Lab Code: _____

Case No.: _____

SAS No.: _____

SDG No.: Gulfport-011Matrix (soil/water): SOLIDLab Sample ID: 0809127-06Level (low/med): LOWDate Received: 09/12/08% Solids: 93.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5020			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	3.5			P
7440-39-3	Barium	9.3	J		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	525	J		P
7440-47-3	Chromium	7.7			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	3.0	J		P
57-12-5	Cyanide	0.13	U		AS
7439-89-6	Iron	4660			P
7439-92-1	Lead	18.4			P
7439-95-4	Magnesium	211	U		P
7439-96-5	Manganese	15.1			P
7439-97-6	Mercury	0.013	U		AV
7440-02-0	Nickel	1.7	J		P
7440-09-7	Potassium	211	U		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	211	U		P
7440-28-0	Thallium	0.63	U		P
7440-62-2	Vanadium	9.7	J		P
7440-66-6	Zinc	54.8			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS1101

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): SOLID Lab Sample ID: 0809127-07
 Level (low/med): LOW Date Received: 09/12/08
 Solids: 81.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4510			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.7	J		P
7440-39-3	Barium	11.8	J		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	431	J		P
7440-47-3	Chromium	4.1			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	10.9			P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	2750			P
7439-92-1	Lead	14.4			P
7439-95-4	Magnesium	240	U		P
7439-96-5	Manganese	4.3			P
7439-97-6	Mercury	0.052			AV
7440-02-0	Nickel	1.4	J		P
7440-09-7	Potassium	240	U		P
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	240	U		P
7440-28-0	Thallium	0.72	U		P
7440-62-2	Vanadium	6.0	J		P
7440-66-6	Zinc	12.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS1201

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): SOLID Lab Sample ID: 0809127-08
 Level (low/med): LOW Date Received: 09/12/08
 Solids: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8640			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.3	J		P
7440-39-3	Barium	16.3	J		P
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	527	J		P
7440-47-3	Chromium	6.8			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	16.6			P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	4010			P
7439-92-1	Lead	10.0			P
7439-95-4	Magnesium	241	J		P
7439-96-5	Manganese	21.3			P
7439-97-6	Mercury	0.017	J		AV
7440-02-0	Nickel	3.1	J		P
7440-09-7	Potassium	225	U		P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	225	U		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	9.6	J		P
7440-66-6	Zinc	15.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: Thallium MDL increased due to negative bias.

APPENDIX C

SUPPORT DOCUMENTATION

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	UG/KG	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/29/2008	5	13	18
HERB	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HG	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/17/2008	5	1	6
HG	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
M	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/29/2008	9/30/2008	18	1	19
M	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/15/2008	9/30/2008	6	15	21
M	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OS	%	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01SS0701	0809127-03	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	%	01SS1101	0809127-07	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS1001	0809127-06	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS0901	0809127-05	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS0801	0809127-04	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	%	01SS1201	0809127-08	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01RB091108	0809127-02	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
OS	UG/KG	01SS0701	0809127-03	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	UG/KG	01SS0801	0809127-04	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42068

SHIP TO: 227 French Landing Drive, Suite 550 + Nashville, TN 37228 + 615-345-1115 + (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:																																																				
Name <u>Bob Fisher</u>		Name <u>Per Sow</u>		 <table border="1"> <tr><td>TCL VOC</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TCL SVOC/PAH/PCB</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>HAZ</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>TRAC METALS</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>MSX CN</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> 				TCL VOC										TCL SVOC/PAH/PCB										HAZ										TRAC METALS										MSX CN										VOA: Headspace <input checked="" type="checkbox"/> NA		
TCL VOC																																																												
TCL SVOC/PAH/PCB																																																												
HAZ																																																												
TRAC METALS																																																												
MSX CN																																																												
Company <u>T+N US</u>		Company _____		Field Filtered <input checked="" type="checkbox"/> NA																																																								
Address <u>3360 Cap. Cir. NE #</u>		Address _____		Correct Containers <input checked="" type="checkbox"/> NA																																																								
City <u>Tallahassee</u>		City _____		Discrepancies <input checked="" type="checkbox"/> NA																																																								
State, Zip <u>FL 32317</u>		State, Zip _____		Cus. Seals Intact <input checked="" type="checkbox"/> NA																																																								
Phone <u>850 385 9899</u>		Phone _____		Containers Intact <input checked="" type="checkbox"/> NA																																																								
Fax _____		Fax _____		Airbill # <u>4619, 8041, 8052, 8063, 8074</u>																																																								
E-mail _____		E-mail _____		CAR # _____																																																								
Project No./Name: <u>GTO 65 Gulfport Site</u>		Sampler's (Signature): <u>[Signature]</u>																																																										

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	PK	FL	HAZ	TRAC	MSX	CN	Comments	No. of Bottles	Lab Use Only Containers/Pres
0809091-01	9-9-08 0745	OLT8090908	QA	2						0809091-01	2	25-49
-02	9-9-08 0805	OLGW 2304 ✓	GW	3	5	1	1			-02	10	5H, 35, 49, 70, 100, 120, 150
-03	0830	OLGW 220L ✓	GW	3	5	1	1			-03	10	
-04	9/9/08	OLGW 2201MS	QA	3	5	1	1			-04	10	
-05		OLGW 2201MSD	QA	3	5	1	1			-05	10	
-06	9-9-08 1030	OLGW 2501 ✓	GW	3	5	1	1			-06	10	
-07	9-9-08 1025	OLGW 240L ✓	GW	3	5	1	1			-07	10	
-08	9-9-08 1245	OLGW 2701 ✓	GW	3	5	1	1			-08	10	
-09	9-9-08 1340	OLGW 2601 ✓	GW	3	5	1	1			-09	10	
-10	1500	OLRB090908 ✓	QA	3	5	1	1			-10	10	

Sample Kit Prep'd by: (Signature)	Date/Time <u>9-10-08</u>	Received By: (Signature) <u>[Signature]</u>	REMARKS:	Details:	
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>9-10-08/1630</u>	Received By: (Signature)		Page _____ of _____	
Relinquished by: (Signature)	Date/Time	Received By: (Signature)		Cooler No. _____ of _____	
Received for Laboratory by: (Signature) <u>[Signature]</u>	Date/Time <u>9-10-08</u>	Temperature <u>1.8°C</u>		Date Shipped _____	
				Shipped By _____	
				Turnaround _____	

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42075

SHIP TO: 227 French Landing Drive, Suite 550 + Nashville, TN 37228 + 615-345-1115 + (fax) 615-846-5426

Send Results to:	Send Invoice to:	Analysis Requirements:	Lab Use Only:
Name: <u>Bob Fisher</u>	Name: <u>PER WR</u>	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TCL VOC</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">P.L. SW/PEST/RES/HERB</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TALmetals/CN</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TALmetals</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CN</div> </div>	VOA Headspace <input checked="" type="checkbox"/> NA
Company: <u>Term Tech</u>	Company: <u>PER WR</u>		Field Filtered <input checked="" type="checkbox"/> NA
Address: <u>3360 Capital Circle NW</u>	Address: _____		Correct Containers <input checked="" type="checkbox"/> NA
City: <u>Tallahassee</u>	City: _____		Discrepancies <input checked="" type="checkbox"/> NA
State, Zip: <u>FL 32308</u>	State, Zip: _____		Cust. Seals Intact <input checked="" type="checkbox"/> NA
Phone: <u>905 385 9891</u>	Phone: _____		Containers Intact <input checked="" type="checkbox"/> NA
Fax: _____	Fax: _____	Airbill #: <u>4582</u>	
E-mail: _____	E-mail: _____	CAR #: _____	
Project No./Name: _____	Sampler's (Signature): <u>[Signature]</u>		

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	TCL VOC	P.L. SW/PEST/RES/HERB	TALmetals/CN	TALmetals	CN	Comments	No. of Bottles	Lab Use Only Containers/Pres
0809127-01	0720 ⁹⁻¹¹⁻⁰⁸	OLTBO91108 ✓	QA	2						2	25-15
-02	0720 ⁹⁻¹¹⁻⁰⁸	OLRBO91108 ✓	QA	3	5	1	1	1		10	30-10 10-10 10-10
-03	0820 ⁹⁻¹¹⁻⁰⁸	OLSS070L ✓	SO	3	1	1	1	1		5	3-0 10-10
-03	0826 ⁹⁻¹¹⁻⁰⁸	OLSS070LMS ✓	SO	3	1	1	1	1		5	
-03	0820 ⁹⁻¹¹⁻⁰⁸	OLSS070LMSD ✓	SO	3	1	1	1	1		5	
-04	0900 ⁹⁻¹¹⁻⁰⁸	OLSS080L ✓	SO	3	1	1	1	1		5	
-05	0920 ⁹⁻¹¹⁻⁰⁸	OLSS090L ✓	SO	3	1	1	1	1		5	
-06	0940 ⁹⁻¹¹⁻⁰⁸	OLSS100L ✓	SO	3	1	1	1	1		5	
-07	1000 ⁹⁻¹¹⁻⁰⁸	OLSS110L ✓	SO	3	1	1	1	1		5	
-08	1025 ⁹⁻¹¹⁻⁰⁸	OLSS120L ✓	SO	3	1	1	1	1		5	

Sample Kit Prep'd by: (Signature)	Date/Time	Received By: (Signature)	REMARKS:
			<p style="font-size: 2em; font-weight: bold;">FEDEX 8640 4207 4582</p>
Relinquished by: (Signature)	Date/Time	Received By: (Signature)	
<u>[Signature]</u>	<u>9-11-08 1700</u>		
Relinquished by: (Signature)	Date/Time	Received By: (Signature)	
Received for Laboratory by: (Signature)	Date/Time	Temperature	
<u>[Signature]</u>	<u>9-12-08 0900</u>	<u>27°C</u>	

Details:

Page _____ of _____

Cooler No. _____ of _____

Date Shipped _____

Shipped By _____

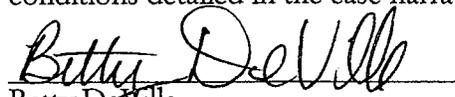
Turnaround _____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

**INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 011
Work Order # 0809091, 0809127
September, 2008**

Empirical Laboratories ID	Client ID
0809091-02	01GW2301
0809091-03	01GW2201
0809091-04	01GW2501
0809091-05	01GW2401
0809091-06	01GW2701
0809091-07	01GW2601
0809091-08	01RB090908
0809127-02	01RB091108
0809127-03	01SS0701
0809127-04	01SS0801
0809127-05	01SS0901
0809127-06	01SS1001
0809127-07	01SS1101
0809127-08	01SS1201

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Betty DeVille
Inorganic Lab Manager

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

I. HOLDING TIMES

- A. **Sample Preparation:** All holding times were met.
- B. **Sample Analysis:** All holding times were met.

II. METHODS

US EPA SW846 Method 3050B was used to digest and method 6010B was used for analysis of ICAP metals. Method 7471A was used to digest and analyze mercury and method 9012A was used to distill and analyze cyanide. Note: The "U" flag indicates that the sample concentration is reported down to the laboratory MDL. The "J" flag indicates that the analyte result is between the

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 011
Work Order # 0809091, 0809127
September, 2008

laboratory reporting limit and the laboratory MDL. All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

III. PREPARATION

All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

IV. ANALYSIS

- A. Calibration:** All calibration criteria were met with the following exception: The initial calibration verification for mercury on the second mercury analysis was out of the specification limits of 90 to 110% for mercury at 116.0%.
- The third CCV in the fourth ICAP analysis was out of the specification limits of 90 to 110% for calcium at 115%. The sample impacted by this CCV had a concentration less than the MDL for calcium. There is no impact to the sample data.
- The low level distilled check standard for cyanide was out of the specification limits of 85 to 115% at 80.5% on the first cyanide analysis and at 53.4% on the second cyanide analysis.
- B. Blanks:** All blank criteria were met with the following exceptions: The third CCB in the first ICAP analysis was out of the specification limits for lead at 1.9 ug/L. All impacted samples had concentrations less than the MDL for lead or the sample was reanalyzed. There is no impact to the sample data.
- C. Spikes:** All matrix spikes quality control criteria were met with the following exceptions: The matrix spike and the matrix spike duplicate were out of the specification limits for antimony at 39.7 and 40.2% on sample 01SS0701. The post digestion spike recovery was at 954%. **All associated data are flagged with an "N" on the final report.**
- D. Duplicates:** All duplicate quality control criteria were met.
- E. Samples:** All sample analysis proceeded normally with the following exception: The MDL was increased due to a negative bias on some samples for thallium. The samples impacted are noted in the comment section of the form one.
- F. Laboratory Control Samples:** All percent recovery quality control criteria were met.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0809091 Number of Coolers: 1 of 5
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 9-10-08 9:00 Date cooler(s) opened: 9-10-08
Opened By (print): E. J. Overlay (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 8041

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 9-9-08 Seal Initials: MAO

- 3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
- 4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
- 5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
- 6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
- 7. Was project identifiable from custody papers? Yes No N/A
- 8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 1.8°C

Dates samples were logged-in: 9/10/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): ws

- 10. Were all bottle lids intact and sealed tightly? Yes No N/A
- 11. Did all bottles arrive unbroken? Yes No N/A
- 12. Was all required bottle label information complete? Yes No N/A
- 13. Did all bottle labels agree with custody papers? Yes No N/A
- 14. Were correct containers used for the analyses indicated? Yes No N/A
- 15. Were preservative levels correct in all applicable sample containers? Yes No N/A
- 16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
- 17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0809091 Number of Coolers: 2 of 5
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 9-10-08 9:00 Date cooler(s) opened: 9-10-08
Opened By (print): E. J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 8052

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 9-9-08 Seal Initials: MAO
3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A
- Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.2°C

Dates samples were logged-in: 9/10/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 6809091 Number of Coolers: 3 of 5
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 9-10-08 9:00 Date cooler(s) opened: 9-10-08
Opened By (print): E. J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 8074

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 9-9-08 Seal Initials: MAO

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

Dates samples were logged-in: 9/10/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was sufficient amount of sample sent for the analyses required? Yes No N/A

17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0809091 Number of Coolers: 4 of 5
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 9-10-08 9:00 Date cooler(s) opened: 9-10-08
Opened By (print): E. J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 8063

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 9-9-08 Seal Initials: MAO

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 1.9°C

Dates samples were logged-in: 9/10/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was sufficient amount of sample sent for the analyses required? Yes No N/A

17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0809091 Number of Coolers: 5 of 5
Client: Tetra Tech NUS Project: Gulfport
Date/Time Received: 9-10-08 9:00 Date cooler(s) opened: 9-10-08
Opened By (print): E. J. Overlay (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 4619

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 9-9-08 Seal Initials: MAO

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.2°C

Dates samples were logged-in: 9/10/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was sufficient amount of sample sent for the analyses required? Yes No N/A

17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0809127 Number of Coolers: 1 of 1
Client: Tetra Tech WWS Project: Gulfport CTO-065
Date/Time Received: 9/12/08 09:00 Date cooler(s) opened: 9/12/08
Opened By (print): Will Schwab (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4582

2. Were custody seals on outside of cooler(s)? Yes No
How many: 2 Seal date: 9/11/08 Seal Initials: ?

- 3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
- 4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
- 5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
- 6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
- 7. Was project identifiable from custody papers? Yes No N/A
- 8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 2.70C

Dates samples were logged-in: 9/12/08

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

- 10. Were all bottle lids intact and sealed tightly? Yes No N/A
- 11. Did all bottles arrive unbroken? Yes No N/A
- 12. Was all required bottle label information complete? Yes No N/A
- 13. Did all bottle labels agree with custody papers? Yes No N/A
- 14. Were correct containers used for the analyses indicated? Yes No N/A
- 15. Were preservative levels correct in all applicable sample containers? Yes No N/A
- 16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
- 17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

Sample Delivery Group Assignment Form - Empirical Laboratories

Matrix: GW/SOIL/TB

Client: TetraTech NUS, Inc.

QC LEVEL: EDD/FDP

Project Name: Gulfport Site 1 CTO065

Analytical Due: 10/07/08

Project Manager: Bob Fisher

Report Due: 10/10/08 28 day TAT

SDG #: Gulfport-011

Sample Type/count	Date Sampled	Date Received	Work Order	Client ID	VOA	SVOC	Pest/PCB	Herb	TAL Metals	Cyanide
					8260B	8270C	8081/8082	8151A	6010B/7470A	9012
TB	09/09/08	09/10/08	0809091-01	01GWTB090908	X					
1	09/09/08	09/10/08	0809091-02	01GW2301	X	X	X	X	X	X
MS/MSD	09/09/08	09/10/08	0809091-03	01GW2201	X	X	X	X	X	X
3	09/09/08	09/10/08	0809091-04	01GW2501	X	X	X	X	X	X
4	09/09/08	09/10/08	0809091-05	01GW2401	X	X	X	X	X	X
5	09/09/08	09/10/08	0809091-06	01GW2701	X	X	X	X	X	X
6	09/09/08	09/10/08	0809091-07	01GW2601	X	X	X	X	X	X
7	09/09/08	09/10/08	0809091-08	01RB090908	X	X	X	X	X	X
TB	09/11/08	09/12/08	0809127-01	01TB091108	X					
RB	09/11/08	09/12/08	0809127-02	01RB091108	X	X	X	X	X	X
8	09/11/08	09/12/08	0809127-03	01SS0701	X	X	X	X	X	X
9	09/11/08	09/12/08	0809127-04	01SS0801	X	X	X	X	X	X
10	09/11/08	09/12/08	0809127-05	01SS0901	X	X	X	X	X	X
11	09/11/08	09/12/08	0809127-06	01SS1001	X	X	X	X	X	X
12	09/11/08	09/12/08	0809127-07	01SS1101	X	X	X	X	X	X
13	09/11/08	09/12/08	0809127-08	01SS1201	X	X	X	X	X	X

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-01

OW No.: ILM04.1

EPA Sample No.	Lab Sample ID.
01GW2301	0809091-02
01GW2201	0809091-03
01GW2201S	0809091-03S
01GW2201SD	0809091-03SD
01GW2501	0809091-04
01GW2401	0809091-05
01GW2701	0809091-06
01GW2601	0809091-07
01RB090908	0809091-08
01RB091108	0809127-02
01RB091108S	0809127-02S
01RB091108SD	0809127-02SD
01SS0701	0809127-03
01SS0701S	0809127-03S
01SS0701SD	0809127-03SD
01SS0801	0809127-04
01SS0901	0809127-05
01SS1001	0809127-06
01SS1101	0809127-07
01SS1201	0809127-08

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: D. Rick Davis

Date: _____ Title: Vice-President

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2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Initial Calibration Source: Accustandard, HighPurity, FisherContinuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	20000.0	20585.69	102.9	10000.0	10199.72	102.0	10359.48	103.6	P
Antimony	2000.0	1907.59	95.4	1000.0	978.54	97.9	978.70	97.9	P
Arsenic	2000.0	2052.84	102.6	1000.0	1010.39	101.0	1010.60	101.1	P
Barium	2000.0	1997.93	99.9	1000.0	989.60	99.0	995.22	99.5	P
Beryllium	2000.0	2005.88	100.3	1000.0	1037.33	103.7	1042.01	104.2	P
Cadmium	2000.0	2074.54	103.7	1000.0	1022.81	102.3	1026.41	102.6	P
Calcium	2000.0	2058.28	102.9	1000.0	1080.69	108.1	1073.48	107.3	P
Chromium	2000.0	1980.94	99.0	1000.0	992.75	99.3	998.45	99.8	P
Cobalt	2000.0	1972.33	98.6	1000.0	990.55	99.1	999.04	99.9	P
Copper	2000.0	2049.70	102.5	1000.0	1011.29	101.1	1017.24	101.7	P
Cyanide	100.0	109.80	109.8	100.0	96.64	96.6	97.32	97.3	AS
Iron	20000.0	20284.73	101.4	10000.0	10071.88	100.7	10118.21	101.2	P
Lead	2000.0	2002.19	100.1	1000.0	1003.07	100.3	1008.50	100.8	P
Magnesium	2000.0	1905.28	95.3	1000.0	943.18	94.3	949.69	95.0	P
Manganese	2000.0	2049.88	102.5	1000.0	1020.30	102.0	1024.66	102.5	P
Mercury	4.0	4.31	107.8	4.0	4.16	104.0	4.22	105.5	AV
Nickel	2000.0	2030.88	101.5	1000.0	1000.67	100.1	1007.38	100.7	P
Potassium	20000.0	20798.48	104.0	10000.0	10153.85	101.5	10252.91	102.5	P
Selenium	2000.0	2063.26	103.2	1000.0	1015.89	101.6	1008.80	100.9	P
Silver	1000.0	946.89	94.7	500.0	472.39	94.5	477.93	95.6	P
Sodium	22000.0	22053.42	100.2	11000.0	11073.54	100.7	11369.52	103.4	P
Thallium	2000.0	1937.97	96.9	1000.0	1001.18	100.1	1006.92	100.7	P
Vanadium	2000.0	1991.70	99.6	1000.0	989.42	98.9	995.53	99.6	P
Zinc	2000.0	2019.46	101.0	1000.0	1016.89	101.7	1020.78	102.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Initial Calibration Source: Accustandard, HighPurity, Fisher
 Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				10000.0	10337.40	103.4			P
Antimony				1000.0	971.80	97.2			P
Arsenic				1000.0	1004.26	100.4			P
Barium				1000.0	988.67	98.9			P
Beryllium				1000.0	1051.19	105.1			P
Cadmium				1000.0	1019.07	101.9			P
Calcium				1000.0	1099.65	110.0			P
Chromium				1000.0	991.20	99.1			P
Cobalt				1000.0	998.08	99.8			P
Copper				1000.0	1010.99	101.1			P
Iron				10000.0	10035.86	100.4			P
Lead				1000.0	1002.27	100.2			P
Magnesium				1000.0	939.47	93.9			P
Manganese				1000.0	1017.56	101.8			P
Mercury				2.0	2.04	102.0			AV
Nickel				1000.0	1004.03	100.4			P
Potassium				10000.0	10412.05	104.1			P
Selenium				1000.0	1005.01	100.5			P
Silver				500.0	481.16	96.2			P
Sodium				11000.0	11365.65	103.3			P
Thallium				1000.0	1001.02	100.1			P
Vanadium				1000.0	991.10	99.1			P
Zinc				1000.0	1016.03	101.6			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10034.03	100.3	10000.0	9983.13	99.8	10051.64	100.5	P
Antimony	1000.0	945.05	94.5	1000.0	979.24	97.9	987.64	98.8	P
Arsenic	1000.0	1033.24	103.3	1000.0	1031.16	103.1	1034.40	103.4	P
Barium	1000.0	978.56	97.9	1000.0	974.17	97.4	979.67	98.0	P
Beryllium	1000.0	1041.17	104.1	1000.0	1046.75	104.7	1025.64	102.6	P
Cadmium	1000.0	1056.21	105.6	1000.0	1046.72	104.7	1033.78	103.4	P
Calcium	1000.0	1018.06	101.8	1000.0	990.55	99.1	940.35	94.0	P
Chromium	1000.0	1001.34	100.1	1000.0	1015.54	101.6	1006.93	100.7	P
Cobalt	1000.0	987.30	98.7	1000.0	984.89	98.5	972.86	97.3	P
Copper	1000.0	993.43	99.3	1000.0	998.39	99.8	1004.12	100.4	P
Cyanide	100.0	107.10	107.1	100.0	109.70	109.7			AS
Iron	10000.0	10337.66	103.4	10000.0	10201.53	102.0	10090.75	100.9	P
Lead	1000.0	996.65	99.7	1000.0	1009.48	100.9	1003.81	100.4	P
Magnesium	1000.0	949.51	95.0	1000.0	949.36	94.9	946.14	94.6	P
Manganese	1000.0	1032.80	103.3	1000.0	1037.54	103.8	1026.44	102.6	P
Mercury	2.0	2.32	116.0	4.0	3.80	95.0	3.84	96.0	AV
Nickel	1000.0	1018.11	101.8	1000.0	1020.33	102.0	1012.22	101.2	P
Potassium	10000.0	9987.33	99.9	10000.0	9946.05	99.5	10063.77	100.6	P
Selenium	1000.0	1012.88	101.3	1000.0	1000.75	100.1	996.65	99.7	P
Silver	500.0	484.79	97.0	500.0	476.21	95.2	472.63	94.5	P
Sodium	11000.0	11283.20	102.6	11000.0	11041.32	100.4	11056.06	100.5	P
Thallium	1000.0	968.23	96.8	1000.0	1019.98	102.0	1017.96	101.8	P
Vanadium	1000.0	997.03	99.7	1000.0	1001.60	100.2	996.29	99.6	P
Zinc	1000.0	1041.04	104.1	1000.0	1040.37	104.0	1018.62	101.9	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				10000.0	10028.51	100.3			P
Antimony				1000.0	978.42	97.8			P
Arsenic				1000.0	1031.80	103.2			P
Barium				1000.0	976.17	97.6			P
Beryllium				1000.0	1039.97	104.0			P
Cadmium				1000.0	1032.86	103.3			P
Calcium				1000.0	951.14	95.1			P
Chromium				1000.0	1006.22	100.6			P
Cobalt				1000.0	980.14	98.0			P
Copper				1000.0	1002.16	100.2			P
Iron				10000.0	10109.46	101.1			P
Lead				1000.0	1003.46	100.3			P
Magnesium				1000.0	947.62	94.8			P
Manganese				1000.0	1026.82	102.7			P
Nickel				1000.0	1010.04	101.0			P
Potassium				10000.0	9952.59	99.5			P
Selenium				1000.0	1001.09	100.1			P
Silver				500.0	474.53	94.9			P
Sodium				11000.0	11067.84	100.6			P
Thallium				1000.0	1009.36	100.9			P
Vanadium				1000.0	996.42	99.6			P
Zinc				1000.0	1024.77	102.5			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Lead	1000.0	1003.65	100.4	1000.0	1011.04	101.1	1014.01	101.4	P
Mercury	4.0	3.99	99.8	4.0	3.99	99.8	4.29	107.2	AV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Lead				1000.0	1005.52	100.6			P
Mercury				2.0	1.95	97.5	1.96	98.0	AV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Mercury				2.0	1.96	98.0			AV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10291.43	102.9	10000.0	10180.88	101.8	10397.22	104.0	P
Antimony	1000.0	970.09	97.0	1000.0	987.57	98.8	963.92	96.4	P
Arsenic	1000.0	1034.79	103.5	1000.0	1026.48	102.6	1015.70	101.6	P
Barium	1000.0	996.42	99.6	1000.0	988.62	98.9	1000.61	100.1	P
Beryllium	1000.0	1030.47	103.0	1000.0	1035.94	103.6	1041.01	104.1	P
Cadmium	1000.0	1038.86	103.9	1000.0	1019.84	102.0	1016.68	101.7	P
Calcium	1000.0	1020.11	102.0	1000.0	1019.40	101.9	1053.83	105.4	P
Chromium	1000.0	991.84	99.2	1000.0	998.67	99.9	971.78	97.2	P
Cobalt	1000.0	985.42	98.5	1000.0	972.78	97.3	1016.11	101.6	P
Copper	1000.0	1023.41	102.3	1000.0	1019.17	101.9	1024.75	102.5	P
Iron	10000.0	10237.84	102.4	10000.0	10156.42	101.6	10074.72	100.7	P
Lead	1000.0	994.06	99.4	1000.0	996.83	99.7	998.88	99.9	P
Magnesium	1000.0	954.15	95.4	1000.0	950.44	95.0	932.88	93.3	P
Manganese	1000.0	1030.28	103.0	1000.0	1030.13	103.0	1008.63	100.9	P
Nickel	1000.0	1008.17	100.8	1000.0	996.32	99.6	995.27	99.5	P
Potassium	10000.0	10167.03	101.7	10000.0	9983.80	99.8	10345.91	103.5	P
Selenium	1000.0	1026.53	102.7	1000.0	1003.39	100.3	1034.68	103.5	P
Silver	500.0	472.96	94.6	500.0	466.15	93.2	478.17	95.6	P
Sodium	11000.0	11291.59	102.7	11000.0	11069.37	100.6	11602.66	105.5	P
Thallium	1000.0	955.76	95.6	1000.0	993.24	99.3	965.82	96.6	P
Vanadium	1000.0	996.63	99.7	1000.0	991.21	99.1	987.68	98.8	P
Zinc	1000.0	1008.94	100.9	1000.0	998.25	99.8	1013.61	101.4	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				10000.0	10399.67	104.0	10439.29	104.4	P
Antimony				1000.0	951.40	95.1	964.14	96.4	P
Arsenic				1000.0	1004.35	100.4	1016.66	101.7	P
Barium				1000.0	991.90	99.2	999.41	99.9	P
Beryllium				1000.0	1101.63	110.2	1062.94	106.3	P
Cadmium				1000.0	1016.11	101.6	1025.73	102.6	P
Calcium				1000.0	1150.14	115.0	1075.74	107.6	P
Chromium				1000.0	984.40	98.4	984.20	98.4	P
Cobalt				1000.0	1049.79	105.0	1022.48	102.2	P
Copper				1000.0	1022.93	102.3	1027.21	102.7	P
Iron				10000.0	10271.85	102.7	10227.65	102.3	P
Lead				1000.0	1004.44	100.4	1001.82	100.2	P
Magnesium				1000.0	934.14	93.4	943.75	94.4	P
Manganese				1000.0	1027.35	102.7	1025.88	102.6	P
Nickel				1000.0	990.42	99.0	998.14	99.8	P
Potassium				10000.0	10064.56	100.6	10034.55	100.3	P
Selenium				1000.0	1054.29	105.4	1038.57	103.9	P
Silver				500.0	492.12	98.4	480.89	96.2	P
Sodium				11000.0	11841.09	107.6	11636.87	105.8	P
Thallium				1000.0	960.45	96.0	967.68	96.8	P
Vanadium				1000.0	995.73	99.6	994.88	99.5	P
Zinc				1000.0	1044.43	104.4	1024.39	102.4	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	122.37	102.0		
Arsenic				20.0	22.75	113.8		
Barium								
Beryllium				10.0	10.39	103.9		
Cadmium				10.0	10.65	106.5		
Calcium								
Chromium				20.0	20.22	101.1		
Cobalt				100.0	98.13	98.1		
Copper				50.0	50.92	101.8		
Iron								
Lead				6.0	7.43	123.8		
Magnesium								
Manganese				30.0	30.78	102.6		
Nickel				80.0	80.19	100.2		
Potassium								
Selenium				10.0	9.95	99.5		
Silver				20.0	19.24	96.2		
Sodium								
Thallium				20.0	20.71	103.6		
Vanadium				100.0	98.28	98.3		
Zinc				40.0	40.48	101.2		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	121.58	101.3		
Arsenic				20.0	21.33	106.6		
Barium								
Beryllium				10.0	10.49	104.9		
Cadmium				10.0	10.33	103.3		
Calcium								
Chromium				20.0	19.81	99.0		
Cobalt				100.0	96.56	96.6		
Copper				50.0	46.68	93.4		
Iron								
Lead				6.0	5.53	92.2		
Magnesium								
Manganese				30.0	30.73	102.4		
Nickel				80.0	80.68	100.8		
Potassium								
Selenium				10.0	7.29	72.9		
Silver				20.0	18.95	94.8		
Sodium								
Thallium				20.0	19.55	97.8		
Vanadium				100.0	98.25	98.2		
Zinc				40.0	40.99	102.5		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial		Final		
				True	Found	%R	Found	%R
Lead				6.0	7.03	117.2		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

ab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	121.81	101.5		
Arsenic				20.0	21.35	106.8		
Barium								
Beryllium				10.0	10.39	103.9		
Cadmium				10.0	10.17	101.7		
Calcium								
Chromium				20.0	19.52	97.6		
Cobalt				100.0	95.49	95.5		
Copper				50.0	48.80	97.6		
Iron								
Lead				6.0	5.96	99.3		
Magnesium								
Manganese				30.0	30.04	100.1		
Nickel				80.0	78.43	98.0		
Potassium								
Selenium				10.0	11.03	110.3		
Silver				20.0	18.52	92.6		
Sodium								
Thallium				20.0	19.80	99.0		
Vanadium				100.0	96.37	96.4		
Zinc				40.0	39.16	97.9		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	50.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Cyanide	5.0	U	5.0	U	5.0	U			5.000	U	AS
Iron	30.0	U	30.0	U	30.0	U	30.0	U	30.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.9	J	1.500	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Mercury	0.080	U	0.080	U	0.080	U	0.080	U	0.080	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cyanide	5.0	U	5.0	U					5.000	U	AS
Iron	30.0	U	30.0	U	30.0	U	30.0	U	6.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	0.300	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Mercury	0.080	U	0.080	U	0.080	U			0.080	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	-0.643	J	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Cyanide									0.125	U	AS

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	1	C	1	C	2	C	3	C	C		
Lead	1.5	U	1.5	U	1.5	U	1.5	U			P
Mercury	0.080	U	0.080	U	0.080	U	0.080	U	0.013	U	AV

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Mercury			0.080	U	0.080	U				AV	

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	50.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Iron	30.0	U	30.0	U	30.0	U	30.0	U	30.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank		M
			1	C	2	C	3	C	C		
Aluminum			50.0	U							P
Antimony			5.0	U							P
Arsenic			3.0	U							P
Barium			5.0	U							P
Beryllium			1.0	U							P
Cadmium			1.0	U							P
Calcium			1000.0	U							P
Chromium			2.0	U							P
Cobalt			5.0	U							P
Copper			5.0	U							P
Iron			30.0	U							P
Lead			1.5	U							P
Magnesium			1000.0	U							P
Manganese			3.0	U							P
Nickel			5.0	U							P
Potassium			1000.0	U							P
Selenium			3.0	U							P
Silver			1.0	U							P
Sodium			1000.0	U							P
Thallium			3.0	U							P
Vanadium			5.0	U							P
Zinc			5.0	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011ICP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPIConcentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	518444	502799.3	100.6			
Antimony	0	600	5	589.6	98.3			
Arsenic	0	100	0	97.2	97.2			
Barium	0	500	2	523.8	104.8			
Beryllium	0	500	0	485.9	97.2			
Cadmium	0	1000	2	933.9	93.4			
Calcium	500000	500000	451146	439968.2	88.0			
Chromium	0	500	2	471.5	94.3			
Cobalt	0	500	-1	455.0	91.0			
Copper	0	500	2	532.3	106.5			
Iron	200000	200000	196728	191231.3	95.6			
Lead	0	50	0	49.3	98.6			
Magnesium	500000	500000	506048	489331.8	97.9			
Manganese	0	500	-1	484.3	96.9			
Nickel	0	1000	-1	915.6	91.6			
Potassium	0	0	65	59.0				
Selenium	0	50	-2	40.4	80.8			
Silver	0	200	1	200.5	100.2			
Sodium	0	0	251	208.8				
Thallium	0	100	-12	89.6	89.6			
Vanadium	0	500	1	477.3	95.5			
Zinc	0	1000	-13	882.9	88.3			

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	502469	505864.9	101.2			
Antimony	0	600	4	609.7	101.6			
Arsenic	0	100	-2	106.6	106.6			
Barium	0	500	2	532.6	106.5			
Beryllium	0	500	0	505.2	101.0			
Cadmium	0	1000	-1	978.1	97.8			
Calcium	500000	500000	463301	466502.3	93.3			
Chromium	0	500	2	496.2	99.2			
Cobalt	0	500	-1	465.5	93.1			
Copper	0	500	-1	538.2	107.6			
Iron	200000	200000	196300	197586.4	98.8			
Lead	0	50	4	49.4	98.8			
Magnesium	500000	500000	509072	510409.8	102.1			
Manganese	0	500	-1	507.4	101.5			
Nickel	0	1000	-1	955.3	95.5			
Potassium	0	0	49	46.6				
Selenium	0	50	-6	46.3	92.6			
Silver	0	200	0	207.5	103.8			
Sodium	0	0	242	256.6				
Thallium	0	100	-10	94.4	94.4			
Vanadium	0	500	0	497.4	99.5			
Zinc	0	1000	-13	926.3	92.6			

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

ab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Lead	0	50	5	52.4	104.8			

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011CP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPIConcentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	515151	511842.2	102.4			
Antimony	0	600	7	619.2	103.2			
Arsenic	0	100	2	107.5	107.5			
Barium	0	500	2	544.5	108.9			
Beryllium	0	500	0	509.4	101.9			
Cadmium	0	1000	1	963.0	96.3			
Calcium	500000	500000	460455	461594.7	92.3			
Chromium	0	500	1	492.3	98.5			
Cobalt	0	500	-1	466.4	93.3			
Copper	0	500	1	553.6	110.7			
Iron	200000	200000	197300	196412.9	98.2			
Lead	0	50	3	53.1	106.2			
Magnesium	500000	500000	512742	508963.6	101.8			
Manganese	0	500	-1	507.0	101.4			
Nickel	0	1000	-1	939.7	94.0			
Potassium	0	0	45	49.6				
Selenium	0	50	2	45.3	90.6			
Silver	0	200	0	207.2	103.6			
Sodium	0	0	158	152.0				
Thallium	0	100	-10	87.2	87.2			
Vanadium	0	500	0	495.7	99.1			
Zinc	0	1000	-14	904.1	90.4			

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW2201S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2386.0860	165.6317 J	2000.00	111.0		P
Antimony	75 - 125	267.4135	5.0000 U	250.00	107.0		P
Arsenic	75 - 125	274.6829	3.0000 U	250.00	109.9		P
Barium	75 - 125	2111.0690	21.0705 J	2000.00	104.5		P
Beryllium	75 - 125	55.3091	1.0000 U	50.00	110.6		P
Cadmium	75 - 125	137.5869	1.0000 U	125.00	110.1		P
Calcium	75 - 125	23548.9300	19343.6000	5000.00	84.1		P
Chromium	75 - 125	205.6478	2.0000 U	200.00	102.8		P
Cobalt	75 - 125	509.7704	5.0000 U	500.00	102.0		P
Copper	75 - 125	265.4886	5.0000 U	250.00	106.2		P
Cyanide	75 - 125	76.0100	5.0000	100.00	76.0		AS
Iron	75 - 125	1204.4510	147.1278	1000.00	105.7		P
Lead	75 - 125	268.6904	1.5071 J	250.00	106.9		P
Magnesium	75 - 125	5809.7400	1000.0000 U	5000.00	116.2		P
Manganese	75 - 125	534.3422	11.8307 J	500.00	104.5		P
Mercury	75 - 125	2.1305	0.0800 U	2.00	106.5		AV
Nickel	75 - 125	512.2848	5.0000 U	500.00	102.5		P
Potassium	75 - 125	5536.2300	1000.0000 U	5000.00	110.7		P
Selenium	75 - 125	272.7049	3.0000 U	250.00	109.1		P
Silver	75 - 125	255.4766	1.0000 U	250.00	102.2		P
Sodium	75 - 125	12150.2600	7264.4500	5000.00	97.7		P
Thallium	75 - 125	260.6484	3.0000 U	250.00	104.3		P
Vanadium	75 - 125	508.7022	5.0000 U	500.00	101.7		P
Zinc	75 - 125	522.2567	5.0000 U	500.00	104.5		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW2201SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Matrix (soil/water): WATER Level (low/med): LOWSolids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2455.0260		165.6317	J	2000.00	114.5		P
Antimony	75 - 125	277.6891		5.0000	U	250.00	111.1		P
Arsenic	75 - 125	282.0703		3.0000	U	250.00	112.8		P
Barium	75 - 125	2165.5140		21.0705	J	2000.00	107.2		P
Beryllium	75 - 125	56.5556		1.0000	U	50.00	113.1		P
Cadmium	75 - 125	141.4896		1.0000	U	125.00	113.2		P
Calcium		24262.5400		19343.6000		5000.00	98.4		P
Chromium	75 - 125	211.0380		2.0000	U	200.00	105.5		P
Cobalt	75 - 125	521.6293		5.0000	U	500.00	104.3		P
Copper	75 - 125	272.5623		5.0000	U	250.00	109.0		P
Cyanide	75 - 125	83.2700		-0.6172		100.00	83.3		AS
Iron	75 - 125	1235.4840		147.1278		1000.00	108.8		P
Lead	75 - 125	275.7335		1.5071	J	250.00	109.7		P
Magnesium	75 - 125	5950.9400		1000.0000	U	5000.00	119.0		P
Manganese	75 - 125	547.4057		11.8307	J	500.00	107.1		P
Mercury	75 - 125	2.2321		0.0800	U	2.00	111.6		AV
Nickel	75 - 125	525.2750		5.0000	U	500.00	105.1		P
Potassium	75 - 125	5670.0400		1000.0000	U	5000.00	113.4		P
Selenium	75 - 125	280.7757		3.0000	U	250.00	112.3		P
Silver	75 - 125	261.0367		1.0000	U	250.00	104.4		P
Sodium	75 - 125	12472.4700		7264.4500		5000.00	104.2		P
Thallium	75 - 125	266.3331		3.0000	U	250.00	106.5		P
Vanadium	75 - 125	521.0728		5.0000	U	500.00	104.2		P
Zinc	75 - 125	532.9486		5.0000	U	500.00	106.6		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01RB091108S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	2.2862		0.0800	U	2.00	114.3		AV

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01RB091108SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	2.3226	0.0800 | U	2.00	116.1		AV

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS0701S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Matrix (soil/water): SOLID Level (low/med): LOWSolids for Sample: 91.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		12007.7400		10484.2400		439.56	346.6		P
Antimony	75 - 125	21.8363		1.1100	U	54.95	39.7	N	P
Arsenic	75 - 125	60.4515		3.8986		54.95	102.9		P
Barium	75 - 125	456.7125		12.7856	J	439.56	101.0		P
Beryllium	75 - 125	11.3810		0.2220	U	10.99	103.6		P
Cadmium	75 - 125	28.4640		0.2220	U	27.47	103.6		P
Calcium	75 - 125	1321.9340		222.0002	U	1098.90	120.3		P
Chromium	75 - 125	54.2977		7.8781		43.96	105.6		P
Cobalt	75 - 125	106.9322		1.1100	U	109.89	97.3		P
Copper	75 - 125	58.7232		2.7437	J	54.95	101.9		P
Cyanide	75 - 125	2.8132		0.1374		2.75	102.3		AS
Iron		7017.8450		5030.8920		219.78	904.1		P
Lead	75 - 125	60.7809		4.3822		54.95	102.6		P
Magnesium	75 - 125	1348.2840		273.3933	J	1098.90	97.8		P
Manganese	75 - 125	133.5034		8.3406		109.89	113.9		P
Mercury	75 - 125	0.3848		0.0200	J	0.34	107.3		AV
Nickel	75 - 125	115.0764		3.7036	J	109.89	101.3		P
Potassium	75 - 125	1329.4040		222.0002	U	1098.90	121.0		P
Selenium	75 - 125	52.8367		0.6660	U	54.95	96.2		P
Silver	75 - 125	53.3352		0.2220	U	54.95	97.1		P
Sodium	75 - 125	1135.0220		222.0002	U	1098.90	103.3		P
Thallium	75 - 125	52.5357		0.6660	U	54.95	95.6		P
Vanadium	75 - 125	125.2709		13.2506		109.89	101.9		P
Zinc	75 - 125	121.7138		8.7229		109.89	102.8		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS0701SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Matrix (soil/water): SOLID Level (low/med): LOWSolids for Sample: 91.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		11834.5000		10484.2400		435.21	310.3		P
Antimony	75 - 125	21.8892		1.1100	U	54.40	40.2	N	P
Arsenic	75 - 125	60.8116		3.8986		54.40	104.6		P
Barium	75 - 125	454.3875		12.7856	J	435.21	101.5		P
Beryllium	75 - 125	11.3353		0.2220	U	10.88	104.2		P
Cadmium	75 - 125	28.2624		0.2220	U	27.20	103.9		P
Calcium	75 - 125	1305.6750		222.0002	U	1088.02	120.0		P
Chromium	75 - 125	53.0095		7.8781		43.52	103.7		P
Cobalt	75 - 125	106.5117		1.1100	U	108.80	97.9		P
Copper	75 - 125	58.4069		2.7437	J	54.40	102.3		P
Cyanide	75 - 125	2.7606		0.1374	U	2.67	103.4		AS
Iron		5999.7920		5030.8920		217.60	445.3		P
Lead	75 - 125	59.5581		4.3822		54.40	101.4		P
Magnesium	75 - 125	1339.4430		273.3933	J	1088.02	98.0		P
Manganese	75 - 125	124.4772		8.3406		108.80	106.7		P
Mercury	75 - 125	0.3916		0.0200		0.34	109.3		AV
Nickel	75 - 125	113.7960		3.7036	J	108.80	101.2		P
Potassium	75 - 125	1322.8900		222.0002	U	1088.02	121.6		P
Selenium	75 - 125	52.5540		0.6660	U	54.40	96.6		P
Silver	75 - 125	53.0372		0.2220	U	54.40	97.5		P
Sodium	75 - 125	1125.8600		222.0002	U	1088.02	103.5		P
Thallium	75 - 125	52.7790		0.6660	U	54.40	97.0		P
Vanadium	75 - 125	123.2550		13.2506		108.80	101.1		P
Zinc	75 - 125	121.1951		8.7229		108.80	103.4		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW2201A

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS _____ SDG No.: Gulfport-011Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		2390.98	165.63 J	2000.0	111.3		P
Antimony		243.59	5.00 U	250.0	97.4		P
Arsenic		261.05	3.00 U	250.0	104.4		P
Barium		2112.13	21.07 J	2000.0	104.6		P
Beryllium		54.79	1.00 U	50.0	109.6		P
Cadmium		130.85	1.00 U	125.0	104.7		P
Calcium		24023.25	19343.60	5000.0	93.6		P
Chromium		205.15	2.00 U	200.0	102.6		P
Cobalt		507.09	5.00 U	500.0	101.4		P
Copper		265.62	5.00 U	250.0	106.2		P
Iron		1193.77	147.13	1000.0	104.7		P
Lead		256.64	1.51 J	250.0	102.1		P
Magnesium		5797.63	1000.00 U	5000.0	116.0		P
Manganese		532.52	11.83 J	500.0	104.1		P
Nickel		510.78	5.00 U	500.0	102.2		P
Potassium		5604.63	1000.00 U	5000.0	112.1		P
Selenium		258.86	3.00 U	250.0	103.5		P
Silver		253.65	1.00 U	250.0	101.5		P
Sodium		12207.63	7264.45	5000.0	98.9		P
Thallium		252.02	3.00 U	250.0	100.8		P
Vanadium		507.41	5.00 U	500.0	101.5		P
Zinc		516.28	5.00 U	500.0	103.3		P

Comments: _____

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS0701A

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS _____ SDG No.: Gulfport-011Matrix (soil/water): SOLID Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added(SA)	%R	Q	M
Aluminum		49207.93	47226.27	2000.0	99.1		P
Antimony		238.42	5.00	250.0	95.4		P
Arsenic		285.83	17.56	250.0	107.3		P
Barium		2141.97	57.59	2000.0	104.2		P
Beryllium		53.74	1.00	50.0	107.5		P
Cadmium		134.46	1.00	125.0	107.6		P
Calcium		6500.46	1000.00	5000.0	130.0		P
Chromium		244.33	35.49	200.0	104.4		P
Cobalt		504.22	5.00	500.0	100.8		P
Copper		274.72	12.36	250.0	104.9		P
Iron		23643.14	22661.65	1000.0	98.1		P
Lead		278.19	19.74	250.0	103.4		P
Magnesium		6122.20	1231.50	5000.0	97.8		P
Manganese		565.94	37.57	500.0	105.7		P
Nickel		534.77	16.68	500.0	103.6		P
Potassium		6175.41	1000.00	5000.0	123.5		P
Selenium		253.12	3.00	250.0	101.2		P
Silver		253.04	1.00	250.0	101.2		P
Sodium		5365.89	1000.00	5000.0	107.3		P
Thallium		253.29	3.00	250.0	101.3		P
Vanadium		572.21	59.69	500.0	102.5		P
Zinc		567.56	39.29	500.0	105.7		P

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01GW2201SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		2386.0863		2455.0260		2.8		P
Antimony		267.4135		277.6891		3.8		P
Arsenic		274.6829		282.0703		2.7		P
Barium		2111.0686		2165.5140		2.5		P
Beryllium		55.3091		56.5556		2.2		P
Cadmium		137.5869		141.4896		2.8		P
Calcium		23548.9300		24262.5400		3.0		P
Chromium		205.6479		211.0380		2.6		P
Cobalt		509.7704		521.6293		2.3		P
Copper		265.4886		272.5623		2.6		P
Cyanide		76.0100		83.2700		9.1		AS
Iron		1204.4510		1235.4840		2.5		P
Lead		268.6904		275.7335		2.6		P
Magnesium		5809.7400		5950.9400		2.4		P
Manganese		534.3421		547.4057		2.4		P
Mercury		2.1305		2.2321		4.7		AV
Nickel		512.2848		525.2750		2.5		P
Potassium		5536.2300		5670.0400		2.4		P
Selenium		272.7049		280.7757		2.9		P
Silver		255.4766		261.0367		2.2		P
Sodium		12150.2600		12472.4700		2.6		P
Thallium		260.6484		266.3331		2.2		P
Vanadium		508.7022		521.0728		2.4		P
Zinc		522.2567		532.9486		2.0		P

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01RB091108SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		2.2862		2.3226		1.6		AV

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01SS0701SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Matrix (soil/water): SOLID Level (low/med): LOW
 % Solids for Sample: 91.0 % Solids for Duplicate: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		12007.7400		11834.5000		1.5		P
Antimony		21.8363		21.8892		0.2		P
Arsenic		60.4515		60.8116		0.6		P
Barium		456.7125		454.3875		0.5		P
Beryllium		11.3810		11.3353		0.4		P
Cadmium		28.4640		28.2624		0.7		P
Calcium		1321.9340		1305.6750		1.2		P
Chromium		54.2977		53.0095		2.4		P
Cobalt		106.9322		106.5117		0.4		P
Copper		58.7232		58.4069		0.5		P
Cyanide		2.8132		2.7606		1.9		AS
Iron		7017.8450		5999.7920		15.6		P
Lead		60.7809		59.5581		2.0		P
Magnesium		1348.2840		1339.4430		0.7		P
Manganese		133.5034		124.4772		7.0		P
Mercury		0.3848		0.3916		1.8		AV
Nickel		115.0764		113.7960		1.1		P
Potassium		1329.4040		1322.8900		0.5		P
Selenium		52.8367		52.5540		0.5		P
Silver		53.3352		53.0372		0.6		P
Sodium		1135.0220		1125.8600		0.8		P
Thallium		52.5357		52.7790		0.5		P
Vanadium		125.2709		123.2550		1.6		P
Zinc		121.7138		121.1951		0.4		P

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Solid LCS Source: HighPurity,FisherAqueous LCS Source: HighPurity,Fisher

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	2000.0	2036.91	101.8					
Antimony	250.0	242.66	97.1					
Arsenic	250.0	243.11	97.2					
Barium	2000.0	1950.14	97.5					
Beryllium	50.0	53.26	106.5					
Cadmium	125.0	124.93	99.9					
Calcium	5000.0	4975.19	99.5					
Chromium	200.0	192.48	96.2					
Cobalt	500.0	478.47	95.7					
Copper	250.0	247.05	98.8					
Cyanide	283.0	312.60	110.5					
Iron	1000.0	1004.57	100.5					
Lead	250.0	247.08	98.8					
Magnesium	5000.0	4513.72	90.3					
Manganese	500.0	490.95	98.2					
Mercury	2.00	2.18	109.0					
Nickel	500.0	475.49	95.1					
Potassium	5000.0	4650.60	93.0					
Selenium	250.0	238.01	95.2					
Silver	250.0	237.82	95.1					
Sodium	5000.0	5061.39	101.2					
Thallium	250.0	232.47	93.0					
Vanadium	500.0	475.60	95.1					
Zinc	500.0	493.09	98.6					

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Solid LCS Source: HighPurity,FisherAqueous LCS Source: HighPurity,Fisher

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				400.0	416.8		320.0 | 480.0	104.2
Antimony				50.0	49.9		40.0 | 60.0	99.8
Arsenic				50.0	51.4		40.0 | 60.0	102.8
Barium				400.0	399.9		320.0 | 480.0	100.0
Beryllium				10.0	10.1		8.0 | 12.0	101.0
Cadmium				25.0	25.9		20.0 | 30.0	103.6
Calcium				1000.0	996.7	J	800.0 | 1200.0	99.7
Chromium				40.0	39.9		32.0 | 48.0	99.8
Cobalt				100.0	95.0		80.0 | 120.0	95.0
Copper				50.0	49.4		40.0 | 60.0	98.8
Cyanide	283.0	305.30	107.9	7.1	7.36		3.4 | 5.0	103.7
Iron				200.0	203.8		160.0 | 240.0	101.9
Lead				50.0	50.0		40.0 | 60.0	100.0
Magnesium				1000.0	932.6	J	800.0 | 1200.0	93.3
Manganese				100.0	100.8		80.0 | 120.0	100.8
Mercury	2.00	2.32	116.0	0.33	0.36		0.3 | 0.4	109.1
Nickel				100.0	98.9		80.0 | 120.0	98.9
Potassium				1000.0	1057.4		800.0 | 1200.0	105.7
Selenium				50.0	47.9		40.0 | 60.0	95.8
Silver				50.0	48.4		40.0 | 60.0	96.8
Sodium				1000.0	1000.1		800.0 | 1200.0	100.0
Thallium				50.0	47.8		40.0 | 60.0	95.6
Vanadium				100.0	98.3		80.0 | 120.0	98.3
Zinc				100.0	100.2		80.0 | 120.0	100.2

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Solid LCS Source: HighPurity,Fisher

Aqueous LCS Source: HighPurity,Fisher

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	2000.0	2168.89	108.4					
Antimony	250.0	254.61	101.8					
Arsenic	250.0	256.18	102.5					
Barium	2000.0	2084.01	104.2					
Beryllium	50.0	56.23	112.5					
Cadmium	125.0	129.53	103.6					
Calcium	5000.0	5065.82	101.3					
Chromium	200.0	198.53	99.3					
Cobalt	500.0	506.80	101.4					
Copper	250.0	262.83	105.1					
Iron	1000.0	1026.83	102.7					
Lead	250.0	258.73	103.5					
Magnesium	5000.0	4684.30	93.7					
Manganese	500.0	507.00	101.4					
Nickel	500.0	494.20	98.8					
Potassium	5000.0	4854.08	97.1					
Selenium	250.0	255.56	102.2					
Silver	250.0	247.39	99.0					
Sodium	5000.0	5397.55	108.0					
Thallium	250.0	245.66	98.3					
Vanadium	500.0	495.67	99.1					
Zinc	500.0	506.83	101.4					

USEPA - CLP

9

ICP SERIAL DILUTIONS

SAMPLE NO.

01GW2201L

Lab Name: Empirical Laboratories

Contract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample			Serial Dilution			% Difference	Q	M
	MDL (ug/L) 90L	Result (I)	C	Result (S)	C				
Aluminum	50	165.63	J	250.00	U	100.0		P	-OK
Antimony		5.00	U	25.00	U			P	
Arsenic		3.00	U	15.00	U			P	
Barium	5	21.07	J	25.00	U	100.0		P	-OK
Beryllium		1.00	U	5.00	U			P	
Cadmium		1.00	U	5.00	U			P	
Calcium	1000	19343.60		55355.95		186.2		P	250 x OK
Chromium		2.00	U	10.00	U			P	
Cobalt		5.00	U	25.00	U			P	
Copper		5.00	U	25.00	U			P	
Iron	30	147.13		183.31	J	24.6		P	-OK
Lead	1.5	1.51	J	7.50	U	100.0		P	-OK
Magnesium		1000.00	U	5000.00	U			P	
Manganese	3	11.83	J	15.00	U	100.0		P	-OK
Nickel		5.00	U	25.00	U			P	
Potassium		1000.00	U	5000.00	U			P	
Selenium		3.00	U	15.00	U			P	
Silver		1.00	U	5.00	U			P	
Sodium	1000	7264.45		8129.00	J	11.9		P	-OK
Thallium		3.00	U	15.00	U			P	
Vanadium		5.00	U	25.00	U			P	
Zinc		5.00	U	27.74	J	100.0		P	-OK

USEPA - CLP

9
ICP SERIAL DILUTIONS

SAMPLE NO.

01SS0701L

Lab Name: Empirical Laboratories

Contract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-011

Matrix (soil/water): SOLID

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	47226.27		48000.47		1.6		P
Antimony	5.00	U	25.00	U			P
Arsenic	17.56		26.13	J	48.8		P -OK
Barium	57.59	J	58.51	J	1.6		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	1000.00	U	25517.45		100.0		P -OK
Chromium	35.49		36.03	J	1.5		P
Cobalt	5.00	U	25.00	U			P
Copper	12.36	J	25.00	U	100.0		P -OK
Iron	22661.65		22763.34		0.4		P
Lead	19.74		19.01		3.7		P
Magnesium	1231.50	J	5000.00	U	100.0		P -OK
Manganese	37.57		38.52	J	2.5		P
Nickel	16.68	J	25.00	U	100.0		P -OK
Potassium	1000.00	U	5000.00	U			P
Selenium	3.00	U	15.00	U			P
Silver	1.00	U	5.00	U			P
Sodium	1000.00	U	5000.00	U			P
Thallium	3.00	U	15.00	U			P
Vanadium	59.69		60.82	J	1.9		P
Zinc	39.29		60.18	J	53.2		P -OK

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011CP ID Number: TJA61E TRACE ICP Date: 02/04/08

Lame AA ID Number: _____

Burnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Aluminum	308.22		200.0	50.0	P
Antimony	206.84		60.0	5.0	P
Arsenic	189.04		10.0	3.0	P
Barium	493.41		200.0	5.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	226.50		5.0	1.0	P
Calcium	317.93		5000.0	1000.0	P
Chromium	267.72		10.0	2.0	P
Cobalt	228.62		50.0	5.0	P
Copper	324.75		25.0	5.0	P
Iron	271.44		100.0	30.0	P
Lead	220.35		3.0	1.5	P
Magnesium	279.08		5000.0	1000.0	P
Manganese	257.61		15.0	3.0	P
Nickel	231.60		40.0	5.0	P
Potassium	766.49		5000.0	1000.0	P
Selenium	196.02		5.0	3.0	P
Silver	328.07		10.0	1.0	P
Sodium	330.23		5000.0	1000.0	P
Thallium	190.86		10.0	3.0	P
Vanadium	292.40		50.0	5.0	P
Zinc	206.84		20.0	5.0	P

Comments: _____

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: _____ Date: 03/18/08

Lamp AA ID Number: PE CVAA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.08	AV

Comments:

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011CP ID Number: _____ Date: 05/22/06Name AA ID Number: Lachat Cyanide

Burnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Cyanide	570		10.0	5.00	AS

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	As
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Arsenic	189.04	0.0000030	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000240	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001100	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0001910	0.0000000
Lead	220.35	0.0002530	0.0000000	0.0001120	0.0000000	0.0000000
Lead	220.35	-0.0001600	0.0000000	0.0000450	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000120	0.0216570	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000130	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0003400	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	-0.0001200	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0018200	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000210	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	-0.0000700	0.0282910	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		B	Ba	Be	Cd	Co
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	-0.0139700
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0017660
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000900
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	-0.0014600	0.0000000	-0.000190	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0865310
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019300
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000700
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0009900
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0025020
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	K	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0071840
Antimony	206.84	0.0031350	0.0000000	0.0000000	0.0000000	-0.0027800
Arsenic	189.04	0.0001610	0.0000000	0.0000000	0.0000000	0.0003200
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001310	-0.0003400
Cobalt	228.62	-0.0000200	0.0000000	0.0000000	0.0000000	0.0000290
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0004170
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000160	-0.0000800	0.0000000	0.0000840	-0.0001300
Lead	220.35	-0.0000500	0.0000000	0.0000000	0.0000510	-0.0011800
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000140
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0000700	0.0000000	0.0000000	0.0001750	0.0000000
Selenium	196.02	-0.0001100	0.0000000	0.0000000	0.0001450	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000350	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002970	0.0000000	0.0000000	0.0004160	-0.0026800
Tin	189.99	0.0000000	0.0000000	0.0000000	-0.000110	0.0000000
Titanium	334.94	0.0000430	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0004700
Zinc	206.20	0.0003790	0.0000000	0.0000000	0.0000000	0.0003690

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Na	Ni	Pb	Si	Sn
Aluminum	308.22	0.000000	0.000000	0.000000	0.000000	0.000000
Antimony	206.84	0.000000	0.000000	0.000000	0.000000	-0.0000400
Arsenic	189.04	0.000000	0.000000	0.000000	0.000000	0.000000
Barium	493.41	0.000000	0.000000	0.000000	0.000000	0.000000
Beryllium	313.04	0.000000	0.000000	0.000000	0.000000	0.000000
Boron	249.68	0.000000	0.000000	0.000000	0.000000	0.000000
Cadmium	226.50	0.000000	-0.0000600	0.000000	0.000000	0.000000
Calcium	317.93	0.000000	0.000000	0.000000	0.000000	0.000000
Chromium	267.72	0.000000	0.000000	0.000000	0.000000	0.000000
Cobalt	228.62	0.000000	0.0002750	0.000000	0.000000	-0.0000100
Copper	324.75	0.000000	0.000000	0.000000	0.000000	0.000000
Iron	271.44	0.000000	0.000000	0.000000	0.000000	0.000000
Lead	220.35	0.000000	-0.0007000	-0.0008700	0.000000	0.000000
Lead	220.35	0.000000	0.000000	0.000000	0.000000	0.000000
Lead	220.35	0.000000	0.000000	0.000000	0.000000	0.000000
Magnesium	279.08	0.000000	0.000000	0.000000	0.000000	0.000000
Manganese	279.08	0.000000	0.000000	0.000000	0.000000	0.000000
Molybdenum	202.03	0.000000	0.000000	0.000000	0.000000	0.000000
Nickel	231.60	0.000000	0.000000	0.000000	0.000000	0.000000
Potassium	766.49	0.000000	0.000000	0.000000	0.000000	0.000000
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	0.000000
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	0.000000
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	0.000000
Silver	328.22	0.000000	0.000000	0.000000	0.000000	0.000000
Sodium	331.23	0.000000	0.000000	0.000000	0.000000	0.000000
Thallium	190.86	0.000000	0.000000	0.000000	0.000000	0.000000
Tin	189.99	0.000000	-0.0000700	0.000000	0.000000	0.000000
Titanium	334.94	0.000000	0.000000	0.000000	0.000000	0.000000
Vanadium	292.40	0.000000	0.000000	0.000000	0.000000	0.000000
Zinc	206.20	0.000000	0.0000670	0.000000	0.000000	0.000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		Ti	Tl	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.0028970	0.0000000
Antimony	206.84	0.0000870	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	-0.0030300	0.0000000	0.0005980	0.0000000
Boron	249.68	-0.0002400	0.0000000	-0.0000600	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000790	0.0000000	-0.0000500	0.0000000
Cobalt	228.62	0.0020140	0.0000000	0.0000000	0.0000000
Copper	324.75	-0.0001600	0.0000000	-0.0001000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0089800	0.0000000
Lead	220.35	0.0000260	0.0000000	-0.0000500	0.0000000
Lead	220.35	-0.0008800	0.0000000	-0.0001300	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0001020	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0001000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000390	0.0000000
Sodium	331.23	-0.0000300	0.0000000	0.0000000	0.0000230
Thallium	190.86	0.0002100	0.0000000	0.0017130	0.0000000
Tin	189.99	0.0007090	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000220	0.0000000
Vanadium	292.40	0.0004080	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000770	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: Empirical LaboratoriesContract: TetraTech NUS, Inc.

Lab Code: _____

Case No.: _____

SAS No.: _____

SDG No.: Gulfport-011CP ID Number: TJA61E TRACE ICPDate: 06/16/08

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	15.00	500000.0	P
Antimony	15.00	10000.0	P
Arsenic	15.00	10000.0	P
Barium	15.00	5000.0	P
Beryllium	15.00	10000.0	P
Cadmium	15.00	10000.0	P
Calcium	15.00	250000.0	P
Chromium	15.00	10000.0	P
Cobalt	15.00	10000.0	P
Copper	15.00	10000.0	P
Iron	15.00	500000.0	P
Lead	15.00	10000.0	P
Magnesium	15.00	500000.0	P
Manganese	15.00	10000.0	P
Nickel	15.00	10000.0	P
Potassium	15.00	100000.0	P
Selenium	15.00	10000.0	P
Silver	15.00	2000.0	P
Sodium	15.00	250000.0	P
Thallium	15.00	10000.0	P
Vanadium	15.00	50000.0	P
Zinc	15.00	10000.0	P

Comments: _____

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW091508A	09/15/08	50.0	50.0
LCSW091508A	09/15/08	50.0	50.0
01GW2301	09/15/08	50.0	50.0
01GW2201	09/15/08	50.0	50.0
01GW2201S	09/15/08	50.0	50.0
01GW2201SD	09/15/08	50.0	50.0
01GW2501	09/15/08	50.0	50.0
01GW2401	09/15/08	50.0	50.0
01GW2701	09/15/08	50.0	50.0
01GW2601	09/15/08	50.0	50.0
01RB090908	09/15/08	50.0	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
PBS091708A	09/17/08	1.00	200.0
LCSS091708A	09/17/08	1.00	200.0
01SS0701	09/17/08	0.99	200.0
01SS0701S	09/17/08	1.00	200.0
01SS0701SD	09/17/08	1.01	200.0
01SS0801	09/17/08	1.05	200.0
01SS0901	09/17/08	1.01	200.0
01SS1001	09/17/08	1.02	200.0
01SS1101	09/17/08	1.03	200.0
01SS1201	09/17/08	1.00	200.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW092908B	09/29/08	50.0	50.0
LCSW092908B	09/29/08	50.0	50.0
01RB091108	09/29/08	50.0	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW091208A	09/12/08	30.0	30.0
PBW091208A	09/12/08	30.0	30.0
01GW2301	09/12/08	30.0	30.0
01GW2201	09/12/08	30.0	30.0
01GW2201S	09/12/08	30.0	30.0
01GW2201SD	09/12/08	30.0	30.0
01GW2501	09/12/08	30.0	30.0
01GW2401	09/12/08	30.0	30.0
01GW2701	09/12/08	30.0	30.0
01GW2601	09/12/08	30.0	30.0
01RB090908	09/12/08	30.0	30.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW091608A	09/16/08	30.0	30.0
PBW091608A	09/16/08	30.0	30.0
01RB091108	09/16/08	30.0	30.0
01RB091108S	09/16/08	30.0	30.0
01RB091108SD	09/16/08	30.0	30.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
LCSS091708A	09/17/08	0.30	50.0
PBS091708A	09/17/08	0.30	50.0
01SS0701	09/17/08	0.33	50.0
01SS0701S	09/17/08	0.32	50.0
01SS0701SD	09/17/08	0.32	50.0
01SS0801	09/17/08	0.31	50.0
01SS0901	09/17/08	0.33	50.0
01SS1001	09/17/08	0.32	50.0
01SS1101	09/17/08	0.35	50.0
01SS1201	09/17/08	0.29	50.0

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011Method: AS
8/12/08 10/21/08

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW091208	09/12/08	25.0	25.0
LCSW091208	09/12/08	25.0	25.0
01GW2301	09/12/08	25.0	25.0
01GW2201	09/12/08	25.0	25.0
01GW2501	09/12/08	25.0	25.0
01GW2401	09/12/08	25.0	25.0
01GW2701	09/12/08	25.0	25.0
01GW2601	09/12/08	25.0	25.0
01RB090908	09/12/08	25.0	25.0
01GW2201S	09/12/08	25.0	25.0
01GW2201SD	09/12/08	25.0	25.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011

Method: As
SMC 10/2/08

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW091808W	09/18/08	25.0	25.0
LCSW091808W	09/18/08	25.0	25.0
01RB091108	09/18/08	25.0	25.0

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/16/08 End Date: 09/16/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
S	1.00	1016			X	X		X	X		X	X	X		X		X		X									X	X	X	
S	1.00	1024		X			X						X	X							X										
S	1.00	1032								X									X			X									
ZZZZZZ	1.00	1044																													
S0	1.00	1052		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1057																													
ZZZZZZ	1.00	1102																													
ZZZZZZ	1.00	1117																													
ZZZZZZ	1.00	1124																													
ZZZZZZ	1.00	1132																													
ZZZZZZ	1.00	1139																													
ICV1	1.00	1157		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB1	1.00	1208		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1215																													
ZZZZZZ	1.00	1221																													
ZZZZZZ	1.00	1228																													
ZZZZZZ	1.00	1235																													
ZZZZZZ	1.00	1242																													
ZZZZZZ	1.00	1248																													
ZZZZZZ	1.00	1254																													
ZZZZZZ	1.00	1301																													
CRDL1	1.00	1317		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA-0	1.00	1323		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB-0	1.00	1330		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV1	1.00	1351		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB1	1.00	1402		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZZ	1.00	1408																													
ZZZZZZ	1.00	1421																													
ZZZZZZ	1.00	1428																													
ZZZZZZ	1.00	1436																													
ZZZZZZ	1.00	1443																													
ZZZZZZ	1.00	1449																													
ZZZZZZ	1.00	1456																													
ZZZZZZ	1.00	1509																													
CCV2	1.00	1520		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB2	1.00	1531		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PBW091508A	1.00	1539		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LCSW091508A	1.00	1545		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/16/08 End Date: 09/16/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N		
01GW2301	1.00	1554		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2201	1.00	1601		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2201S	1.00	1607		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2201SD	1.00	1613		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2201A	1.00	1620		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2201L	5.00	1627		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2501	1.00	1634		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2401	1.00	1640		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2701	1.00	1646		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01GW2601	1.00	1653		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01RB090908	1.00	1659		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCV3	1.00	1708		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB3	1.00	1719		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/22/08 End Date: 09/22/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F U	P E	M B	M G	H N	N G	K I	S E	A G	N A	T L	V L	Z N	C N		
S	1.00	0926			X	X		X	X		X	X	X		X		X		X				X	X	X				
S	1.00	0934		X			X						X		X						X								
S	1.00	0943								X									X			X							
ZZZZZZ	1.00	0955																											
ZZZZZZ	1.00	1000																											
S0	1.00	1005		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1011																											
ZZZZZZ	1.00	1021																											
ZZZZZZ	1.00	1034																											
ZZZZZZ	1.00	1041																											
ZZZZZZ	1.00	1053																											
ZZZZZZ	1.00	1100																											
ICV2	1.00	1113		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ICB2	1.00	1124		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1131																											
ZZZZZZ	1.00	1137																											
ZZZZZZ	1.00	1144																											
ZZZZZZ	1.00	1152																											
ZZZZZZ	1.00	1158																											
ZZZZZZ	1.00	1204																											
ZZZZZZ	1.00	1211																											
ZZZZZZ	1.00	1217																											
ZZZZZZ	1.00	1223																											
CRDL1	1.00	1232		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ICSA-0	1.00	1239		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ICSAB-0	1.00	1245		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1254																											
CCV1	1.00	1302		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1314		X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1320																											
ZZZZZZ	1.00	1326																											
ZZZZZZ	1.00	1342																											
ZZZZZZ	1.00	1349																											
ZZZZZZ	1.00	1355																											
ZZZZZZ	1.00	1401																											
ZZZZZZ	5.00	1409																											
ZZZZZZ	1.00	1418																											
ZZZZZZ	1.00	1425																											

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/22/08 End Date: 09/22/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V N	Z N	C N				
ZZZZZZ	1.00	1433																													
ZZZZZZ	1.00	1440																													
ZZZZZZ	1.00	1447																													
CCV2	1.00	1456		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	1507		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PBS091708A	1.00	1518		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCSS091708A	1.00	1524		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0701	1.00	1534		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0701S	1.00	1541		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0701SD	1.00	1547		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0701A	1.00	1554		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0701L	5.00	1601		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0801	1.00	1608		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS0901	1.00	1614		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS1001	1.00	1620		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS1101	1.00	1627		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS1201	1.00	1633		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV3	1.00	1642		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB3	1.00	1653		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/29/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N				
S0	1.00	1018												X																	
S	1.00	1023												X																	
ZZZZZZ	1.00	1031																													
ZZZZZZ	1.00	1036																													
ZZZZZZ	1.00	1041																													
ZZZZZZ	1.00	1051																													
ZZZZZZ	1.00	1057																													
ZZZZZZ	1.00	1107																													
ZZZZZZ	1.00	1110																													
ZZZZZZ	1.00	1117																													
ZZZZZZ	1.00	1124																													
ZZZZZZ	1.00	1133																													
ZZZZZZ	1.00	1139																													
ICV3	1.00	1158												X																	
ICB3	1.00	1209												X																	
ZZZZZZ	1.00	1215																													
ZZZZZZ	1.00	1222																													
ZZZZZZ	1.00	1229																													
ZZZZZZ	1.00	1237																													
ZZZZZZ	1.00	1244																													
ZZZZZZ	1.00	1250																													
ZZZZZZ	1.00	1257																													
ZZZZZZ	1.00	1303																													
ZZZZZZ	1.00	1309																													
ZZZZZZ	1.00	1326																													
ZZZZZZ	1.00	1333																													
CRDL1	1.00	1342												X																	
ICSA-0	1.00	1348												X																	
ICSAB-0	1.00	1354												X																	
ZZZZZZ	1.00	1403																													
CCV1	1.00	1412												X																	
CCB1	1.00	1429												X																	
ZZZZZZ	1.00	1436																													
ZZZZZZ	1.00	1442																													
ZZZZZZ	1.00	1451																													
ZZZZZZ	1.00	1502																													
ZZZZZZ	1.00	1507																													
ZZZZZZ	1.00	1515																													

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/29/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N				
ZZZZZZ	1.00	1522																													
ZZZZZZ	1.00	1535																													
ZZZZZZ	1.00	1603																													
ZZZZZZ	1.00	1610																													
ZZZZZZ	1.00	1618																													
ZZZZZZ	1.00	1625																													
ZZZZZZ	1.00	1631																													
ZZZZZZ	1.00	1637																													
ZZZZZZ	1.00	1647																													
ZZZZZZ	1.00	1654																													
ZZZZZZ	1.00	1702																													
ZZZZZZ	1.00	1708																													
ZZZZZZ	1.00	1717																													
ZZZZZZ	1.00	1728																													
ZZZZZZ	1.00	1734																													
ZZZZZZ	1.00	1741																													
ZZZZZZ	1.00	1747																													
ZZZZZZ	1.00	1753																													
ZZZZZZ	1.00	1800																													
ZZZZZZ	1.00	1806																													
ZZZZZZ	1.00	1812																													
ZZZZZZ	5.00	1820																													
ZZZZZZ	1.00	1826																													
ZZZZZZ	1.00	1833																													
ZZZZZZ	1.00	1839																													
ZZZZZZ	1.00	1845																													
ZZZZZZ	1.00	1852																													
ZZZZZZ	1.00	1858																													
ZZZZZZ	1.00	1907																													
ZZZZZZ	1.00	1918																													
ZZZZZZ	1.00	1924																													
ZZZZZZ	1.00	1931																													
ZZZZZZ	1.00	1937																													
ZZZZZZ	1.00	1944																													
ZZZZZZ	1.00	1950																													
ZZZZZZ	1.00	1959																													
ZZZZZZ	1.00	2005																													
ZZZZZZ	1.00	2011																													

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/29/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																								
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	A L	N L	T L	V L	Z N	C N
ZZZZZZ	1.00	2018																										
ZZZZZZ	1.00	2024																										
ZZZZZZ	1.00	2031																										
ZZZZZZ	1.00	2037																										
ZZZZZZ	5.00	2045																										
ZZZZZZ	1.00	2051																										
ZZZZZZ	1.00	2057																										
ZZZZZZ	1.00	2104																										
ZZZZZZ	1.00	2110																										
ZZZZZZ	1.00	2119																										
ZZZZZZ	1.00	2130																										
ZZZZZZ	1.00	2136																										
ZZZZZZ	1.00	2143																										
ZZZZZZ	1.00	2149																										
ZZZZZZ	1.00	2155																										
ZZZZZZ	1.00	2202																										
ZZZZZZ	1.00	2208																										
ZZZZZZ	1.00	2215																										
ZZZZZZ	1.00	2221																										
ZZZZZZ	1.00	2230																										
ZZZZZZ	1.00	2241																										
ZZZZZZ	1.00	2247																										
ZZZZZZ	1.00	2254																										
ZZZZZZ	1.00	2302																										
ZZZZZZ	1.00	2309																										
ZZZZZZ	1.00	2315																										
ZZZZZZ	1.00	2322																										
ZZZZZZ	1.00	2328																										
ZZZZZZ	1.00	2334																										
ZZZZZZ	5.00	2342																										
ZZZZZZ	1.00	2348																										
ZZZZZZ	1.00	2355																										
ZZZZZZ	1.00	0001																										
ZZZZZZ	1.00	0007																										
ZZZZZZ	1.00	0014																										
ZZZZZZ	1.00	0020																										
ZZZZZZ	1.00	0027																										
ZZZZZZ	1.00	0035																										

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/29/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F E	P B	M G	M N	H G	N I	K I	S E	A E	A G	N A	T L	V L	Z N	C N			
ZZZZZZ	1.00	0047																													
ZZZZZZ	1.00	0053																													
ZZZZZZ	1.00	0059																													
ZZZZZZ	1.00	0106																													
ZZZZZZ	1.00	0112																													
ZZZZZZ	1.00	0119																													
ZZZZZZ	1.00	0125																													
ZZZZZZ	1.00	0131																													
ZZZZZZ	1.00	0138																													
ZZZZZZ	1.00	0144																													
ZZZZZZ	1.00	0154																													
ZZZZZZ	1.00	0205																													
ZZZZZZ	1.00	0212																													
ZZZZZZ	1.00	0218																													
ZZZZZZ	1.00	0224																													
ZZZZZZ	1.00	0231																													
ZZZZZZ	1.00	0237																													
ZZZZZZ	1.00	0244																													
ZZZZZZ	1.00	0250																													
ZZZZZZ	1.00	0256																													
ZZZZZZ	1.00	0303																													
ZZZZZZ	1.00	0309																													
ZZZZZZ	1.00	0316																													
ZZZZZZ	1.00	0322																													
ZZZZZZ	5.00	0330																													
ZZZZZZ	1.00	0338																													
ZZZZZZ	1.00	0349																													
ZZZZZZ	1.00	0356																													
ZZZZZZ	1.00	0402																													
ZZZZZZ	1.00	0409																													
ZZZZZZ	1.00	0415																													
ZZZZZZ	1.00	0421																													
ZZZZZZ	5.00	0428																													
ZZZZZZ	1.00	0434																													
ZZZZZZ	1.00	0441																													
ZZZZZZ	1.00	0447																													
ZZZZZZ	1.00	0453																													
CCV2	1.00	0502																													

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/29/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
CCB2	1.00	0513												X																	
ZZZZZZ	1.00	0520																													
ZZZZZZ	1.00	0526																													
ZZZZZZ	1.00	0535																													
ZZZZZZ	1.00	0541																													
ZZZZZZ	1.00	0549																													
ZZZZZZ	1.00	0555																													
ZZZZZZ	1.00	0602																													
ZZZZZZ	1.00	0611																													
ZZZZZZ	1.00	0617																													
ZZZZZZ	1.00	0623																													
ZZZZZZ	1.00	0630																													
ZZZZZZ	1.00	0636																													
ZZZZZZ	5.00	0644																													
ZZZZZZ	1.00	0650																													
01GW2201	1.00	0657												X																	
CCV3	1.00	0707												X																	
CCB3	1.00	0718												X																	

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/30/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																					
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	P B	M G	M N	H G	N I	K E	S G	A L	N T	T V	V N	Z N	C N
ZZZZZZ	1.00	1320																							
ZZZZZZ	5.00	1328																							
ZZZZZZ	1.00	1334																							
ZZZZZZ	1.00	1340																							
ZZZZZZ	1.00	1347																							
ZZZZZZ	1.00	1353																							
ZZZZZZ	1.00	1400																							
ZZZZZZ	1.00	1406																							
ZZZZZZ	1.00	1415																							
ZZZZZZ	1.00	1426																							
ZZZZZZ	1.00	1432																							
ZZZZZZ	1.00	1439																							
ZZZZZZ	1.00	1445																							
ZZZZZZ	1.00	1451																							
ZZZZZZ	1.00	1458																							
ZZZZZZ	1.00	1504																							
ZZZZZZ	1.00	1510																							
ZZZZZZ	1.00	1517																							
ZZZZZZ	1.00	1524																							
ZZZZZZ	1.00	1533																							
ZZZZZZ	1.00	1544																							
ZZZZZZ	1.00	1551																							
ZZZZZZ	1.00	1557																							
ZZZZZZ	1.00	1606																							
ZZZZZZ	1.00	1612																							
ZZZZZZ	1.00	1618																							
ZZZZZZ	1.00	1625																							
ZZZZZZ	1.00	1631																							
ZZZZZZ	1.00	1638																							
ZZZZZZ	1.00	1644																							
ZZZZZZ	1.00	1657																							
ZZZZZZ	1.00	1703																							
ZZZZZZ	1.00	1710																							
ZZZZZZ	1.00	1716																							
ZZZZZZ	1.00	1722																							
ZZZZZZ	5.00	1730																							
ZZZZZZ	1.00	1736																							
ZZZZZZ	1.00	1745																							

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/30/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N					
ZZZZZZ	1.00	1756																													
ZZZZZZ	1.00	1803																													
ZZZZZZ	1.00	1809																													
ZZZZZZ	1.00	1815																													
ZZZZZZ	1.00	1822																													
ZZZZZZ	1.00	1828																													
ZZZZZZ	1.00	1834																													
ZZZZZZ	1.00	1841																													
ZZZZZZ	1.00	1847																													
ZZZZZZ	1.00	1854																													
ZZZZZZ	1.00	1900																													
CCV2	1.00	1909		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB2	1.00	1920		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
PBW092908B	1.00	1926		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
LCSW092908B	1.00	1933		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ	1.00	1941																													
ZZZZZZ	1.00	1948																													
ZZZZZZ	1.00	1954																													
ZZZZZZ	1.00	2000																													
ZZZZZZ	1.00	2007																													
ZZZZZZ	1.00	2013																													
ZZZZZZ	1.00	2020																													
ZZZZZZ	1.00	2026																													
ZZZZZZ	1.00	2032																													
ZZZZZZ	1.00	2039																													
CCV3	1.00	2048		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB3	1.00	2059		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ	1.00	2105																													
ZZZZZZ	1.00	2111																													
ZZZZZZ	1.00	2118																													
ZZZZZZ	1.00	2124																													
ZZZZZZ	1.00	2131																													
ZZZZZZ	1.00	2137																													
ZZZZZZ	1.00	2143																													
ZZZZZZ	1.00	2150																													
ZZZZZZ	1.00	2156																													
ZZZZZZ	1.00	2203																													
ZZZZZZ	1.00	2209																													

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/30/08 End Date: 09/30/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	5.00	2216																													
01RB091108	1.00	2223		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV4	1.00	2232		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB4	1.00	2243		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: PE CVAA Method: AV
 Start Date: 09/18/08 End Date: 09/18/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N		
S0	1.00	1034																									X		
S0.20	1.00	1035																									X		
S0.50	1.00	1036																									X		
S1.0	1.00	1037																									X		
S2.0	1.00	1038																									X		
S4.0	1.00	1040																									X		
S6.0	1.00	1041																									X		
S10.0	1.00	1042																									X		
ICV3	1.00	1052																									X		
ICB3	1.00	1053																									X		
LCSS091708A	1.00	1054																									X		
PBS091708A	1.00	1056																									X		
ZZZZZZ	1.00	1057																											
ZZZZZZ	1.00	1058																											
ZZZZZZ	1.00	1059																											
ZZZZZZ	1.00	1100																											
01SS0701	1.00	1102																									X		
01SS0701S	1.00	1103																									X		
01SS0701SD	1.00	1104																									X		
01SS0801	1.00	1105																									X		
CCV1	1.00	1106																									X		
CCB1	1.00	1108																									X		
CCV2	1.00	1134																									X		
CCB2	1.00	1135																									X		
01SS0901	1.00	1136																									X		
01SS1001	1.00	1137																									X		
01SS1101	1.00	1138																									X		
ZZZZZZ	1.00	1140																											
ZZZZZZ	1.00	1141																											
ZZZZZZ	1.00	1142																											
ZZZZZZ	1.00	1143																											
CCV3	1.00	1144																									X		
CCB3	1.00	1146																									X		
ZZZZZZ	1.00	1159																											
ZZZZZZ	1.00	1201																											
ZZZZZZ	1.00	1202																											
CCV4	1.00	1203																									X		
CCB4	1.00	1204																									X		

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 09/12/08 End Date: 09/12/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F U	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N				
S1000	1.00	1411																										X			
S500	1.00	1412																										X			
S200	1.00	1414																										X			
S100	1.00	1415																										X			
S20	1.00	1416																										X			
S10	1.00	1417																										X			
S5.0	1.00	1418																										X			
S0	1.00	1419																										X			
ICV1	1.00	1420																										X			
ICB1	1.00	1421																										X			
ZZZZZZ	1.00	1423																													
ZZZZZZ	1.00	1424																													
ZZZZZZ	1.00	1425																													
ZZZZZZ	1.00	1426																													
ZZZZZZ	1.00	1427																													
ZZZZZZ	1.00	1428																													
ZZZZZZ	1.00	1429																													
PBW091208	1.00	1430																										X			
LCSW091208	1.00	1432																										X			
ZZZZZZ	1.00	1433																													
ZZZZZZ	1.00	1434																													
ZZZZZZ	1.00	1435																													
ZZZZZZ	1.00	1436																													
ZZZZZZ	1.00	1437																													
ZZZZZZ	1.00	1438																													
01GW2301	1.00	1439																										X			
01GW2201	1.00	1440																										X			
ZZZZZZ	1.00	1442																													
ZZZZZZ	1.00	1443																													
01GW2501	1.00	1444																										X			
01GW2401	1.00	1445																										X			
01GW2701	1.00	1446																										X			
CCV1	1.00	1447																										X			
CCB1	1.00	1448																										X			
01GW2601	1.00	1449																										X			
01RB090908	1.00	1451																										X			
ZZZZZZ	1.00	1452																													
ZZZZZZ	1.00	1453																													

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 09/12/08 End Date: 09/12/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T A	V L	Z N	C N				
ZZZZZZ	1.00	1454																													
ZZZZZZ	1.00	1455																													
ZZZZZZ	1.00	1456																													
ZZZZZZ	1.00	1457																													
ZZZZZZ	1.00	1458																													
ZZZZZZ	1.00	1500																													
01GW2201S	1.00	1501																										X			
01GW2201SD	1.00	1502																										X			
CCV2	1.00	1503																										X			
CCB2	1.00	1504																										X			

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 09/18/08 End Date: 09/18/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N		
S1000	1.00	1523																										X	
S500	1.00	1524																										X	
S200	1.00	1525																										X	
S100	1.00	1527																										X	
S20	1.00	1528																										X	
S10	1.00	1529																										X	
S5.0	1.00	1530																										X	
S0	1.00	1531																										X	
ICV2	1.00	1532																										X	
ICB2	1.00	1533																										X	
ZZZZZZ	1.00	1534																											
ZZZZZZ	1.00	1535																											
ZZZZZZ	1.00	1537																											
ZZZZZZ	1.00	1538																											
ZZZZZZ	1.00	1539																											
ZZZZZZ	1.00	1540																											
PBW091808W	1.00	1541																										X	
LCSW091808W	1.00	1542																										X	
PBS091808S	1.00	1543																										X	
LCSS091808S	1.00	1544																										X	
ZZZZZZ	1.00	1546																											
01RB091108	1.00	1547																										X	
01SS0701	1.00	1548																										X	
01SS0701S	1.00	1549																										X	
01SS0701SD	1.00	1550																										X	
01SS0801	1.00	1551																										X	
01SS0901	1.00	1552																										X	
01SS1001	1.00	1553																										X	
01SS1101	1.00	1554																										X	
01SS1201	1.00	1556																										X	
ZZZZZZ	1.00	1557																											
ZZZZZZ	1.00	1558																											
CCV1	1.00	1559																										X	
CCB1	1.00	1600																										X	

SRV: 0809127-03 = 01550701 [Cr] = 7.9 mg/kg as reported by ene lab.

Analysis Report

09/22/08 03:41:15 PM

page 1

Method: TESTING Sample Name: 0809127-03,TS,TETRA Operator: RGB

Run Time: 09/22/08 15:34:59

Comment: 200.7 / 6010B

Mode: CONC Corr. Factor: 1

$35.487 \mu\text{g} \cdot \frac{0.2\text{L}}{0.99\text{g}} \cdot \frac{1000\mu\text{g}}{1\text{kg}} \cdot \frac{1\text{mg}}{1000\mu\text{g}} = \frac{7.17\text{mg}}{\text{kg}} / 0.91 = 7.9 \text{ mg/kg}$

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppm
Avg	.13509	47226.	17.561	-2.5489	57.593	.66085	.74805
SDev	.09965	101.	1.674	.1194	.077	.01423	.00165
%RSD	73.762	.21375	9.5341	4.6855	.13426	2.1530	.22030

#1	.15741	47283.	16.093	-2.6796	57.551	.67706	.74982
#2	.22169	47286.	19.385	-2.5216	57.682	.65507	.74778
#3	.02618	47110.	17.206	-2.4455	57.545	.65043	.74656

Errors	LC Pass						
High	2000.0	500000.	10000.	50000.	5000.0	10000.	100.00
Low	-1.0000	-50.000	-3.0000	-10.000	-5.0000	-1.0000	-1.0000

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790
Units	ppb	ppb	ppb	ppb	ppb	ppm	ppm
Avg	-.20417	2.5955	35.487	12.359	22662.	.64297	1.2315
SDev	.03004	.3807	.264	.163	26.	.00525	.0016
%RSD	14.712	14.669	.74446	1.3170	.11470	.81612	.13212

#1	-.18432	2.6013	35.791	12.419	22689.	.63700	1.2319
#2	-.23873	2.2120	35.362	12.483	22660.	.64505	1.2329
#3	-.18947	2.9733	35.308	12.175	22637.	.64685	1.2297

Errors	LC Pass						
High	10000.	10000.	10000.	10000.	500000.	100.00	500.00
Low	-1.0000	-5.0000	-2.0000	-5.0000	-30.000	-1.0000	-1.0000

Elem	Mn2576	Mo2020	Na3302	Ni2316	Pb2203	Se1960	Sb2068
Units	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Avg	37.570	1.1583	.30384	16.683	19.740	1.3954	1.3862
SDev	.089	.5580	.02572	.207	.932	.8938	3.3431
%RSD	.23717	48.171	8.4641	1.2424	4.7203	64.056	241.18

#1	37.631	.94231	.31583	16.763	18.666	2.2144	-2.3690
#2	37.612	.74067	.32138	16.447	20.338	.44194	2.4886
#3	37.468	1.7921	.27432	16.837	20.215	1.5299	4.0389

Errors	LC Pass						
High	10000.	10000.	100.00	10000.	10000.	10000.	10000.
Low	-3.0000	-5.0000	-1.0000	-5.0000	-3.0000	-3.0000	-10.000

Elem	Sn1899	Ti3349	Tl1908	V_2924	Zn2062	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	12.840	330.19	.02955	59.687	39.292	17.819	20.698
SDev	.724	.62	2.9302	.216	.627	1.092	1.115
%RSD	5.6386	.18836	9916.8	.36115	1.5957	6.1272	5.3884

#1	12.072	330.43	.81557	59.830	38.779	17.052	19.471
#2	13.510	330.66	L-3.2135	59.439	39.991	19.069	20.971
#3	12.937	329.49	2.4865	59.793	39.107	17.337	21.651

Errors	LC Pass	NOCHECK	NOCHECK				
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Mercury

Client:

TETRA

Curve Date: 09/18/08 Curve age OK

Correlation: 0.99982 Corr. OK

Slope: 0.009662
Intercept: 0.001306

RL= 0.20 ug/l for H2O and TCLP
0.033 mg/kg (using 0.30 g) for soils or other

MDL= 0.08 ug/L WATER AND 0.013 mg/Kg SOIL

QC Criteria: Method Blank < 1/2 RL for CORP Samples

LCS = ±20% of True Value

CCB =<MDL

Analysis Time	Curve Data	
	Conc.(ug/L)	Pk Height
10:34:18	0	0.0008
10:35:12	0.2	0.0029
10:36:06	0.5	0.0061
10:37:23	1	0.0111
10:38:41	2	0.0204
10:40:00	4	0.0409
10:41:20	6	0.0601
10:42:42	10	0.0971

Empirical Laboratories

Digestion Date: 09/17/08

Digestion by: KH

Analysis Date: 09/18/08

Analyst: KH

Analyst Authorization:

Method#: 245.1/7470A for H2O

7471A for snits

Method Type: Cold Vapor

SLV: 080912707 = 0.052 mg/kg as reported by the lab

Concentration (ug/L) = (Peak Height - intercept)/slope * dilution

Conversion for soils from concentration (ug/L) to mg/kg (wet weight) = concentration (ug/L) * final volume (mL)/initial weight (g) * 1L/1000mL * 1000g/1kg * 1g/1000mg

Lab. #	Client	Waste Description	T.V. (ug/L) (mg/kg)	Analysis Time HH:MM (Military)	Matrix Type	Digestion		Analysis		Dilution	Peak Height	[Hg] ug/L	[Hg] mg/kg	Recovery %	Control Limits		RPD	Method
						Initial Sample Volume	Final Sample Volume (mL)	Initial Sample Volume (mL)	Final Sample Volume (mL)						Low Limit %	High Limit %		
ICV		ISA080195	4.0000	10:52:40	H2O	50.00	50.0	50.0	50.0	1.00	0.0398	3.9883		99.71	90.0	110.0		7471A
ICB		DI H2O		10:53:54	H2O	50.00	50.0	50.0	50.0	1.00	0.0008	-0.0566						7471A
LCSS091708A		ISA080195	0.3333	10:54:47	SOIL	0.30	50.0	50.0	50.0	1.00	0.0221	2.1567	0.35944	107.84	80.0	120.0		7471A
PBS091708A		DI H2O		10:56:04	SOIL	0.30	50.0	50.0	50.0	1.00	0.0008	-0.0547	-0.00912					7471A
0809145-01				10:56:56	SOIL	0.32	50.0	50.0	50.0	1.00	0.4337	44.7533	6.99270					7471A
0809146-01				10:58:15	SOIL	0.33	50.0	50.0	50.0	1.00	0.0067	0.5627	0.08525					7471A
0809146-02				10:59:34	SOIL	0.31	50.0	50.0	50.0	1.00	0.0061	0.4957	0.07996					7471A
0809146-03				11:00:54	SOIL	0.31	50.0	50.0	50.0	1.00	0.0143	1.3487	0.21753					7471A
0809127-03	TETRA			11:02:12	SOIL	0.33	50.0	50.0	50.0	1.00	0.0025	0.1202	0.01821					7471A
0809127-03MS	TETRA		0.3125	11:03:25	SOIL	0.32	50.0	50.0	50.0	1.00	0.0230	2.2408	0.35013	112.04	80.0	120.0	1.8	7471A
0809127-03MSD	TETRA		0.3313	11:04:40	SOIL	0.32	50.0	50.0	50.0	1.00	0.0233	2.2805	0.35632	107.57	80.0	120.0		7471A
0809127-04	TETRA			11:05:54	SOIL	0.31	50.0	50.0	50.0	1.00	0.0013	-0.0004	-0.00007					7471A
CCV		ISA080069	4.0000	11:06:47	H2O	50.00	50.0	50.0	50.0	1.00	0.0399	3.9946		99.86				7471A
CCB		DI H2O		11:08:02	H2O	50.00	50.0	50.0	50.0	1.00	0.0007	-0.0627						7471A
CCV		ISA080069	4.0000	11:34:09	H2O	50.00	50.0	50.0	50.0	1.00	0.0428	4.2935		107.34	85.0	115.0		7471A
CCB		DI H2O		11:35:24	H2O	50.00	50.0	50.0	50.0	1.00	0.0006	-0.0693						7471A
0809127-05	TETRA			11:36:16	SOIL	0.33	50.0	50.0	50.0	1.00	0.0016	0.0339	0.00513					7471A
0809127-06	TETRA			11:37:33	SOIL	0.32	50.0	50.0	50.0	1.00	0.0019	0.0656	0.01025					7471A
0809127-07	TETRA			11:38:50	SOIL	0.35	50.0	50.0	50.0	1.00	0.0041	0.2943	0.04204					7471A
0809127-08	TETRA			11:40:07	SOIL	0.29	50.0	50.0	50.0	1.00	0.0002	-0.1183	-0.02040					7471A
0809132-07	TETRA			11:41:00	SOIL	0.30	50.0	50.0	50.0	1.00	0.1134	11.6014	1.93354					7471A
0809132-07MS	TETRA		0.3125	11:42:19	SOIL	0.30	50.0	50.0	50.0	1.00	0.1424	14.6060	2.43434	778.99				7471A
0809132-07MSD	TETRA		0.3125	11:43:37	SOIL	0.30	50.0	50.0	50.0	1.00	0.5108	52.7304	8.78985	2842.75				7471A
CCV		ISA080069	2	11:44:57	H2O	50.00	50.0	50.0	50.0	1.00	0.0202	1.9523		97.62	85.0	115		7471A
CCB		DI H2O		11:46:16	H2O	50.00	50.0	50.0	50.0	1.00	0.0008	-0.0532						7471A
0809132-07				11:59:47	SOIL	0.30	50.0	50.0	50.0	1.00	0.0678	6.8852	1.14753					7471A
0809132-07MS				12:01:01	SOIL	0.30	50.0	50.0	50.0	1.00	0.1045	10.6809	1.78015					7471A
0809132-07MSD				12:02:15	SOIL	0.30	50.0	50.0	50.0	1.00	0.0556	5.6248	0.93746					7471A
CCV		ISA080069	2	12:03:30	H2O	50.00	50.0	50.0	50.0	1.00	0.0202	1.9606		98.03	85.0	115		7471A
CCB		DI H2O		12:04:44	H2O	50.00	50.0	50.0	50.0	1.00	0.0008	-0.0568						7471A
0809127-08	TETRA			12:29:37	SOIL	0.29	50.0	50.0	50.0	1.00	0.0021	0.0863	0.01488					7471A

Kraus, Matthew

From: Marcia McGinnity [MMcGinnity@EmpirLabs.com]
Sent: Tuesday, November 11, 2008 8:28 AM
To: Kraus, Matthew
Subject: RE: TTNUS SDG: GULFPORT-011
Attachments: GULFPORT-011rev20081111(MISC).TXT

Matt - I'm sorry for the delay in responding - we had a quarterly meeting yesterday. Attached is the revised EDD file for Cyanide results. The "U" qualifiers were missing for all the non-detect cyanide results. As for the calculation - what is not clear from the worksheet is that the soil worksheet value is in mg/kg assuming a 1g sample aliquot. This correction factor is reflected on the worksheet under the column MDF (Manual Dilution Factor). The only thing required to finalize the concentration is correcting for the actual extracted sample weight and the percent moisture. Therefore, the calculation for the example given would be:

$(0.03285\text{mg/kg} \cdot 1\text{g}) / (1.03\text{g} \cdot 0.76) = 0.042\text{mg/kg}$ or 0.16mg/kg U .

I apologize for the difficulties encountered with the cyanide data. I have been assured that the worksheet labeling will be clarified for the soils. Please let me know if there is anything else we can provide.

PLEASE NOTE: Our laboratory will be closed on Thursday, November 27th and Friday November 28th for the Thanksgiving Holiday.

Thanks,
Marcia

-----Original Message-----

From: Kraus, Matthew [mailto:Matthew.Kraus@tetrattech.com]
Sent: Friday, November 07, 2008 4:45 PM
To: MMcGinnity@EmpirLabs.com
Subject: TTNUS SDG: GULFPORT-011

Hi Marcia,

I performed a sample result verification for CN using raw data and calculated a different result than your laboratory. Please see the attached documents and contact me ASAP to resolve this issue. Thank you for your time and I hope you have a great weekend.

Matthew D. Kraus, EPI | Environmental Chemist
Direct: 412.921.8729 | Main: 412.921.7090 | Fax: 412.921.4040
matthew.kraus@tetrattech.com

Tetra Tech NUS, Inc. | Chemistry & Toxicology Department
661 Andersen Drive Foster Plaza 7 | Pittsburgh, PA 15220 | www.tetrattech.com

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Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO: R. FISHER **DATE:** DECEMBER 11, 2008
FROM: JOSEPH KALINYAK **COPIES:** DV FILE
SUBJECT: ORGANIC DATA VALIDATION – VOC/SVOC/PEST/PCB/HERB
NCBC GULFPORT CTO 0065
SAMPLE DELIVERY GROUP (SDG) GULFPORT – 011

SAMPLES: 10/Aqueous/VOC

01GW2201	01GW2301	01GW2401
01GW2501	01GW2601	01GW2701
01RB090908	01RB091108	01TB090908
01TB091108		

8/Aqueous/SVOC/PEST/PCB/HERB

01GW2201	01GW2301	01GW2401
01GW2501	01GW2601	01GW2701
01RB090908	01RB091108	

6/Soil/VOC/SVOC/PEST/PCB/HERB

01SS0701	01SS0801	01SS0901
01SS1001	01SS1101	01SS1201

Overview

The sample set for CTO 0065, NCBC Gulfport, SDG Gulfport-011, consists of two (2) trip blanks, two (2) rinsate blanks, six (6) aqueous environmental samples and six (6) soil environmental samples. There were no field duplicates included in this sample delivery group.

All samples were analyzed for volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), organochloride pesticides (PEST), polychlorinated biphenyls (PCB), and herbicides (HERB). The trip blanks were analyzed for VOCs only. The samples were collected by Tetra Tech NUS on September 9 and September 11, 2008 and analyzed by Empirical Laboratories, LLC. All analyses were conducted in accordance with Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria using USEPA SW-846 Methods 8260B, 8270C, 8081A, 8082 and 8151B analysis and reporting protocols. The data contained in this SDG were validated with regard to the following parameters:

- * ● Data completeness
- Hold times
- * ● GC/MS Tuning
- Initial/continuing calibrations
- Laboratory method blank results
- Surrogate Recoveries
- Blank Spike/Blank Spike Duplicate Results
- Matrix Spike/Matrix Spike Duplicate Results
- * ● Internal Standards
- * ● Compound Quantitation
- * ● Compound Identification
- * ● Detection Limits

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The symbol (*) indicates that quality control criteria were met for this parameter. Problems affecting data quality are discussed below; documentation supporting these findings is presented in Appendix C. Qualified Analytical results are presented in Appendix A. Results as reported by the laboratory are presented in Appendix B.

Volatiles - VOC

The following compounds were detected in the method blanks and rinsate blanks with the associated samples in SDG Gulfport-011:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Blank Action Level</u>
Methylene chloride ⁽¹⁾	1.00 µg/kg	10.0 µg/kg
Acetone ⁽²⁾	3.1 µg/l (µg/kg)	31.0 µg/l (µg/kg)
Methylene chloride ⁽³⁾	0.30 µg/l	10.0 µg/l

⁽¹⁾ Maximum concentration present in the laboratory method blank affecting soil samples.

⁽²⁾ Maximum concentration present in the rinsate blank 01RB091108 affecting all SDG samples.

⁽³⁾ Maximum concentration present in the laboratory method blank affecting the aqueous samples.

An action level of 10X the maximum contaminant concentration for acetone and methylene chloride was established to evaluate laboratory contamination. Dilution factors and sample aliquots and percent solids for soils, if applicable, were taken into consideration during the application of all action levels. The positive results for acetone and methylene chloride below the blank action level were qualified as non-detected, (U). The concentrations listed in parentheses were for soil samples.

The continuing calibration %D was greater than 25% the quality control limit for 1,2,4-trichlorobenzene for instrument VOA1 on 09/15/08 @ 09:38 affecting samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101, and 01SS1201. The non-detected results reported for 1,2,4-trichlorobenzene for the associated samples were qualified as estimated, (UJ).

The continuing calibration %D was greater than 25% the quality control limit for carbon disulfide for instrument VOA3 on 09/12/08 @ 10:21 affecting samples 01GW2201, 01GW2301, 01GW2401, 01GW2501, 01GW2601, 01GW2701, 01RB090908, and TB090908. The non-detected results reported for carbon disulfide for the associated samples were qualified as estimated, (UJ).

The continuing calibration %D was greater than 25% the quality control limit for bromoform, carbon disulfide, and methyl acetate for instrument VOA3 on 09/15/08 @ 09:53 affecting samples 01TB091108 and 01RB091108. The non-detected results reported for bromoform, carbon disulfide, and methyl acetate for the associated samples were qualified as estimated, (UJ).

A laboratory control sample (LCS) / laboratory control sample duplicate (LCSD) and the matrix spike (MS) / matrix spike duplicate (MSD) for sample 01GW2201 had % RPDs above the QC limits for bromomethane. No action was taken because the LCS/LCSD and MS/MSD % recoveries for bromomethane were within the quality control limits and all samples results were non-detected for bromomethane.

The MS/MSD associated with sample 01SS0701 had % recoveries below the quality control limit for a number of compounds for both the MS and the MSD. The laboratory narrative suggests the problem was due to sample matrix interference. On this basis sample 01SS0701 data was qualified for those compounds for which both the MS and MSD % recovery QC limit non-compliances were less than the quality control limit. Positive and non-detected results for benzene, bromochloromethane, chlorobenzene, dibromochloromethane, 1,2-dibromoethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, cis-1,3-

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dichloropropene, trans-1,3-dichloropropene, ethylbenzene, isopropylbenzene, methyl cyclohexane, styrene, tetrachloroethene, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, trichloroethene, and total xylene for sample 01SS0701 were qualified estimated, (J) and (UJ), respectively.

Semi-Volatiles - SVOC

The following compounds were detected in the method blanks with the associated soil samples in SDG Gulfport-011:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Blank Action Level</u>
Bis(2-ethylhexyl)phthalate ⁽¹⁾	130 µg/kg	1300 µg/kg
Di-n-butylphthalate ⁽¹⁾	49.0 µg/kg	490 µg/kg

⁽¹⁾ Maximum concentration present in the laboratory method preparation blank SBLK0923BS1 affecting SDG samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101, and 01SS1201.

An action level of 10X the maximum contaminant concentration for the common laboratory contaminant phthalates was established to evaluate laboratory contamination. Dilution factors, sample aliquots, and % solids were taken into consideration during the application of all action levels. The positive results for Di-n-butylphthalate and bis(2-ethylhexyl)phthalate below the blank action level were qualified as non-detected, (U).

The calibration verification %D was greater than the 25% quality control limit for benzaldehyde and bis(2-chloroethyl)ether and the RRF was <0.05 the quality control limit for atrazine for instrument BNA1 on 09/18/08 @ 08:30. The affected samples 01GW2201, 01GW2301, 01GW2401, 01GW2501, 01GW2601, 01GW2701, 01RB090908, and 01RB091108 had non-detected results for benzaldehyde and bis(2-chloroethyl)ether which were qualified estimated, (UJ). The aforementioned samples had non-detected results for atrazine which were qualified rejected, (UR).

The calibration verification %D was greater than the 25% quality control limit for bis(2-chloroethyl)ether and hexachlorocyclopentadiene for instrument BNA1 on 09/24/08 @ 10:43. The affected samples 01SS0901, 01SS1001, 01SS1101, and 01SS1201 had non-detected results for bis(2-chloroethyl)ether and hexachlorocyclopentadiene which were qualified estimated, (UJ).

The laboratory control sample (LCS) SBLK0915BW1 had a % recovery less than the quality control limit for caprolactam. Non-detected results for the associated samples 01GW2201, 01GW2301, 01GW2401, 01GW2501, 01GW2601, 01GW2701, 01RB090908, and 01RB091108 were qualified estimated, (UJ).

The laboratory control sample (LCS) SBLK0923BS1 had a % recovery greater than the quality control limit for caprolactam. Positive results for the associated samples 01SS0901, 01SS1101, and 01SS1201 were qualified estimated, (J). Non-detected results for the associated samples 01SS0701, 01SS0801, and 01SS1001 were not qualified.

The matrix spike (MS) and matrix spike duplicate (MSD) performed on sample 01GW2201 had a % recovery less than the quality control limit for caprolactam. The sample caprolactam non-detected result was qualified estimated, (UJ).

The MS/MSD performed on sample 01GW2201 had a % RPD greater than the quality control limit for 4-nitrophenol. The associated sample non-detected result for 4-nitrophenol was not qualified as both the MS and MSD % recoveries were within the quality control limits for 4-nitrophenol.

The matrix spike duplicate (MSD) performed on sample 01SS0701 had a % recovery less than the quality control limit for acetophenone. The MSD %RPDs were less than the quality control limit for acetophenone

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and benzaldehyde. No action was taken on this basis because the MS for the sample had a % recovery within the quality control limit for acetophenone and both the MS and MSD for the sample had % recoveries within the quality control limit for benzaldehyde.

Pesticides/PCBs

The soil samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101, and 01SS1201 were extracted 22 days after date sampled exceeding the quality control limit of 14 days due to the laboratory not logging in samples upon receipt. All associated samples positive results and non-detected results for pesticides and PCBs were qualified estimated, (J) and (UJ), respectively.

The continuing calibration average %D for PCB-1016 was greater than 20% the quality control limit for the secondary GC column MR-2 on instrument ECD3 on 09/29/08 @ 23:20 and 09/30/08 @ 03:38. No action was necessary since the primary GC column MR-1 had a within the quality control limit %D and all samples had non-detected aroclor/PCB results.

The continuing calibration %D was greater than 15% the quality control limit for methoxychlor for the primary GC column MR-1 on instrument ECD3 on 09/30/08 @ 03:20. The continuing calibration %D was greater than 15% the quality control limit for 4,4'-DDD and endrin aldehyde for the secondary GC column MR-2 on instrument ECD3 on 09/29/08 @ 18:45. The continuing calibration %D was greater than 15% the quality control limit for alpha-BHC for the primary GC column MR-1 on 10/07/08 @ 20:58 and on 10/08/08 @ 01:33 on instrument ECD3. The alternate GC column in each case had within the QC limit %Ds so no data qualification was necessary for the affected samples 01GW2201, 01GW2301, 01GW2401, 01GW2501, 01GW2601, 01GW2701, 01RB090908, and 01RB091108.

The continuing calibration %D was greater than 15% the quality control limit for 4,4'-DDT for the primary GC column MR-1 on instrument ECD3 on 10/08/08 @ 01:33 and the secondary GC column MR-2 on instrument on 10/08/08 @ 01:33 affecting samples 01GW2201, 01GW2301, 01GW2401, 01GW2501, 01GW2601, 01GW2701, 01RB090908, and 01RB091108. The positive and non-detected results for the aforementioned samples were qualified estimated, (J) and (UJ), respectively.

The MSD performed on sample 01SS0701 had a % recovery greater than the quality control limit for alpha-BHC. No corrective action was necessary since the MS and the %RPD were within the quality control limits.

The PEST %D between the primary and secondary GC columns exceeded 100% for the analytes as listed below. Associated sample positive detections for single component compounds >100% D were qualified rejected, (R), and detects >25% and <100% D were qualified estimated, (J). The higher result of the two GC columns was used in the final report except as where noted.

<u>Sample</u>	<u>Analyte</u>	<u>%D</u>	<u>Qualification</u>
01GW2401	Beta-BHC	152.4	R*
01GW2601	Beta-BHC	139.8	R*
01RB090908	Beta-BHC	153.3	R*
01RB091108	Aldrin	109.5	R*
	Beta-BHC	96.4	J*
	Delta-BHC	34.8	J
	Gamma-BHC	36.8	J
01SS0701	Alpha-chlordane	36.3	J
01SS0801	Heptachlor epoxide	149.3	R*

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01SS1001	4,4'-DDD	145.3	R*
	4,4'-DDE	57.2	J
	4,4'-DDT	81.3	J*
	Endosulfan II	27.5	J
	Endrin aldehyde	36.8	J
	Gamma-chlordane	84.9	J
	Heptachlor epoxide	67.5	J
	Methoxychlor	89.1	J
01SS1101	Endosulfan II	51.0	J
	Heptachlor epoxide	27.1	J

*Lower result used due to matrix interference.

Herbicides

The soil samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101, and 01SS1201 were extracted 22 days after date sampled exceeding the quality control limit of 14 days due to the laboratory not logging in samples upon receipt. All associated samples positive results and non-detected results for herbicides were qualified estimated, (J) and (UJ), respectively.

The initial calibration %RSD was greater than the 15% quality control limit for 2,4-D on the secondary GC column RTX-CLP2 for instrument ECD2 on 09/28/08. No action was taken since the primary GC column RTX-CLP1 had a %RSD within the quality control limits and all associated samples had non-detected results for herbicide 2,4-D.

The initial calibration %RSD was greater than the 15% quality control limit for 2,4-D on the secondary GC column RTX-CLP2 for instrument ECD2 on 10/07/08. No action was taken since the primary GC column RTX-CLP1 had a %RSD within the quality control limits and all associated samples had non-detected results for herbicide 2,4-D.

The % recovery was greater than the quality control limit for the surrogate DCAA for soil samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101, and 01SS1201 on the secondary GC column RTX-CLP2 for instrument ECD2 on 10/07/08. Additionally the surrogate DCAA exceeded the retention time window of +/- 0.03 on the secondary GC column RTX-CLP2 on instrument ECD2 on 10/07/08 for samples 01SS0801, 01SS1101, and 01SS1201. Both of these quality control exceedances were attributed to matrix effects caused by the soil samples. No action was taken for the non-detected results due to these issues since the primary GC column RTX-CLP1 had satisfactory quality control performance. The positive result for 2,4,5-T for sample 01SS0801 was not qualified as the result was reported from the satisfactory primary GC column. The positive results for samples 01SS1001 and 01SS1201 were qualified estimated, (J), as these sample results were reported from the secondary GC column.

Notes

Positive results reported below the quantitation limit but above the method detection limit were qualified as estimated, J.

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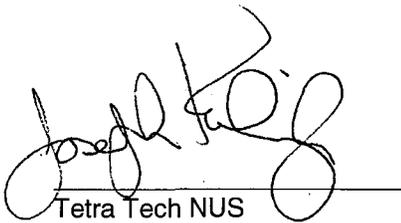
Executive Summary

Laboratory Performance: Methylene chloride and acetone were detected in the VOC field blank. Continuing calibration %Ds affected sample data qualifications in the VOC fraction. Bis(2-ethylhexyl)phthalate and din-n-butylphthalate were detected in the SVOC laboratory method blank. Continuing calibration %Ds exceeded the QC limits in the SVOC fraction. The SVOC fraction had both below and above the quality control limits % recoveries for the LCS and LCSD. The soil samples pesticide and herbicide fractions were extracted 22 days after date sampled exceeding the quality control limit of 14 days due to the laboratory not logging in samples upon receipt. The pesticide fraction had a continuing calibration %D which exceeded the quality control limit and % difference between GC columns which exceeded the quality control limits for a number of samples.

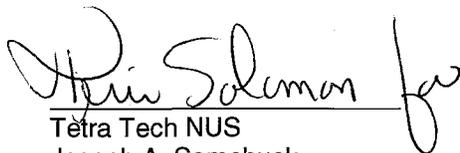
Other Factors Affecting Data Quality: A soil sample VOC had MS/MSD QC limit exceedances which appeared to be due to sample matrix interferences.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD Guidelines."



Tetra Tech NUS
Joseph Kalinyak
Chemist/Data Validator



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

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APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (i.e., base-time drifting)
- P = Uncertainty near detection limit ($< 2 \times \text{IDL}$ for inorganics and $< \text{CRQL}$ for organics)
- Q = Other problems (can encompass a number of issues; i.e. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $> 25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $< 30\%$
- Z = Uncertainty at 2 sigma deviation is less than sample activity

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OV

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 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROBENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROBENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.71	J	P

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 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

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 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

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CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	2.5		
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	1.3		
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROETHANE	0.14	U	
CHLOROETHENE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

PROJ_NO: 00700

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 units UG/L
 Pct_Solids
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 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
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1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROBENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROBENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

PROJ_NO: 00700

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 units UG/L
 Pct_Solids
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 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
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CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROENZENE	0.57	U	
1,2,4-TRICHLOROENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROENZENE	0.38	U	
1,4-DICHLOROENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

PROJ_NO: 00700

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 units UG/L
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 DUP_OF:

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROBENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROBENZENE	0.38	U	
1,4-DICHLOROBENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.47	J	P
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	3.1	J	P
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	UJ	C
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OV

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01TB090908
 samp_date 9/9/2008
 lab_id 0809091-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01TB090908
 samp_date 9/9/2008
 lab_id 0809091-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	0.36	UJ	C
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.24	J	P
TOTAL 1,2-DICHLOROETHENE	0.4	U	
TOTAL XYLENES	0.47	U	
TRANS-1,2-DICHLOROETHENE	0.15	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
VINYL CHLORIDE	0.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROENZENE	0.57	U	
1,2,4-TRICHLOROENZENE	0.57	U	
1,2-DIBROMO-3-CHLOROPROPANE	0.09	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROENZENE	0.11	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
1,3-DICHLOROENZENE	0.38	U	
1,4-DICHLOROENZENE	0.1	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	U	
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
DICHLORODIFLUOROMETHANE	0.25	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	
METHYL ACETATE	0.36	U	
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.23	U	
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL XYLENES	0.47	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
TRICHLOROFLUOROMETHANE	0.12	U	
VINYL CHLORIDE	0.2	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OV

nsample 01TB091108
 samp_date 9/11/2008
 lab_id 0809127-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01TB091108
 samp_date 9/11/2008
 lab_id 0809127-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.12	U	
1,1,2,2-TETRACHLOROETHANE	0.13	U	
1,1,2-TRICHLOROETHANE	0.1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.11	U	
1,1-DICHLOROETHANE	0.11	U	
1,1-DICHLOROETHENE	0.13	U	
1,2,3-TRICHLOROBENZENE	0.57	U	
1,2,4-TRICHLOROBENZENE	0.57	U	
1,2-DIBROMOETHANE	0.14	U	
1,2-DICHLOROETHANE	0.13	U	
1,2-DICHLOROPROPANE	0.11	U	
2-BUTANONE	1.4	U	
2-HEXANONE	0.18	U	
4-METHYL-2-PENTANONE	0.35	U	
ACETONE	1.7	U	
BENZENE	0.12	U	
BROMOCHLOROMETHANE	0.15	U	
BROMODICHLOROMETHANE	0.12	U	
BROMOFORM	0.13	UJ	C
BROMOMETHANE	0.13	U	
CARBON DISULFIDE	0.15	UJ	C
CARBON TETRACHLORIDE	0.11	U	
CHLOROBENZENE	0.1	U	
CHLORODIBROMOMETHANE	0.14	U	
CHLOROETHANE	0.14	U	
CHLOROFORM	0.13	U	
CHLOROMETHANE	0.28	U	
CIS-1,2-DICHLOROETHENE	0.14	U	
CIS-1,3-DICHLOROPROPENE	0.08	U	
CYCLOHEXANE	0.12	U	
ETHYLBENZENE	0.35	U	
ISOPROPYLBENZENE	0.11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	0.36	UJ	C
METHYL CYCLOHEXANE	0.12	U	
METHYL TERT-BUTYL ETHER	0.1	U	
METHYLENE CHLORIDE	0.24		
STYRENE	0.09	U	
TETRACHLOROETHENE	0.1	U	
TOLUENE	0.16	U	
TOTAL 1,2-DICHLOROETHENE	0.4	U	
TOTAL XYLENES	0.47	U	
TRANS-1,2-DICHLOROETHENE	0.15	U	
TRANS-1,3-DICHLOROPROPENE	0.12	U	
TRICHLOROETHENE	0.23	U	
VINYL CHLORIDE	0.2	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.36	U	
1,2,4,5-TETRACHLOROBENZENE	2.8	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.79	U	
2,4,5-TRICHLOROPHENOL	0.47	U	
2,4,6-TRICHLOROPHENOL	0.68	U	
2,4-DICHLOROPHENOL	0.41	U	
2,4-DIMETHYLPHENOL	0.66	U	
2,4-DINITROPHENOL	0.79	U	
2,4-DINITROTOLUENE	0.46	U	
2,6-DINITROTOLUENE	0.62	U	
2-CHLORONAPHTHALENE	0.54	U	
2-CHLOROPHENOL	0.55	U	
2-METHYLNAPHTHALENE	0.64	U	
2-METHYLPHENOL	0.78	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.69	U	
3,3'-DICHLOROBENZIDINE	0.83	U	
3-NITROANILINE	0.98	U	
4,6-DINITRO-2-METHYLPHENOL	0.69	U	
4-BROMOPHENYL PHENYL ETHER	0.53	U	
4-CHLORO-3-METHYLPHENOL	0.54	U	
4-CHLOROANILINE	0.89	U	
4-CHLOROPHENYL PHENYL ETHER	0.83	U	
4-METHYLPHENOL	0.72	U	
4-NITROANILINE	1.9	U	
4-NITROPHENOL	0.78	U	
ACENAPHTHENE	0.59	U	
ACENAPHTHYLENE	0.44	U	
ACETOPHENONE	0.7	U	
ANTHRACENE	0.72	U	
ATRAZINE	0.64	UR	C
BENZALDEHYDE	0.53	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.85	U	
BENZO(A)PYRENE	0.56	U	
BENZO(B)FLUORANTHENE	0.66	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.47	U	
BIS(2-CHLOROETHOXY)METHANE	0.48	U	
BIS(2-CHLOROETHYL)ETHER	0.42	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.7	J	P
BUTYL BENZYL PHTHALATE	0.77	U	
CAPROLACTAM	0.34	UJ	DE
CHRYSENE	0.94	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.61	U	
DIETHYL PHTHALATE	0.95	U	
DIMETHYL PHTHALATE	0.69	U	
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.31	U	
FLUORANTHENE	0.65	U	
FLUORENE	0.51	U	
HEXACHLOROBENZENE	0.44	U	
HEXACHLOROBUTADIENE	0.87	U	
HEXACHLOROCYCLOPENTADIENE	0.83	U	
HEXACHLOROETHANE	0.43	U	
INDENO(1,2,3-CD)PYRENE	1.3	U	
ISOPHORONE	0.51	U	
NAPHTHALENE	0.42	U	
NITROBENZENE	0.58	U	
N-NITROSO-DI-N-PROPYLAMINE	0.84	U	
N-NITROSODIPHENYLAMINE	0.43	U	
PENTACHLOROPHENOL	0.93	U	
PHENANTHRENE	0.72	U	
PHENOL	0.43	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.61	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.36	U	
1,2,4,5-TETRACHLORO BENZENE	2.8	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.79	U	
2,4,5-TRICHLOROPHENOL	0.46	U	
2,4,6-TRICHLOROPHENOL	0.68	U	
2,4-DICHLOROPHENOL	0.41	U	
2,4-DIMETHYLPHENOL	0.66	U	
2,4-DINITROPHENOL	0.79	U	
2,4-DINITROTOLUENE	0.45	U	
2,6-DINITROTOLUENE	0.61	U	
2-CHLORONAPHTHALENE	0.54	U	
2-CHLOROPHENOL	0.55	U	
2-METHYLNAPHTHALENE	0.63	U	
2-METHYLPHENOL	0.77	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.68	U	
3,3'-DICHLOROBENZIDINE	0.82	U	
3-NITROANILINE	0.97	U	
4,6-DINITRO-2-METHYLPHENOL	0.68	U	
4-BROMOPHENYL PHENYL ETHER	0.53	U	
4-CHLORO-3-METHYLPHENOL	0.54	U	
4-CHLOROANILINE	0.88	U	
4-CHLOROPHENYL PHENYL ETHER	0.82	U	
4-METHYLPHENOL	0.71	U	
4-NITROANILINE	1.9	U	
4-NITROPHENOL	0.77	U	
ACENAPHTHENE	0.58	U	
ACENAPHTHYLENE	0.44	U	
ACETOPHENONE	0.69	U	
ANTHRACENE	0.71	U	
ATRAZINE	0.64	UR	C
BENZALDEHYDE	0.53	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.84	U	
BENZO(A)PYRENE	0.56	U	
BENZO(B)FLUORANTHENE	0.66	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.46	U	
BIS(2-CHLOROETHOXY)METHANE	0.48	U	
BIS(2-CHLOROETHYL)ETHER	0.42	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.2	U	
BUTYL BENZYL PHTHALATE	0.76	U	
CAPROLACTAM	0.33	UJ	E
CHRYSENE	0.94	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.6	U	
DIETHYL PHTHALATE	0.94	U	
DIMETHYL PHTHALATE	0.68	U	
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.3	U	
FLUORANTHENE	0.65	U	
FLUORENE	0.51	U	
HEXACHLORO BENZENE	0.44	U	
HEXACHLOROBUTADIENE	0.86	U	
HEXACHLOROCYCLOPENTADIENE	0.82	U	
HEXACHLOROETHANE	0.42	U	
INDENO(1,2,3-CD)PYRENE	1.3	U	
ISOPHORONE	0.51	U	
NAPHTHALENE	0.42	U	
NITROBENZENE	0.57	U	
N-NITROSO-DI-N-PROPYLAMINE	0.83	U	
N-NITROSODIPHENYLAMINE	0.42	U	
PENTACHLOROPHENOL	0.92	U	
PHENANTHRENE	0.71	U	
PHENOL	0.42	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.6	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2401
 samp_date 9/9/2008
 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2401
 samp_date 9/9/2008
 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2401
 samp_date 9/9/2008
 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.38	U	
1,2,4,5-TETRACHLORO BENZENE	2.9	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.82	U	
2,4,5-TRICHLOROPHENOL	0.48	U	
2,4,6-TRICHLOROPHENOL	0.7	U	
2,4-DICHLOROPHENOL	0.42	U	
2,4-DIMETHYLPHENOL	0.68	U	
2,4-DINITROPHENOL	0.82	U	
2,4-DINITROTOLUENE	0.47	U	
2,6-DINITROTOLUENE	0.63	U	
2-CHLORONAPHTHALENE	0.56	U	
2-CHLOROPHENOL	0.57	U	
2-METHYLNAPHTHALENE	0.65	U	
2-METHYLPHENOL	0.8	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.71	U	
3,3'-DICHLORO BENZIDINE	0.86	U	
3-NITROANILINE	1	U	
4,6-DINITRO-2-METHYLPHENOL	0.71	U	
4-BROMOPHENYL PHENYL ETHER	0.55	U	
4-CHLORO-3-METHYLPHENOL	0.56	U	
4-CHLOROANILINE	0.91	U	
4-CHLOROPHENYL PHENYL ETHER	0.86	U	
4-METHYLPHENOL	0.74	U	
4-NITROANILINE	2	U	
4-NITROPHENOL	0.8	U	
ACENAPHTHENE	0.6	U	
ACENAPHTHYLENE	0.45	U	
ACETOPHENONE	0.72	U	
ANTHRACENE	0.74	U	
ATRAZINE	0.66	UR	C
BENZALDEHYDE	0.55	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.88	U	
BENZO(A)PYRENE	0.58	U	
BENZO(B)FLUORANTHENE	0.68	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.48	U	
BIS(2-CHLOROETHOXY)METHANE	0.5	U	
BIS(2-CHLOROETHYL)ETHER	0.43	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.7	J	P
BUTYL BENZYL PHTHALATE	0.79	U	
CAPROLACTAM	0.35	UJ	E
CHRYSENE	0.97	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.62	U	
DIETHYL PHTHALATE	0.98	U	
DIMETHYL PHTHALATE	0.71	U	
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.32	U	
FLUORANTHENE	0.67	U	
FLUORENE	0.53	U	
HEXACHLORO BENZENE	0.45	U	
HEXACHLOROBUTADIENE	0.89	U	
HEXACHLOROCYCLOPENTADIENE	0.86	U	
HEXACHLOROETHANE	0.44	U	
INDENO(1,2,3-CD)PYRENE	1.4	U	
ISOPHORONE	0.53	U	
NAPHTHALENE	0.43	U	
NITROBENZENE	0.6	U	
N-NITROSO-DI-N-PROPYLAMINE	0.86	U	
N-NITROSODIPHENYLAMINE	0.44	U	
PENTACHLOROPHENOL	0.96	U	
PHENANTHRENE	0.74	U	
PHENOL	0.44	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.62	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.36	U	
1,2,4,5-TETRACHLORO BENZENE	2.8	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.79	U	
2,4,5-TRICHLOROPHENOL	0.46	U	
2,4,6-TRICHLOROPHENOL	0.68	U	
2,4-DICHLOROPHENOL	0.41	U	
2,4-DIMETHYLPHENOL	0.66	U	
2,4-DINITROPHENOL	0.79	U	
2,4-DINITROTOLUENE	0.45	U	
2,6-DINITROTOLUENE	0.61	U	
2-CHLORONAPHTHALENE	0.54	U	
2-CHLOROPHENOL	0.55	U	
2-METHYLNAPHTHALENE	0.63	U	
2-METHYLPHENOL	0.77	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.68	U	
3,3'-DICHLORO BENZIDINE	0.82	U	
3-NITROANILINE	0.97	U	
4,6-DINITRO-2-METHYLPHENOL	0.68	U	
4-BROMOPHENYL PHENYL ETHER	0.53	U	
4-CHLORO-3-METHYLPHENOL	0.54	U	
4-CHLOROANILINE	0.88	U	
4-CHLOROPHENYL PHENYL ETHER	0.82	U	
4-METHYLPHENOL	0.71	U	
4-NITROANILINE	1.9	U	
4-NITROPHENOL	0.77	U	
ACENAPHTHENE	0.58	U	
ACENAPHTHYLENE	0.44	U	
ACETOPHENONE	0.69	U	
ANTHRACENE	0.71	U	
ATRAZINE	0.64	UR	C
BENZALDEHYDE	0.53	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.84	U	
BENZO(A)PYRENE	0.56	U	
BENZO(B)FLUORANTHENE	0.66	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.46	U	
BIS(2-CHLOROETHOXY)METHANE	0.48	U	
BIS(2-CHLOROETHYL)ETHER	0.42	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	2	J	P
BUTYL BENZYL PHTHALATE	0.76	U	
CAPROLACTAM	0.33	UJ	E
CHRYSENE	0.94	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.6	U	
DIETHYL PHTHALATE	0.94	U	
DIMETHYL PHTHALATE	0.68	U	
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.3	U	
FLUORANTHENE	0.65	U	
FLUORENE	0.51	U	
HEXACHLORO BENZENE	0.44	U	
HEXACHLOROBUTADIENE	0.86	U	
HEXACHLOROCYCLOPENTADIENE	0.82	U	
HEXACHLOROETHANE	0.42	U	
INDENO(1,2,3-CD)PYRENE	1.3	U	
ISOPHORONE	0.51	U	
NAPHTHALENE	0.42	U	
NITROBENZENE	0.57	U	
N-NITROSO-DI-N-PROPYLAMINE	0.83	U	
N-NITROSODIPHENYLAMINE	0.42	U	
PENTACHLOROPHENOL	0.92	U	
PHENANTHRENE	0.71	U	
PHENOL	0.42	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.6	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.38	U	
1,2,4,5-TETRACHLOROBENZENE	2.9	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.83	U	
2,4,5-TRICHLOROPHENOL	0.49	U	
2,4,6-TRICHLOROPHENOL	0.72	U	
2,4-DICHLOROPHENOL	0.43	U	
2,4-DIMETHYLPHENOL	0.7	U	
2,4-DINITROPHENOL	0.83	U	
2,4-DINITROTOLUENE	0.48	U	
2,6-DINITROTOLUENE	0.65	U	
2-CHLORONAPHTHALENE	0.57	U	
2-CHLOROPHENOL	0.58	U	
2-METHYLNAPHTHALENE	0.67	U	
2-METHYLPHENOL	0.81	U	
2-NITROANILINE	1.2	U	
2-NITROPHENOL	0.72	U	
3,3'-DICHLOROBENZIDINE	0.87	U	
3-NITROANILINE	1	U	
4,6-DINITRO-2-METHYLPHENOL	0.72	U	
4-BROMOPHENYL PHENYL ETHER	0.56	U	
4-CHLORO-3-METHYLPHENOL	0.57	U	
4-CHLOROANILINE	0.93	U	
4-CHLOROPHENYL PHENYL ETHER	0.87	U	
4-METHYLPHENOL	0.75	U	
4-NITROANILINE	2	U	
4-NITROPHENOL	0.81	U	
ACENAPHTHENE	0.62	U	
ACENAPHTHYLENE	0.46	U	
ACETOPHENONE	0.74	U	
ANTHRACENE	0.75	U	
ATRAZINE	0.68	UR	C
BENZALDEHYDE	0.56	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.89	U	
BENZO(A)PYRENE	0.59	U	
BENZO(B)FLUORANTHENE	0.7	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.49	U	
BIS(2-CHLOROETHOXY)METHANE	0.51	U	
BIS(2-CHLOROETHYL)ETHER	0.44	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	2	J	P
BUTYL BENZYL PHTHALATE	0.8	U	
CAPROLACTAM	0.35	UJ	E
CHRYSENE	0.99	U	
DIBENZO(A,H)ANTHRACENE	1.7	U	
DIBENZOFURAN	0.64	U	
DIETHYL PHTHALATE	1	U	
DIMETHYL PHTHALATE	0.72	U	
DI-N-BUTYL PHTHALATE	1.3	U	
DI-N-OCTYL PHTHALATE	0.32	U	
FLUORANTHENE	0.69	U	
FLUORENE	0.54	U	
HEXACHLOROBENZENE	0.46	U	
HEXACHLOROBUTADIENE	0.91	U	
HEXACHLOROCYCLOPENTADIENE	0.87	U	
HEXACHLOROETHANE	0.45	U	
INDENO(1,2,3-CD)PYRENE	1.4	U	
ISOPHORONE	0.54	U	
NAPHTHALENE	6.7	J	P
NITROBENZENE	0.61	U	
N-NITROSO-DI-N-PROPYLAMINE	0.88	U	
N-NITROSODIPHENYLAMINE	0.45	U	
PENTACHLOROPHENOL	0.98	U	
PHENANTHRENE	0.75	U	
PHENOL	0.45	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.64	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.36	U	
1,2,4,5-TETRACHLOROBENZENE	2.8	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.79	U	
2,4,5-TRICHLOROPHENOL	0.46	U	
2,4,6-TRICHLOROPHENOL	0.68	U	
2,4-DICHLOROPHENOL	0.41	U	
2,4-DIMETHYLPHENOL	0.66	U	
2,4-DINITROPHENOL	0.79	U	
2,4-DINITROTOLUENE	0.45	U	
2,6-DINITROTOLUENE	0.61	U	
2-CHLORONAPHTHALENE	0.54	U	
2-CHLOROPHENOL	0.55	U	
2-METHYLNAPHTHALENE	0.63	U	
2-METHYLPHENOL	0.77	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.68	U	
3,3'-DICHLOROBENZIDINE	0.82	U	
3-NITROANILINE	0.97	U	
4,6-DINITRO-2-METHYLPHENOL	0.68	U	
4-BROMOPHENYL PHENYL ETHER	0.53	U	
4-CHLORO-3-METHYLPHENOL	0.54	U	
4-CHLOROANILINE	0.88	U	
4-CHLOROPHENYL PHENYL ETHER	0.82	U	
4-METHYLPHENOL	0.71	U	
4-NITROANILINE	1.9	U	
4-NITROPHENOL	0.77	U	
ACENAPHTHENE	0.58	U	
ACENAPHTHYLENE	0.44	U	
ACETOPHENONE	0.69	U	
ANTHRACENE	0.71	U	
ATRAZINE	0.64	UR	C
BENZALDEHYDE	0.53	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.84	U	
BENZO(A)PYRENE	0.56	U	
BENZO(B)FLUORANTHENE	0.66	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.46	U	
BIS(2-CHLOROETHOXY)METHANE	0.48	U	
BIS(2-CHLOROETHYL)ETHER	0.42	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.7	J	P
BUTYL BENZYL PHTHALATE	0.76	U	
CAPROLACTAM	0.33	UJ	E
CHRYSENE	0.94	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.6	U	
DIETHYL PHTHALATE	0.94	U	
DIMETHYL PHTHALATE	0.68	U	
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.3	U	
FLUORANTHENE	0.65	U	
FLUORENE	0.51	U	
HEXACHLOROBENZENE	0.44	U	
HEXACHLOROBUTADIENE	0.86	U	
HEXACHLOROCYCLOPENTADIENE	0.82	U	
HEXACHLOROETHANE	0.42	U	
INDENO(1,2,3-CD)PYRENE	1.3	U	
ISOPHORONE	0.51	U	
NAPHTHALENE	0.42	U	
NITROBENZENE	0.57	U	
N-NITROSO-DI-N-PROPYLAMINE	0.83	U	
N-NITROSODIPHENYLAMINE	0.42	U	
PENTACHLOROPHENOL	0.92	U	
PHENANTHRENE	0.71	U	
PHENOL	0.42	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.6	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.38	U	
1,2,4,5-TETRACHLOROBENZENE	2.9	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.82	U	
2,4,5-TRICHLOROPHENOL	0.48	U	
2,4,6-TRICHLOROPHENOL	0.71	U	
2,4-DICHLOROPHENOL	0.43	U	
2,4-DIMETHYLPHENOL	0.69	U	
2,4-DINITROPHENOL	0.82	U	
2,4-DINITROTOLUENE	0.48	U	
2,6-DINITROTOLUENE	0.64	U	
2-CHLORONAPHTHALENE	0.56	U	
2-CHLOROPHENOL	0.57	U	
2-METHYLNAPHTHALENE	0.66	U	
2-METHYLPHENOL	0.8	U	
2-NITROANILINE	1.2	U	
2-NITROPHENOL	0.72	U	
3,3'-DICHLOROBENZIDINE	0.86	U	
3-NITROANILINE	1	U	
4,6-DINITRO-2-METHYLPHENOL	0.72	U	
4-BROMOPHENYL PHENYL ETHER	0.55	U	
4-CHLORO-3-METHYLPHENOL	0.56	U	
4-CHLOROANILINE	0.92	U	
4-CHLOROPHENYL PHENYL ETHER	0.86	U	
4-METHYLPHENOL	0.75	U	
4-NITROANILINE	2	U	
4-NITROPHENOL	0.8	U	
ACENAPHTHENE	0.61	U	
ACENAPHTHYLENE	0.46	U	
ACETOPHENONE	0.73	U	
ANTHRACENE	0.75	U	
ATRAZINE	0.67	UR	C
BENZALDEHYDE	0.55	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.88	U	
BENZO(A)PYRENE	0.58	U	
BENZO(B)FLUORANTHENE	0.69	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.48	U	
BIS(2-CHLOROETHOXY)METHANE	0.5	U	
BIS(2-CHLOROETHYL)ETHER	0.44	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.3	J	P
BUTYL BENZYL PHTHALATE	0.8	U	
CAPROLACTAM	0.35	UJ	E
CHRYSENE	0.98	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.63	U	
DIETHYL PHTHALATE	26		
DIMETHYL PHTHALATE	2.4	J	P
DI-N-BUTYL PHTHALATE	1.3	U	
DI-N-OCTYL PHTHALATE	0.32	U	
FLUORANTHENE	0.68	U	
FLUORENE	0.53	U	
HEXACHLOROBENZENE	0.46	U	
HEXACHLOROBUTADIENE	0.9	U	
HEXACHLOROCYCLOPENTADIENE	0.86	U	
HEXACHLOROETHANE	0.45	U	
INDENO(1,2,3-CD)PYRENE	1.4	U	
ISOPHORONE	0.53	U	
NAPHTHALENE	0.44	U	
NITROBENZENE	0.6	U	
N-NITROSO-DI-N-PROPYLAMINE	0.87	U	
N-NITROSODIPHENYLAMINE	0.45	U	
PENTACHLOROPHENOL	0.97	U	
PHENANTHRENE	0.75	U	
PHENOL	0.45	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.63	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: OS

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	0.37	U	
1,2,4,5-TETRACHLOROBENZENE	2.8	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	0.8	U	
2,4,5-TRICHLOROPHENOL	0.47	U	
2,4,6-TRICHLOROPHENOL	0.69	U	
2,4-DICHLOROPHENOL	0.42	U	
2,4-DIMETHYLPHENOL	0.67	U	
2,4-DINITROPHENOL	0.8	U	
2,4-DINITROTOLUENE	0.46	U	
2,6-DINITROTOLUENE	0.62	U	
2-CHLORONAPHTHALENE	0.55	U	
2-CHLOROPHENOL	0.56	U	
2-METHYLNAPHTHALENE	0.64	U	
2-METHYLPHENOL	0.78	U	
2-NITROANILINE	1.1	U	
2-NITROPHENOL	0.7	U	
3,3'-DICHLOROBENZIDINE	0.84	U	
3-NITROANILINE	0.99	U	
4,6-DINITRO-2-METHYLPHENOL	0.7	U	
4-BROMOPHENYL PHENYL ETHER	0.54	U	
4-CHLORO-3-METHYLPHENOL	0.55	U	
4-CHLOROANILINE	0.9	U	
4-CHLOROPHENYL PHENYL ETHER	0.84	U	
4-METHYLPHENOL	0.73	U	
4-NITROANILINE	1.9	U	
4-NITROPHENOL	0.78	U	
ACENAPHTHENE	0.59	U	
ACENAPHTHYLENE	0.44	U	
ACETOPHENONE	0.71	U	
ANTHRACENE	0.73	U	
ATRAZINE	0.65	UR	C
BENZALDEHYDE	0.54	UJ	C

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	0.86	U	
BENZO(A)PYRENE	0.57	U	
BENZO(B)FLUORANTHENE	0.67	U	
BENZO(G,H,I)PERYLENE	1.4	U	
BENZO(K)FLUORANTHENE	0.47	U	
BIS(2-CHLOROETHOXY)METHANE	0.49	U	
BIS(2-CHLOROETHYL)ETHER	0.42	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	1.2	U	
BUTYL BENZYL PHTHALATE	0.77	U	
CAPROLACTAM	0.34	UJ	E
CHRYSENE	0.95	U	
DIBENZO(A,H)ANTHRACENE	1.6	U	
DIBENZOFURAN	0.61	U	
DIETHYL PHTHALATE	41		
DIMETHYL PHTHALATE	4.1	J	P
DI-N-BUTYL PHTHALATE	1.2	U	
DI-N-OCTYL PHTHALATE	0.31	U	
FLUORANTHENE	0.66	U	
FLUORENE	0.52	U	
HEXACHLOROBENZENE	0.44	U	
HEXACHLOROBUTADIENE	0.88	U	
HEXACHLOROCYCLOPENTADIENE	0.84	U	
HEXACHLOROETHANE	0.43	U	
INDENO(1,2,3-CD)PYRENE	1.3	U	
ISOPHORONE	0.52	U	
NAPHTHALENE	0.42	U	
NITROBENZENE	0.58	U	
N-NITROSO-DI-N-PROPYLAMINE	0.85	U	
N-NITROSODIPHENYLAMINE	0.43	U	
PENTACHLOROPHENOL	0.94	U	
PHENANTHRENE	0.73	U	
PHENOL	0.43	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	0.61	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW2201
 samp_date 9/9/2008
 lab_id 0809091-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2301
 samp_date 9/9/2008
 lab_id 0809091-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2401
 samp_date 9/9/2008
 lab_id 0809091-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0048	U	
4,4'-DDE	0.0048	U	
4,4'-DDT	0.0048	UJ	C
ALDRIN	0.0031	U	
ALPHA-BHC	0.0031	U	
ALPHA-CHLORDANE	0.0031	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.0031	U	
DELTA-BHC	0.0031	U	
DIELDRIN	0.0048	U	
ENDOSULFAN I	0.0031	U	
ENDOSULFAN II	0.0048	U	
ENDOSULFAN SULFATE	0.0048	U	
ENDRIN	0.0048	U	
ENDRIN ALDEHYDE	0.0048	U	
ENDRIN KETONE	0.0048	U	
GAMMA-BHC (LINDANE)	0.0031	U	
GAMMA-CHLORDANE	0.0031	U	
HEPTACHLOR	0.0031	U	
HEPTACHLOR EPOXIDE	0.0031	U	
METHOXYCHLOR	0.0031	U	
TOXAPHENE	0.31	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0046	U	
4,4'-DDE	0.0046	U	
4,4'-DDT	0.0046	UJ	C
ALDRIN	0.003	U	
ALPHA-BHC	0.003	U	
ALPHA-CHLORDANE	0.003	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.003	U	
DELTA-BHC	0.003	U	
DIELDRIN	0.0046	U	
ENDOSULFAN I	0.003	U	
ENDOSULFAN II	0.0046	U	
ENDOSULFAN SULFATE	0.0046	U	
ENDRIN	0.0046	U	
ENDRIN ALDEHYDE	0.0046	U	
ENDRIN KETONE	0.0046	U	
GAMMA-BHC (LINDANE)	0.003	U	
GAMMA-CHLORDANE	0.003	U	
HEPTACHLOR	0.003	U	
HEPTACHLOR EPOXIDE	0.003	U	
METHOXYCHLOR	0.003	U	
TOXAPHENE	0.3	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0049	U	
4,4'-DDE	0.0049	U	
4,4'-DDT	0.0068	J	CP
ALDRIN	0.0032	U	
ALPHA-BHC	0.0032	U	
ALPHA-CHLORDANE	0.0032	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.0048	R	U
DELTA-BHC	0.0032	U	
DIELDRIN	0.0049	U	
ENDOSULFAN I	0.0032	U	
ENDOSULFAN II	0.0049	U	
ENDOSULFAN SULFATE	0.0049	U	
ENDRIN	0.0049	U	
ENDRIN ALDEHYDE	0.0049	U	
ENDRIN KETONE	0.0049	U	
GAMMA-BHC (LINDANE)	0.0032	U	
GAMMA-CHLORDANE	0.0032	U	
HEPTACHLOR	0.0032	U	
HEPTACHLOR EPOXIDE	0.0032	U	
METHOXYCHLOR	0.0032	U	
TOXAPHENE	0.32	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0046	U	
4,4'-DDE	0.0046	U	
4,4'-DDT	0.0046	UJ	C
ALDRIN	0.003	U	
ALPHA-BHC	0.003	U	
ALPHA-CHLORDANE	0.003	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.003	U	
DELTA-BHC	0.003	U	
DIELDRIN	0.0046	U	
ENDOSULFAN I	0.003	U	
ENDOSULFAN II	0.0046	U	
ENDOSULFAN SULFATE	0.0046	U	
ENDRIN	0.0046	U	
ENDRIN ALDEHYDE	0.0046	U	
ENDRIN KETONE	0.0046	U	
GAMMA-BHC (LINDANE)	0.003	U	
GAMMA-CHLORDANE	0.003	U	
HEPTACHLOR	0.003	U	
HEPTACHLOR EPOXIDE	0.003	U	
METHOXYCHLOR	0.003	U	
TOXAPHENE	0.3	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.005	U	
4,4'-DDE	0.005	U	
4,4'-DDT	0.005	UJ	C
ALDRIN	0.0033	U	
ALPHA-BHC	0.0033	U	
ALPHA-CHLORDANE	0.0033	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.0062	R	U
DELTA-BHC	0.0033	U	
DIELDRIN	0.005	U	
ENDOSULFAN I	0.0033	U	
ENDOSULFAN II	0.005	U	
ENDOSULFAN SULFATE	0.005	U	
ENDRIN	0.005	U	
ENDRIN ALDEHYDE	0.005	U	
ENDRIN KETONE	0.005	U	
GAMMA-BHC (LINDANE)	0.0033	U	
GAMMA-CHLORDANE	0.0033	U	
HEPTACHLOR	0.0033	U	
HEPTACHLOR EPOXIDE	0.0033	U	
METHOXYCHLOR	0.0033	U	
TOXAPHENE	0.33	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0047	U	
4,4'-DDE	0.0047	U	
4,4'-DDT	0.0047	UJ	C
ALDRIN	0.0031	U	
ALPHA-BHC	0.0031	U	
ALPHA-CHLORDANE	0.0031	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.0031	U	
DELTA-BHC	0.0031	U	
DIELDRIN	0.0047	U	
ENDOSULFAN I	0.0031	U	
ENDOSULFAN II	0.0047	U	
ENDOSULFAN SULFATE	0.0047	U	
ENDRIN	0.0047	U	
ENDRIN ALDEHYDE	0.0047	U	
ENDRIN KETONE	0.0047	U	
GAMMA-BHC (LINDANE)	0.0031	U	
GAMMA-CHLORDANE	0.0031	U	
HEPTACHLOR	0.0031	U	
HEPTACHLOR EPOXIDE	0.0031	U	
METHOXYCHLOR	0.0031	U	
TOXAPHENE	0.31	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01RB090908
 samp_date 9/9/2008
 lab_id 0809091-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01RB091108
 samp_date 9/11/2008
 lab_id 0809127-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0049	U	
4,4'-DDE	0.0049	U	
4,4'-DDT	0.0092	J	CP
ALDRIN	0.0032	U	
ALPHA-BHC	0.0032	U	
ALPHA-CHLORDANE	0.0032	U	
AROCLOR-1016	0.12	U	
AROCLOR-1221	0.12	U	
AROCLOR-1232	0.12	U	
AROCLOR-1242	0.12	U	
AROCLOR-1248	0.12	U	
AROCLOR-1254	0.12	U	
AROCLOR-1260	0.12	U	
BETA-BHC	0.0049	R	U
DELTA-BHC	0.0032	U	
DIELDRIN	0.0049	U	
ENDOSULFAN I	0.0032	U	
ENDOSULFAN II	0.0049	U	
ENDOSULFAN SULFATE	0.0049	U	
ENDRIN	0.0049	U	
ENDRIN ALDEHYDE	0.0049	U	
ENDRIN KETONE	0.0049	U	
GAMMA-BHC (LINDANE)	0.0032	U	
GAMMA-CHLORDANE	0.0032	U	
HEPTACHLOR	0.0032	U	
HEPTACHLOR EPOXIDE	0.0032	U	
METHOXYCHLOR	0.0032	U	
TOXAPHENE	0.32	U	

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.0053	U	
4,4'-DDE	0.0053	U	
4,4'-DDT	0.0053	UJ	C
ALDRIN	0.02	R	U
ALPHA-BHC	0.0035	U	
ALPHA-CHLORDANE	0.0035	U	
AROCLOR-1016	0.13	U	
AROCLOR-1221	0.13	U	
AROCLOR-1232	0.13	U	
AROCLOR-1242	0.13	U	
AROCLOR-1248	0.13	U	
AROCLOR-1254	0.13	U	
AROCLOR-1260	0.13	U	
BETA-BHC	0.0045	J	PU
DELTA-BHC	0.012	J	U
DIELDRIN	0.0053	U	
ENDOSULFAN I	0.0035	U	
ENDOSULFAN II	0.0053	U	
ENDOSULFAN SULFATE	0.0053	U	
ENDRIN	0.0053	U	
ENDRIN ALDEHYDE	0.0053	U	
ENDRIN KETONE	0.0053	U	
GAMMA-BHC (LINDANE)	0.0059	J	PU
GAMMA-CHLORDANE	0.0035	U	
HEPTACHLOR	0.0035	U	
HEPTACHLOR EPOXIDE	0.0035	U	
METHOXYCHLOR	0.0035	U	
TOXAPHENE	0.35	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW2201
samp_date 9/9/2008
lab_id 0809091-03
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01GW2301
samp_date 9/9/2008
lab_id 0809091-02
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01GW2401
samp_date 9/9/2008
lab_id 0809091-05
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW2501
 samp_date 9/9/2008
 lab_id 0809091-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2601
 samp_date 9/9/2008
 lab_id 0809091-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2701
 samp_date 9/9/2008
 lab_id 0809091-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: WATER DATA FRACTION: HERB

nsample 01RB090908
samp_date 9/9/2008
lab_id 0809091-08
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01RB091108
samp_date 9/11/2008
lab_id 0809127-02
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.023	U	
2,4,5-TP (SILVEX)	0.023	U	
2,4-D	0.23	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.92	U	
1,1,2,2-TETRACHLOROETHANE	0.44	U	
1,1,2-TRICHLOROETHANE	0.36	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.56	U	
1,1-DICHLOROETHANE	0.55	U	
1,1-DICHLOROETHENE	1.2	U	
1,2,3-TRICHLOROENZENE	0.43	UJ	D
1,2,4-TRICHLOROENZENE	0.18	UJ	CD
1,2-DIBROMOETHANE	0.44	UJ	D
1,2-DICHLOROETHANE	0.47	U	
1,2-DICHLOROPROPANE	0.47	U	
2-BUTANONE	1.4	U	
2-HEXANONE	2.3	U	
4-METHYL-2-PENTANONE	0.59	U	
ACETONE	5	U	B
BENZENE	0.48	UJ	D
BROMOCHLOROMETHANE	0.43	UJ	D
BROMODICHLOROMETHANE	0.3	U	
BROMOFORM	1	U	
BROMOMETHANE	0.73	U	
CARBON DISULFIDE	1.3	U	
CARBON TETRACHLORIDE	0.9	U	
CHLOROBENZENE	0.34	UJ	D
CHLORODIBROMOMETHANE	0.34	UJ	D
CHLOROETHANE	1.1	U	
CHLOROFORM	0.56	U	
CHLOROMETHANE	0.53	U	
CIS-1,2-DICHLOROETHENE	1.2	UJ	D
CIS-1,3-DICHLOROPROPENE	0.51	UJ	D
CYCLOHEXANE	0.55	U	
ETHYLBENZENE	0.76	UJ	D
ISOPROPYLBENZENE	0.9	UJ	D

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	1.6	U	
METHYL CYCLOHEXANE	0.3	UJ	D
METHYL TERT-BUTYL ETHER	0.32	U	
METHYLENE CHLORIDE	1.6	U	A
STYRENE	0.36	UJ	D
TETRACHLOROETHENE	0.99	UJ	D
TOLUENE	0.88	U	
TOTAL 1,2-DICHLOROETHENE	1.2	U	
TOTAL XYLENES	0.71	UJ	D
TRANS-1,2-DICHLOROETHENE	1.1	UJ	D
TRANS-1,3-DICHLOROPROPENE	0.32	UJ	D
TRICHLOROETHENE	0.86	UJ	D
VINYL CHLORIDE	1.1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.1	U	
1,1,2,2-TETRACHLOROETHANE	0.52	U	
1,1,2-TRICHLOROETHANE	0.43	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.67	U	
1,1-DICHLOROETHANE	0.66	U	
1,1-DICHLOROETHENE	1.5	U	
1,2,3-TRICHLOROENZENE	0.51	U	
1,2,4-TRICHLOROENZENE	0.22	UJ	C
1,2-DIBROMOETHANE	0.52	U	
1,2-DICHLOROETHANE	0.56	U	
1,2-DICHLOROPROPANE	0.56	U	
2-BUTANONE	1.7	U	
2-HEXANONE	2.8	U	
4-METHYL-2-PENTANONE	0.71	U	
ACETONE	2.4	U	
BENZENE	0.57	U	
BROMOCHLOROMETHANE	0.51	U	
BROMODICHLOROMETHANE	0.36	U	
BROMOFORM	1.2	U	
BROMOMETHANE	0.88	U	
CARBON DISULFIDE	1.6	U	
CARBON TETRACHLORIDE	1.1	U	
CHLOROBENZENE	0.41	U	
CHLORODIBROMOMETHANE	0.41	U	
CHLOROETHANE	1.3	U	
CHLOROFORM	0.67	U	
CHLOROMETHANE	0.63	U	
CIS-1,2-DICHLOROETHENE	1.5	U	
CIS-1,3-DICHLOROPROPENE	0.61	U	
CYCLOHEXANE	0.66	U	
ETHYLBENZENE	0.91	U	
ISOPROPYLBENZENE	1.1	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	2	U	
METHYL CYCLOHEXANE	0.36	U	
METHYL TERT-BUTYL ETHER	0.39	U	
METHYLENE CHLORIDE	2	U	A
STYRENE	0.43	U	
TETRACHLOROETHENE	1.2	U	
TOLUENE	1	U	
TOTAL 1,2-DICHLOROETHENE	1.5	U	
TOTAL XYLENES	0.85	U	
TRANS-1,2-DICHLOROETHENE	1.3	U	
TRANS-1,3-DICHLOROPROPENE	0.39	U	
TRICHLOROETHENE	1	U	
VINYL CHLORIDE	1.3	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1.2	U	
1,1,2,2-TETRACHLOROETHANE	0.58	U	
1,1,2-TRICHLOROETHANE	0.47	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.74	U	
1,1-DICHLOROETHANE	0.72	U	
1,1-DICHLOROETHENE	1.6	U	
1,2,3-TRICHLOROBENZENE	0.56	U	
1,2,4-TRICHLOROBENZENE	0.24	UJ	C
1,2-DIBROMOETHANE	0.58	U	
1,2-DICHLOROETHANE	0.62	U	
1,2-DICHLOROPROPANE	0.62	U	
2-BUTANONE	1.9	U	
2-HEXANONE	3.1	U	
4-METHYL-2-PENTANONE	0.78	U	
ACETONE	7	U	B
BENZENE	0.63	U	
BROMOCHLOROMETHANE	0.56	U	
BROMODICHLOROMETHANE	0.4	U	
BROMOFORM	1.3	U	
BROMOMETHANE	0.96	U	
CARBON DISULFIDE	1.7	U	
CARBON TETRACHLORIDE	1.2	U	
CHLOROETHANE	0.46	U	
CHLORODIBROMOMETHANE	0.46	U	
CHLOROETHANE	1.5	U	
CHLOROFORM	0.74	U	
CHLOROMETHANE	0.7	U	
CIS-1,2-DICHLOROETHENE	1.6	U	
CIS-1,3-DICHLOROPROPENE	0.67	U	
CYCLOHEXANE	0.72	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1.2	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	2.1	U	
METHYL CYCLOHEXANE	0.4	U	
METHYL TERT-BUTYL ETHER	0.43	U	
METHYLENE CHLORIDE	2.3	U	A
STYRENE	0.47	U	
TETRACHLOROETHENE	1.3	U	
TOLUENE	1.2	U	
TOTAL 1,2-DICHLOROETHENE	1.6	U	
TOTAL XYLENES	0.94	U	
TRANS-1,2-DICHLOROETHENE	1.5	U	
TRANS-1,3-DICHLOROPROPENE	0.43	U	
TRICHLOROETHENE	1.1	U	
VINYL CHLORIDE	1.5	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.84	U	
1,1,2,2-TETRACHLOROETHANE	0.4	U	
1,1,2-TRICHLOROETHANE	0.32	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.51	U	
1,1-DICHLOROETHANE	0.5	U	
1,1-DICHLOROETHENE	1.1	U	
1,2,3-TRICHLOROBENZENE	0.39	U	
1,2,4-TRICHLOROBENZENE	0.17	UJ	C
1,2-DIBROMOETHANE	0.4	U	
1,2-DICHLOROETHANE	0.43	U	
1,2-DICHLOROPROPANE	0.43	U	
2-BUTANONE	1.3	U	
2-HEXANONE	2.1	U	
4-METHYL-2-PENTANONE	0.54	U	
ACETONE	1.8	U	
BENZENE	0.44	U	
BROMOCHLOROMETHANE	0.39	U	
BROMODICHLOROMETHANE	0.28	U	
BROMOFORM	0.93	U	
BROMOMETHANE	0.67	U	
CARBON DISULFIDE	1.2	U	
CARBON TETRACHLORIDE	0.82	U	
CHLOROBENZENE	0.32	U	
CHLORODIBROMOMETHANE	0.32	U	
CHLOROETHANE	1	U	
CHLOROFORM	0.51	U	
CHLOROMETHANE	0.48	U	
CIS-1,2-DICHLOROETHENE	1.1	U	
CIS-1,3-DICHLOROPROPENE	0.46	U	
CYCLOHEXANE	0.5	U	
ETHYLBENZENE	0.7	U	
ISOPROPYLBENZENE	0.82	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	1.5	U	
METHYL CYCLOHEXANE	0.28	U	
METHYL TERT-BUTYL ETHER	0.3	U	
METHYLENE CHLORIDE	1.5	U	A
STYRENE	0.32	U	
TETRACHLOROETHENE	0.9	U	
TOLUENE	0.8	U	
TOTAL 1,2-DICHLOROETHENE	1.1	U	
TOTAL XYLENES	0.65	U	
TRANS-1,2-DICHLOROETHENE	1	U	
TRANS-1,3-DICHLOROPROPENE	0.3	U	
TRICHLOROETHENE	0.79	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.98	U	
1,1,2,2-TETRACHLOROETHANE	0.47	U	
1,1,2-TRICHLOROETHANE	0.38	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.6	U	
1,1-DICHLOROETHANE	0.59	U	
1,1-DICHLOROETHENE	1.3	U	
1,2,3-TRICHLOROBENZENE	0.46	U	
1,2,4-TRICHLOROBENZENE	0.2	UJ	C
1,2-DIBROMOETHANE	0.47	U	
1,2-DICHLOROETHANE	0.5	U	
1,2-DICHLOROPROPANE	0.5	U	
2-BUTANONE	1.8	J	P
2-HEXANONE	2.5	U	
4-METHYL-2-PENTANONE	0.63	U	
ACETONE	6.4	U	B
BENZENE	0.51	U	
BROMOCHLOROMETHANE	0.46	U	
BROMODICHLOROMETHANE	0.33	U	
BROMOFORM	1.1	U	
BROMOMETHANE	0.78	U	
CARBON DISULFIDE	1.4	U	
CARBON TETRACHLORIDE	0.96	U	
CHLOROBENZENE	0.37	U	
CHLORODIBROMOMETHANE	0.37	U	
CHLOROETHANE	1.2	U	
CHLOROFORM	0.6	U	
CHLOROMETHANE	0.56	U	
CIS-1,2-DICHLOROETHENE	1.3	U	
CIS-1,3-DICHLOROPROPENE	0.54	U	
CYCLOHEXANE	0.59	U	
ETHYLBENZENE	0.82	U	
ISOPROPYLBENZENE	0.96	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	1.7	U	
METHYL CYCLOHEXANE	0.33	U	
METHYL TERT-BUTYL ETHER	0.35	U	
METHYLENE CHLORIDE	1.6	U	A
STYRENE	0.38	U	
TETRACHLOROETHENE	1	U	
TOLUENE	0.93	U	
TOTAL 1,2-DICHLOROETHENE	1.3	U	
TOTAL XYLENES	0.76	U	
TRANS-1,2-DICHLOROETHENE	1.2	U	
TRANS-1,3-DICHLOROPROPENE	0.35	U	
TRICHLOROETHENE	0.92	U	
VINYL CHLORIDE	1.2	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	0.9	U	
1,1,2,2-TETRACHLOROETHANE	0.43	U	
1,1,2-TRICHLOROETHANE	0.35	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	0.55	U	
1,1-DICHLOROETHANE	0.54	U	
1,1-DICHLOROETHENE	1.2	U	
1,2,3-TRICHLOROBENZENE	0.42	U	
1,2,4-TRICHLOROBENZENE	0.18	UJ	C
1,2-DIBROMOETHANE	0.43	U	
1,2-DICHLOROETHANE	0.46	U	
1,2-DICHLOROPROPANE	0.46	U	
2-BUTANONE	4	J	P
2-HEXANONE	2.3	U	
4-METHYL-2-PENTANONE	0.58	U	
ACETONE	15	U	B
BENZENE	0.47	U	
BROMOCHLOROMETHANE	0.42	U	
BROMODICHLOROMETHANE	0.3	U	
BROMOFORM	1	U	
BROMOMETHANE	0.72	U	
CARBON DISULFIDE	1.3	U	
CARBON TETRACHLORIDE	0.88	U	
CHLOROETHANE	1.1	U	
CHLOROBENZENE	0.34	U	
CHLORODIBROMOMETHANE	0.34	U	
CHLOROETHANE	1.1	U	
CHLOROFORM	0.55	U	
CHLOROMETHANE	0.52	U	
CIS-1,2-DICHLOROETHENE	1.2	U	
CIS-1,3-DICHLOROPROPENE	0.5	U	
CYCLOHEXANE	0.54	U	
ETHYLBENZENE	0.75	U	
ISOPROPYLBENZENE	0.88	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	1.6	U	
METHYL CYCLOHEXANE	0.3	U	
METHYL TERT-BUTYL ETHER	0.32	U	
METHYLENE CHLORIDE	1.4	U	A
STYRENE	0.35	U	
TETRACHLOROETHENE	0.98	U	
TOLUENE	0.86	U	
TOTAL 1,2-DICHLOROETHENE	1.2	U	
TOTAL XYLENES	0.7	U	
TRANS-1,2-DICHLOROETHENE	1.1	U	
TRANS-1,3-DICHLOROPROPENE	0.32	U	
TRICHLOROETHENE	0.85	U	
VINYL CHLORIDE	1.1	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	32	U	
1,2,4,5-TETRACHLOROENZENE	110	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	56	U	
2,4,5-TRICHLOROPHENOL	29	U	
2,4,6-TRICHLOROPHENOL	38	U	
2,4-DICHLOROPHENOL	21	U	
2,4-DIMETHYLPHENOL	23	U	
2,4-DINITROPHENOL	150	U	
2,4-DINITROTOLUENE	26	U	
2,6-DINITROTOLUENE	42	U	
2-CHLORONAPHTHALENE	35	U	
2-CHLOROPHENOL	45	U	
2-METHYLNAPHTHALENE	38	U	
2-METHYLPHENOL	42	U	
2-NITROANILINE	35	U	
2-NITROPHENOL	24	U	
3,3'-DICHLOROBENZIDINE	34	U	
3-NITROANILINE	52	U	
4,6-DINITRO-2-METHYLPHENOL	24	U	
4-BROMOPHENYL PHENYL ETHER	28	U	
4-CHLORO-3-METHYLPHENOL	30	U	
4-CHLOROANILINE	53	U	
4-CHLOROPHENYL PHENYL ETHER	34	U	
4-METHYLPHENOL	29	U	
4-NITROANILINE	110	U	
4-NITROPHENOL	89	U	
ACENAPHTHENE	29	U	
ACENAPHTHYLENE	22	U	
ACETOPHENONE	45	U	
ANTHRACENE	30	U	
ATRAZINE	31	U	
BENZALDEHYDE	61	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	40	U	
BENZO(A)PYRENE	25	U	
BENZO(B)FLUORANTHENE	35	U	
BENZO(G,H,I)PERYLENE	78	U	
BENZO(K)FLUORANTHENE	43	U	
BIS(2-CHLOROETHOXY)METHANE	34	U	
BIS(2-CHLOROETHYL)ETHER	45	U	
BIS(2-ETHYLHEXYL)PHTHALATE	200	U	A
BUTYL BENZYL PHTHALATE	33	U	
CAPROLACTAM	74	U	
CARBAZOLE	40	U	
CHRYSENE	34	U	
DIBENZO(A,H)ANTHRACENE	66	U	
DIBENZOFURAN	27	U	
DIETHYL PHTHALATE	37	U	
DIMETHYL PHTHALATE	34	U	
DI-N-BUTYL PHTHALATE	190	U	A
DI-N-OCTYL PHTHALATE	30	U	
FLUORANTHENE	59	U	
FLUORENE	29	U	
HEXACHLOROENZENE	38	U	
HEXACHLOROBUTADIENE	36	U	
HEXACHLOROCYCLOPENTADIENE	67	U	
HEXACHLOROETHANE	43	U	
INDENO(1,2,3-CD)PYRENE	51	U	
ISOPHORONE	31	U	
NAPHTHALENE	36	U	
NITROBENZENE	38	U	
N-NITROSO-DI-N-PROPYLAMINE	60	U	
N-NITROSODIPHENYLAMINE	35	U	
PENTACHLOROPHENOL	37	U	
PHENANTHRENE	25	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	40	U	
PYRENE	44	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	32	U	
1,2,4,5-TETRACHLOROBENZENE	110	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	55	U	
2,4,5-TRICHLOROPHENOL	29	U	
2,4,6-TRICHLOROPHENOL	37	U	
2,4-DICHLOROPHENOL	20	U	
2,4-DIMETHYLPHENOL	23	U	
2,4-DINITROPHENOL	140	U	
2,4-DINITROTOLUENE	26	U	
2,6-DINITROTOLUENE	41	U	
2-CHLORONAPHTHALENE	34	U	
2-CHLOROPHENOL	44	U	
2-METHYLNAPHTHALENE	37	U	
2-METHYLPHENOL	41	U	
2-NITROANILINE	34	U	
2-NITROPHENOL	24	U	
3,3'-DICHLOROBENZIDINE	34	U	
3-NITROANILINE	51	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	28	U	
4-CHLORO-3-METHYLPHENOL	30	U	
4-CHLOROANILINE	51	U	
4-CHLOROPHENYL PHENYL ETHER	33	U	
4-METHYLPHENOL	28	U	
4-NITROANILINE	110	U	
4-NITROPHENOL	87	U	
ACENAPHTHENE	28	U	
ACENAPHTHYLENE	21	U	
ACETOPHENONE	44	U	
ANTHRACENE	29	U	
ATRAZINE	30	U	
BENZALDEHYDE	60	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	39	U	
BENZO(A)PYRENE	24	U	
BENZO(B)FLUORANTHENE	34	U	
BENZO(G,H,I)PERYLENE	76	U	
BENZO(K)FLUORANTHENE	42	U	
BIS(2-CHLOROETHOXY)METHANE	33	U	
BIS(2-CHLOROETHYL)ETHER	44	U	
BIS(2-ETHYLHEXYL)PHTHALATE	160	U	A
BUTYL BENZYL PHTHALATE	32	U	
CAPROLACTAM	72	U	
CARBAZOLE	39	U	
CHRYSENE	33	U	
DIBENZO(A,H)ANTHRACENE	64	U	
DIBENZOFURAN	26	U	
DIETHYL PHTHALATE	36	U	
DIMETHYL PHTHALATE	33	U	
DI-N-BUTYL PHTHALATE	140	U	A
DI-N-OCTYL PHTHALATE	29	U	
FLUORANTHENE	57	U	
FLUORENE	28	U	
HEXACHLOROBENZENE	37	U	
HEXACHLOROBUTADIENE	35	U	
HEXACHLOROCYCLOPENTADIENE	66	U	
HEXACHLOROETHANE	42	U	
INDENO(1,2,3-CD)PYRENE	49	U	
ISOPHORONE	30	U	
NAPHTHALENE	35	U	
NITROBENZENE	37	U	
N-NITROSO-DI-N-PROPYLAMINE	59	U	
N-NITROSODIPHENYLAMINE	34	U	
PENTACHLOROPHENOL	36	U	
PHENANTHRENE	24	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	39	U	
PYRENE	43	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	39	U	
1,2,4,5-TETRACHLOROENZENE	130	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	67	U	
2,4,5-TRICHLOROPHENOL	35	U	
2,4,6-TRICHLOROPHENOL	46	U	
2,4-DICHLOROPHENOL	25	U	
2,4-DIMETHYLPHENOL	28	U	
2,4-DINITROPHENOL	180	U	
2,4-DINITROTOLUENE	32	U	
2,6-DINITROTOLUENE	50	U	
2-CHLORONAPHTHALENE	42	U	
2-CHLOROPHENOL	54	U	
2-METHYLNAPHTHALENE	46	U	
2-METHYLPHENOL	51	U	
2-NITROANILINE	42	U	
2-NITROPHENOL	29	U	
3,3'-DICHLOROBENZIDINE	41	U	
3-NITROANILINE	62	U	
4,6-DINITRO-2-METHYLPHENOL	29	U	
4-BROMOPHENYL PHENYL ETHER	34	U	
4-CHLORO-3-METHYLPHENOL	36	U	
4-CHLOROANILINE	63	U	
4-CHLOROPHENYL PHENYL ETHER	40	U	
4-METHYLPHENOL	35	U	
4-NITROANILINE	130	U	
4-NITROPHENOL	110	U	
ACENAPHTHENE	35	U	
ACENAPHTHYLENE	26	U	
ACETOPHENONE	54	U	
ANTHRACENE	36	U	
ATRAZINE	37	U	
BENZALDEHYDE	73	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	48	U	
BENZO(A)PYRENE	30	U	
BENZO(B)FLUORANTHENE	41	U	
BENZO(G,H,I)PERYLENE	93	U	
BENZO(K)FLUORANTHENE	52	U	
BIS(2-CHLOROETHOXY)METHANE	41	U	
BIS(2-CHLOROETHYL)ETHER	54	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	130	U	A
BUTYL BENZYL PHTHALATE	39	U	
CAPROLACTAM	300	J	EP
CARBAZOLE	48	U	
CHRYSENE	41	U	
DIBENZO(A,H)ANTHRACENE	79	U	
DIBENZOFURAN	32	U	
DIETHYL PHTHALATE	44	U	
DIMETHYL PHTHALATE	40	U	
DI-N-BUTYL PHTHALATE	40	U	
DI-N-OCTYL PHTHALATE	35	U	
FLUORANTHENE	70	U	
FLUORENE	34	U	
HEXACHLOROENZENE	46	U	
HEXACHLOROBUTADIENE	43	U	
HEXACHLOROCYCLOPENTADIENE	80	UJ	C
HEXACHLOROETHANE	52	U	
INDENO(1,2,3-CD)PYRENE	60	U	
ISOPHORONE	37	U	
NAPHTHALENE	43	U	
NITROENZENE	45	U	
N-NITROSO-DI-N-PROPYLAMINE	72	U	
N-NITROSODIPHENYLAMINE	42	U	
PENTACHLOROPHENOL	44	U	
PHENANTHRENE	30	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	47	U	
PYRENE	52	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	32	U	
1,2,4,5-TETRACHLORO BENZENE	110	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	55	U	
2,4,5-TRICHLOROPHENOL	29	U	
2,4,6-TRICHLOROPHENOL	38	U	
2,4-DICHLOROPHENOL	20	U	
2,4-DIMETHYLPHENOL	23	U	
2,4-DINITROPHENOL	140	U	
2,4-DINITROTOLUENE	26	U	
2,6-DINITROTOLUENE	41	U	
2-CHLORONAPHTHALENE	34	U	
2-CHLOROPHENOL	44	U	
2-METHYLNAPHTHALENE	38	U	
2-METHYLPHENOL	42	U	
2-NITROANILINE	35	U	
2-NITROPHENOL	24	U	
3,3'-DICHLOROBENZIDINE	34	U	
3-NITROANILINE	51	U	
4,6-DINITRO-2-METHYLPHENOL	24	U	
4-BROMOPHENYL PHENYL ETHER	28	U	
4-CHLORO-3-METHYLPHENOL	30	U	
4-CHLOROANILINE	52	U	
4-CHLOROPHENYL PHENYL ETHER	33	U	
4-METHYLPHENOL	29	U	
4-NITROANILINE	110	U	
4-NITROPHENOL	87	U	
ACENAPHTHENE	28	U	
ACENAPHTHYLENE	21	U	
ACETOPHENONE	44	U	
ANTHRACENE	29	U	
ATRAZINE	31	U	
BENZALDEHYDE	60	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	39	U	
BENZO(A)PYRENE	25	U	
BENZO(B)FLUORANTHENE	34	U	
BENZO(G,H,I)PERYLENE	76	U	
BENZO(K)FLUORANTHENE	42	U	
BIS(2-CHLOROETHOXY)METHANE	33	U	
BIS(2-CHLOROETHYL)ETHER	44	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	99	U	A
BUTYL BENZYL PHTHALATE	32	U	
CAPROLACTAM	73	U	
CARBAZOLE	39	U	
CHRYSENE	33	U	
DIBENZO(A,H)ANTHRACENE	65	U	
DIBENZOFURAN	26	U	
DIETHYL PHTHALATE	36	U	
DIMETHYL PHTHALATE	33	U	
DI-N-BUTYL PHTHALATE	33	U	
DI-N-OCTYL PHTHALATE	29	U	
FLUORANTHENE	58	U	
FLUORENE	28	U	
HEXACHLORO BENZENE	37	U	
HEXACHLOROBUTADIENE	35	U	
HEXACHLOROCYCLOPENTADIENE	66	UJ	C
HEXACHLOROETHANE	42	U	
INDENO(1,2,3-CD)PYRENE	50	U	
ISOPHORONE	30	U	
NAPHTHALENE	35	U	
NITROBENZENE	37	U	
N-NITROSO-DI-N-PROPYLAMINE	59	U	
N-NITROSODIPHENYLAMINE	34	U	
PENTACHLOROPHENOL	36	U	
PHENANTHRENE	25	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	39	U	
PYRENE	43	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	36	U	
1,2,4,5-TETRACHLOROBENZENE	120	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	64	U	
2,4,5-TRICHLOROPHENOL	33	U	
2,4,6-TRICHLOROPHENOL	43	U	
2,4-DICHLOROPHENOL	23	U	
2,4-DIMETHYLPHENOL	26	U	
2,4-DINITROPHENOL	160	U	
2,4-DINITROTOLUENE	30	U	
2,6-DINITROTOLUENE	47	U	
2-CHLORONAPHTHALENE	40	U	
2-CHLOROPHENOL	50	U	
2-METHYLNAPHTHALENE	43	U	
2-METHYLPHENOL	48	U	
2-NITROANILINE	40	U	
2-NITROPHENOL	27	U	
3,3'-DICHLOROBENZIDINE	39	U	
3-NITROANILINE	58	U	
4,6-DINITRO-2-METHYLPHENOL	27	U	
4-BROMOPHENYL PHENYL ETHER	32	U	
4-CHLORO-3-METHYLPHENOL	34	U	
4-CHLOROANILINE	59	U	
4-CHLOROPHENYL PHENYL ETHER	38	U	
4-METHYLPHENOL	33	U	
4-NITROANILINE	120	U	
4-NITROPHENOL	100	U	
ACENAPHTHENE	33	U	
ACENAPHTHYLENE	24	U	
ACETOPHENONE	51	U	
ANTHRACENE	34	U	
ATRAZINE	35	U	
BENZALDEHYDE	69	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	45	U	
BENZO(A)PYRENE	28	U	
BENZO(B)FLUORANTHENE	39	U	
BENZO(G,H,I)PERYLENE	87	U	
BENZO(K)FLUORANTHENE	49	U	
BIS(2-CHLOROETHOXY)METHANE	38	U	
BIS(2-CHLOROETHYL)ETHER	50	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	220	U	A
BUTYL BENZYL PHTHALATE	37	U	
CAPROLACTAM	140	J	EP
CARBAZOLE	45	U	
CHRYSENE	38	U	
DIBENZO(A,H)ANTHRACENE	74	U	
DIBENZOFURAN	30	U	
DIETHYL PHTHALATE	50	J	P
DIMETHYL PHTHALATE	38	U	
DI-N-BUTYL PHTHALATE	71	U	A
DI-N-OCTYL PHTHALATE	33	U	
FLUORANTHENE	66	U	
FLUORENE	32	U	
HEXACHLOROBENZENE	43	U	
HEXACHLOROBUTADIENE	41	U	
HEXACHLOROCYCLOPENTADIENE	76	UJ	C
HEXACHLOROETHANE	49	U	
INDENO(1,2,3-CD)PYRENE	57	U	
ISOPHORONE	35	U	
NAPHTHALENE	40	U	
NITROBENZENE	43	U	
N-NITROSO-DI-N-PROPYLAMINE	68	U	
N-NITROSODIPHENYLAMINE	40	U	
PENTACHLOROPHENOL	42	U	
PHENANTHRENE	28	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	45	U	
PYRENE	49	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	33	U	
1,2,4,5-TETRACHLORO BENZENE	110	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	58	U	
2,4,5-TRICHLOROPHENOL	30	U	
2,4,6-TRICHLOROPHENOL	39	U	
2,4-DICHLOROPHENOL	21	U	
2,4-DIMETHYLPHENOL	24	U	
2,4-DINITROPHENOL	150	U	
2,4-DINITROTOLUENE	27	U	
2,6-DINITROTOLUENE	43	U	
2-CHLORONAPHTHALENE	36	U	
2-CHLOROPHENOL	46	U	
2-METHYLNAPHTHALENE	39	U	
2-METHYLPHENOL	43	U	
2-NITROANILINE	36	U	
2-NITROPHENOL	25	U	
3,3'-DICHLOROBENZIDINE	35	U	
3-NITROANILINE	53	U	
4,6-DINITRO-2-METHYLPHENOL	24	U	
4-BROMOPHENYL PHENYL ETHER	29	U	
4-CHLORO-3-METHYLPHENOL	31	U	
4-CHLOROANILINE	54	U	
4-CHLOROPHENYL PHENYL ETHER	35	U	
4-METHYLPHENOL	30	U	
4-NITROANILINE	110	U	
4-NITROPHENOL	91	U	
ACENAPHTHENE	30	U	
ACENAPHTHYLENE	22	U	
ACETOPHENONE	46	U	
ANTHRACENE	31	U	
ATRAZINE	32	U	
BENZALDEHYDE	62	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	41	U	
BENZO(A)PYRENE	26	U	
BENZO(B)FLUORANTHENE	36	U	
BENZO(G,H,I)PERYLENE	79	U	
BENZO(K)FLUORANTHENE	44	U	
BIS(2-CHLOROETHOXY)METHANE	35	U	
BIS(2-CHLOROETHYL)ETHER	46	UJ	C
BIS(2-ETHYLHEXYL)PHTHALATE	87	U	A
BUTYL BENZYL PHTHALATE	33	U	
CAPROLACTAM	210	J	EP
CARBAZOLE	41	U	
CHRYSENE	35	U	
DIBENZO(A,H)ANTHRACENE	68	U	
DIBENZOFURAN	28	U	
DIETHYL PHTHALATE	40	J	P
DIMETHYL PHTHALATE	34	U	
DI-N-BUTYL PHTHALATE	34	U	
DI-N-OCTYL PHTHALATE	30	U	
FLUORANTHENE	60	U	
FLUORENE	29	U	
HEXACHLORO BENZENE	39	U	
HEXACHLOROBUTADIENE	37	U	
HEXACHLOROCYCLOPENTADIENE	69	UJ	C
HEXACHLOROETHANE	44	U	
INDENO(1,2,3-CD)PYRENE	52	U	
ISOPHORONE	32	U	
NAPHTHALENE	36	U	
NITROBENZENE	39	U	
N-NITROSO-DI-N-PROPYLAMINE	62	U	
N-NITROSODIPHENYLAMINE	36	U	
PENTACHLOROPHENOL	38	U	
PHENANTHRENE	26	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	40	U	
PYRENE	45	U	

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS0701
 samp_date 9/11/2008
 lab_id 0809127-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.0
 DUP_OF:

nsample 01SS0801
 samp_date 9/11/2008
 lab_id 0809127-04
 qc_type NM
 units UG/KG
 Pct_Solids 93.2
 DUP_OF:

nsample 01SS0901
 samp_date 9/11/2008
 lab_id 0809127-05
 qc_type NM
 units UG/KG
 Pct_Solids 76.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.18	UJ	H
4,4'-DDE	0.18	UJ	H
4,4'-DDT	0.18	UJ	H
ALDRIN	0.12	UJ	H
ALPHA-BHC	0.12	UJ	H
ALPHA-CHLORDANE	0.57	J	HU
AROCLOR-1016	4.6	UJ	H
AROCLOR-1221	4.6	UJ	H
AROCLOR-1232	4.6	UJ	H
AROCLOR-1242	4.6	UJ	H
AROCLOR-1248	4.6	UJ	H
AROCLOR-1254	4.6	UJ	H
AROCLOR-1260	4.6	UJ	H
BETA-BHC	0.12	UJ	H
DELTA-BHC	0.12	UJ	H
DIELDRIN	0.18	UJ	H
ENDOSULFAN I	0.12	UJ	H
ENDOSULFAN II	0.18	UJ	H
ENDOSULFAN SULFATE	0.18	UJ	H
ENDRIN	0.18	UJ	H
ENDRIN ALDEHYDE	0.18	UJ	H
ENDRIN KETONE	0.18	UJ	H
GAMMA-BHC (LINDANE)	0.12	UJ	H
GAMMA-CHLORDANE	0.22	J	HP
HEPTACHLOR	0.12	UJ	H
HEPTACHLOR EPOXIDE	0.12	UJ	H
METHOXYCHLOR	0.12	UJ	H
TOXAPHENE	12	UJ	H

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.18	UJ	H
4,4'-DDE	0.18	UJ	H
4,4'-DDT	0.18	UJ	H
ALDRIN	0.12	UJ	H
ALPHA-BHC	0.12	UJ	H
ALPHA-CHLORDANE	0.12	UJ	H
AROCLOR-1016	4.5	UJ	H
AROCLOR-1221	4.5	UJ	H
AROCLOR-1232	4.5	UJ	H
AROCLOR-1242	4.5	UJ	H
AROCLOR-1248	4.5	UJ	H
AROCLOR-1254	4.5	UJ	H
AROCLOR-1260	4.5	UJ	H
BETA-BHC	0.36	J	HP
DELTA-BHC	0.12	UJ	H
DIELDRIN	0.91	J	H
ENDOSULFAN I	0.12	UJ	H
ENDOSULFAN II	0.32	J	HP
ENDOSULFAN SULFATE	0.18	UJ	H
ENDRIN	0.18	UJ	H
ENDRIN ALDEHYDE	0.18	UJ	H
ENDRIN KETONE	0.18	UJ	H
GAMMA-BHC (LINDANE)	0.12	UJ	H
GAMMA-CHLORDANE	0.12	UJ	H
HEPTACHLOR	0.19	J	HP
HEPTACHLOR EPOXIDE	0.16	R	U
METHOXYCHLOR	0.12	UJ	H
TOXAPHENE	12	UJ	H

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.22	UJ	H
4,4'-DDE	0.22	UJ	H
4,4'-DDT	0.22	UJ	H
ALDRIN	0.14	UJ	H
ALPHA-BHC	0.14	UJ	H
ALPHA-CHLORDANE	0.14	UJ	H
AROCLOR-1016	5.5	UJ	H
AROCLOR-1221	5.5	UJ	H
AROCLOR-1232	5.5	UJ	H
AROCLOR-1242	5.5	UJ	H
AROCLOR-1248	5.5	UJ	H
AROCLOR-1254	5.5	UJ	H
AROCLOR-1260	5.5	UJ	H
BETA-BHC	0.14	UJ	H
DELTA-BHC	0.14	UJ	H
DIELDRIN	9.5	J	H
ENDOSULFAN I	0.14	UJ	H
ENDOSULFAN II	0.22	UJ	H
ENDOSULFAN SULFATE	0.22	UJ	H
ENDRIN	0.22	UJ	H
ENDRIN ALDEHYDE	0.22	UJ	H
ENDRIN KETONE	0.22	UJ	H
GAMMA-BHC (LINDANE)	0.14	UJ	H
GAMMA-CHLORDANE	0.14	UJ	H
HEPTACHLOR	0.14	UJ	H
HEPTACHLOR EPOXIDE	0.14	UJ	H
METHOXYCHLOR	0.14	UJ	H
TOXAPHENE	14	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS1001
 samp_date 9/11/2008
 lab_id 0809127-06
 qc_type NM
 units UG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS1101
 samp_date 9/11/2008
 lab_id 0809127-07
 qc_type NM
 units UG/KG
 Pct_Solids 80.7
 DUP_OF:

nsample 01SS1201
 samp_date 9/11/2008
 lab_id 0809127-08
 qc_type NM
 units UG/KG
 Pct_Solids 88.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.55	R	U
4,4'-DDE	1.5	J	HU
4,4'-DDT	2	J	HU
ALDRIN	0.12	UJ	H
ALPHA-BHC	0.12	UJ	H
ALPHA-CHLORDANE	2.1	J	H
AROCLOR-1016	4.5	UJ	H
AROCLOR-1221	4.5	UJ	H
AROCLOR-1232	4.5	UJ	H
AROCLOR-1242	4.5	UJ	H
AROCLOR-1248	4.5	UJ	H
AROCLOR-1254	4.5	UJ	H
AROCLOR-1260	17	J	HP
BETA-BHC	0.12	UJ	H
DELTA-BHC	0.12	UJ	H
DIELDRIN	15	J	H
ENDOSULFAN I	0.12	UJ	H
ENDOSULFAN II	0.24	J	HPU
ENDOSULFAN SULFATE	0.18	UJ	H
ENDRIN	0.18	UJ	H
ENDRIN ALDEHYDE	2	J	HU
ENDRIN KETONE	0.18	UJ	H
GAMMA-BHC (LINDANE)	0.12	UJ	H
GAMMA-CHLORDANE	1.4	J	HU
HEPTACHLOR	0.12	UJ	H
HEPTACHLOR EPOXIDE	1.7	J	HU
METHOXYCHLOR	4.5	J	HU
TOXAPHENE	12	UJ	H

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.21	UJ	H
4,4'-DDE	0.21	UJ	H
4,4'-DDT	0.21	UJ	H
ALDRIN	0.14	UJ	H
ALPHA-BHC	0.14	UJ	H
ALPHA-CHLORDANE	0.14	UJ	H
AROCLOR-1016	5.2	UJ	H
AROCLOR-1221	5.2	UJ	H
AROCLOR-1232	5.2	UJ	H
AROCLOR-1242	5.2	UJ	H
AROCLOR-1248	5.2	UJ	H
AROCLOR-1254	5.2	UJ	H
AROCLOR-1260	5.2	UJ	H
BETA-BHC	0.14	UJ	H
DELTA-BHC	0.14	UJ	H
DIELDRIN	2.1	J	H
ENDOSULFAN I	0.14	UJ	H
ENDOSULFAN II	0.69	J	HPU
ENDOSULFAN SULFATE	0.21	UJ	H
ENDRIN	0.21	UJ	H
ENDRIN ALDEHYDE	0.21	UJ	H
ENDRIN KETONE	0.21	UJ	H
GAMMA-BHC (LINDANE)	0.14	UJ	H
GAMMA-CHLORDANE	0.14	UJ	H
HEPTACHLOR	0.14	UJ	H
HEPTACHLOR EPOXIDE	1	J	HU
METHOXYCHLOR	0.14	UJ	H
TOXAPHENE	14	UJ	H

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.19	UJ	H
4,4'-DDE	0.19	UJ	H
4,4'-DDT	0.19	UJ	H
ALDRIN	0.12	UJ	H
ALPHA-BHC	0.12	UJ	H
ALPHA-CHLORDANE	0.12	UJ	H
AROCLOR-1016	4.7	UJ	H
AROCLOR-1221	4.7	UJ	H
AROCLOR-1232	4.7	UJ	H
AROCLOR-1242	4.7	UJ	H
AROCLOR-1248	4.7	UJ	H
AROCLOR-1254	4.7	UJ	H
AROCLOR-1260	4.7	UJ	H
BETA-BHC	0.12	UJ	H
DELTA-BHC	0.12	UJ	H
DIELDRIN	0.19	UJ	H
ENDOSULFAN I	0.12	UJ	H
ENDOSULFAN II	0.19	UJ	H
ENDOSULFAN SULFATE	0.19	UJ	H
ENDRIN	0.19	UJ	H
ENDRIN ALDEHYDE	0.19	UJ	H
ENDRIN KETONE	0.19	UJ	H
GAMMA-BHC (LINDANE)	0.12	UJ	H
GAMMA-CHLORDANE	0.12	UJ	H
HEPTACHLOR	0.12	UJ	H
HEPTACHLOR EPOXIDE	0.12	UJ	H
METHOXYCHLOR	0.12	UJ	H
TOXAPHENE	12	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS0701
samp_date 9/11/2008
lab_id 0809127-03
qc_type NM
units UG/KG
Pct_Solids 91.0
DUP_OF:

nsample 01SS0801
samp_date 9/11/2008
lab_id 0809127-04
qc_type NM
units UG/KG
Pct_Solids 93.2
DUP_OF:

nsample 01SS0901
samp_date 9/11/2008
lab_id 0809127-05
qc_type NM
units UG/KG
Pct_Solids 76.1
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.92	UJ	H
2,4,5-TP (SILVEX)	0.92	UJ	H
2,4-D	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
2,4,5-T	6	J	HU
2,4,5-TP (SILVEX)	0.89	UJ	H
2,4-D	8.9	UJ	H

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.1	UJ	H
2,4,5-TP (SILVEX)	1.1	UJ	H
2,4-D	11	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-011 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS1001
samp_date 9/11/2008
lab_id 0809127-06
qc_type NM
units UG/KG
Pct_Solids 92.7
DUP_OF:

nsample 01SS1101
samp_date 9/11/2008
lab_id 0809127-07
qc_type NM
units UG/KG
Pct_Solids 80.7
DUP_OF:

nsample 01SS1201
samp_date 9/11/2008
lab_id 0809127-08
qc_type NM
units UG/KG
Pct_Solids 88.8
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.2	J	CHRU
2,4,5-TP (SILVEX)	0.9	UJ	H
2,4-D	9	UJ	H

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1	UJ	H
2,4,5-TP (SILVEX)	1	UJ	H
2,4-D	10	UJ	H

Parameter	Result	Val Qual	Qual Code
2,4,5-T	5.1	J	CHR
2,4,5-TP (SILVEX)	0.94	UJ	H
2,4-D	9.4	UJ	H

To: R. Fisher
Page: 8

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909103

Level: (low/med) LOW Date Sampled: 09/09/08 08:30

% Moisture: not dec. _____ Date Analyzed: 09/12/08 18:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909103

Level: (low/med) LOW Date Sampled: 09/09/08 08:30

% Moisture: not dec. _____ Date Analyzed: 09/12/08 18:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.16	1.0		U
87-61-6	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6	Trichloroethene	0.23	1.0		U
76-13-1	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4	Trichlorofluoromethane	0.12	5.0		U
75-01-4	Vinyl chloride	0.20	1.0		U
1330-20-7	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909102

Level: (low/med) LOW Date Sampled: 09/09/08 08:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 17:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/L
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0	0.71	J
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0	2.5	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909102

Level: (low/med) LOW Date Sampled: 09/09/08 08:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 17:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/L	Q
108-88-3	Toluene	0.16	1.0			U
87-61-6	1,2,3-Trichlorobenzene	0.57	1.0			U
120-82-1	1,2,4-Trichlorobenzene	0.57	1.0			U
71-55-6	1,1,1-Trichloroethane	0.12	1.0			U
79-00-5	1,1,2-Trichloroethane	0.10	1.0			U
79-01-6	Trichloroethene	0.23	1.0	1.3		U
76-13-1	Trichlorotrifluoroethane	0.11	1.0			U
75-69-4	Trichlorofluoromethane	0.12	5.0			U
75-01-4	Vinyl chloride	0.20	1.0			U
1330-20-7	Xylene (total)	0.47	1.0			U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909105

Level: (low/med) LOW Date Sampled: 09/09/08 10:25

% Moisture: not dec. _____ Date Analyzed: 09/12/08 19:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909105

Level: (low/med) LOW Date Sampled: 09/09/08 10:25

% Moisture: not dec. _____ Date Analyzed: 09/12/08 19:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-04
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909104
 Level: (low/med) LOW Date Sampled: 09/09/08 10:30
 % Moisture: not dec. _____ Date Analyzed: 09/12/08 18:54
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909104

Level: (low/med) LOW Date Sampled: 09/09/08 10:30

% Moisture: not dec. _____ Date Analyzed: 09/12/08 18:54

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-07
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909107
 Level: (low/med) LOW Date Sampled: 09/09/08 13:40
 % Moisture: not dec. _____ Date Analyzed: 09/12/08 20:25
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909107

Level: (low/med) LOW Date Sampled: 09/09/08 13:40

% Moisture: not dec. _____ Date Analyzed: 09/12/08 20:25

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7----	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909106

Level: (low/med) LOW Date Sampled: 09/09/08 12:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 19:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1-----	Acetone	1.7	5.0		U
71-43-2-----	Benzene	0.12	1.0		U
74-97-5-----	Bromochloromethane	0.15	1.0		U
75-27-4-----	Bromodichloromethane	0.12	1.0		U
75-25-2-----	Bromoform	0.13	1.0		U
74-83-9-----	Bromomethane	0.13	1.0		U
78-93-3-----	2-Butanone	1.4	5.0		U
75-15-0-----	Carbon disulfide	0.15	1.0		U
56-23-5-----	Carbon tetrachloride	0.11	1.0		U
108-90-7-----	Chlorobenzene	0.10	1.0		U
75-00-3-----	Chloroethane	0.14	1.0		U
67-66-3-----	Chloroform	0.13	1.0		U
74-87-3-----	Chloromethane	0.28	1.0		U
110-82-7-----	Cyclohexane	0.12	1.0		U
124-48-1-----	Dibromochloromethane	0.14	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4-----	1,2-Dibromoethane	0.14	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.25	1.0		U
75-34-3-----	1,1-Dichloroethane	0.11	1.0		U
107-06-2-----	1,2-Dichloroethane	0.13	1.0		U
75-35-4-----	1,1-Dichloroethene	0.13	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5-----	1,2-Dichloropropane	0.11	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4-----	Ethylbenzene	0.35	1.0		U
591-78-6-----	2-Hexanone	0.18	5.0		U
98-82-8-----	Isopropylbenzene	0.11	1.0		U
79-20-9-----	Methyl acetate	0.36	1.0		U
108-87-2-----	Methyl cyclohexane	0.12	1.0		U
75-09-2-----	Methylene chloride	0.23	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.10	1.0		U
108-10-1-----	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5-----	Styrene	0.090	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4-----	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909106

Level: (low/med) LOW Date Sampled: 09/09/08 12:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 19:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-08
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909108
 Level: (low/med) LOW Date Sampled: 09/09/08 15:00
 % Moisture: not dec. _____ Date Analyzed: 09/12/08 14:22
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.7	5.0		U
71-43-2-----	Benzene	0.12	1.0		U
74-97-5-----	Bromochloromethane	0.15	1.0		U
75-27-4-----	Bromodichloromethane	0.12	1.0		U
75-25-2-----	Bromoform	0.13	1.0		U
74-83-9-----	Bromomethane	0.13	1.0		U
78-93-3-----	2-Butanone	1.4	5.0		U
75-15-0-----	Carbon disulfide	0.15	1.0		U
56-23-5-----	Carbon tetrachloride	0.11	1.0		U
108-90-7-----	Chlorobenzene	0.10	1.0		U
75-00-3-----	Chloroethane	0.14	1.0		U
67-66-3-----	Chloroform	0.13	1.0		U
74-87-3-----	Chloromethane	0.28	1.0		U
110-82-7-----	Cyclohexane	0.12	1.0		U
124-48-1-----	Dibromochloromethane	0.14	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4-----	1,2-Dibromoethane	0.14	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.25	1.0		U
75-34-3-----	1,1-Dichloroethane	0.11	1.0		U
107-06-2-----	1,2-Dichloroethane	0.13	1.0		U
75-35-4-----	1,1-Dichloroethene	0.13	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5-----	1,2-Dichloropropane	0.11	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4-----	Ethylbenzene	0.35	1.0		U
591-78-6-----	2-Hexanone	0.18	5.0		U
98-82-8-----	Isopropylbenzene	0.11	1.0		U
79-20-9-----	Methyl acetate	0.36	1.0		U
108-87-2-----	Methyl cyclohexane	0.12	1.0		U
75-09-2-----	Methylene chloride	0.23	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.10	1.0		U
108-10-1-----	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5-----	Styrene	0.090	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4-----	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909108

Level: (low/med) LOW Date Sampled: 09/09/08 15:00

% Moisture: not dec. _____ Date Analyzed: 09/12/08 14:22

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.16	1.0	0.47	J
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene(total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0912702

Level: (low/med) LOW Date Sampled: 09/11/08 07:20

% Moisture: not dec. _____ Date Analyzed: 09/15/08 13:22

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

67-64-1-----Acetone	1.7	5.0	3.1	J
71-43-2-----Benzene	0.12	1.0		U
74-97-5-----Bromochloromethane	0.15	1.0		U
75-27-4-----Bromodichloromethane	0.12	1.0		U
75-25-2-----Bromoform	0.13	1.0		U
74-83-9-----Bromomethane	0.13	1.0		U
78-93-3-----2-Butanone	1.4	5.0		U
75-15-0-----Carbon disulfide	0.15	1.0		U
56-23-5-----Carbon tetrachloride	0.11	1.0		U
108-90-7-----Chlorobenzene	0.10	1.0		U
75-00-3-----Chloroethane	0.14	1.0		U
67-66-3-----Chloroform	0.13	1.0		U
74-87-3-----Chloromethane	0.28	1.0		U
110-82-7-----Cyclohexane	0.12	1.0		U
124-48-1-----Dibromochloromethane	0.14	1.0		U
106-93-4-----1,2-Dibromoethane	0.14	1.0		U
75-34-3-----1,1-Dichloroethane	0.11	1.0		U
107-06-2-----1,2-Dichloroethane	0.13	1.0		U
75-35-4-----1,1-Dichloroethene	0.13	1.0		U
156-59-2-----cis-1,2-Dichloroethene	0.14	1.0		U
156-60-5-----trans-1,2-Dichloroethene	0.15	1.0		U
540-59-0-----1,2-Dichloroethene (total)	0.40	1.0		U
78-87-5-----1,2-Dichloropropane	0.11	1.0		U
10061-01-5----cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6----trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4-----Ethylbenzene	0.35	1.0		U
591-78-6-----2-Hexanone	0.18	5.0		U
98-82-8-----Isopropylbenzene	0.11	1.0		U
79-20-9-----Methyl acetate	0.36	1.0		U
108-87-2-----Methyl cyclohexane	0.12	1.0		U
75-09-2-----Methylene chloride	0.23	2.0		U
108-10-1-----4-Methyl-2-pentanone	0.35	5.0		U
1634-04-4----Methyl tert-butyl ether	0.10	1.0		U
100-42-5-----Styrene	0.090	1.0		U
79-34-5-----1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4-----Tetrachloroethene	0.10	1.0		U
108-88-3-----Toluene	0.16	1.0	0.24	J
87-61-6-----1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----1,2,4-Trichlorobenzene	0.57	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0912702

Level: (low/med) LOW Date Sampled: 09/11/08 07:20

% Moisture: not dec. _____ Date Analyzed: 09/15/08 13:22

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0912703A

Level: (low/med) LOW Date Sampled: 09/11/08 08:20

% Moisture: not dec. 9 Date Analyzed: 09/15/08 14:11

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	2.0	10	5.0	J
71-43-2	Benzene	0.48	10		U
74-97-5	Bromochloromethane	0.43	10		U
75-27-4	Bromodichloromethane	0.30	10		U
75-25-2	Bromoform	1.0	10		U
74-83-9	Bromomethane	0.73	10		U
78-93-3	2-Butanone	1.4	10		U
75-15-0	Carbon disulfide	1.3	10		U
56-23-5	Carbon tetrachloride	0.90	10		U
108-90-7	Chlorobenzene	0.34	10		U
75-00-3	Chloroethane	1.1	10		U
67-66-3	Chloroform	0.56	10		U
74-87-3	Chloromethane	0.53	10		U
110-82-7	Cyclohexane	0.55	10		U
124-48-1	Dibromochloromethane	0.34	10		U
106-93-4	1,2-Dibromoethane	0.44	10		U
75-34-3	1,1-Dichloroethane	0.55	10		U
107-06-2	1,2-Dichloroethane	0.47	10		U
75-35-4	1,1-Dichloroethene	1.2	10		U
156-59-2	cis-1,2-Dichloroethene	1.2	10		U
156-60-5	trans-1,2-Dichloroethene	1.1	10		U
540-59-0	1,2-Dichloroethene (total)	1.2	10		U
78-87-5	1,2-Dichloropropane	0.47	10		U
10061-01-5	cis-1,3-Dichloropropene	0.51	10		U
10061-02-6	trans-1,3-Dichloropropene	0.32	10		U
100-41-4	Ethylbenzene	0.76	10		U
591-78-6	2-Hexanone	2.3	10		U
98-82-8	Isopropylbenzene	0.90	10		U
79-20-9	Methyl acetate	1.6	10		U
108-87-2	Methyl cyclohexane	0.30	10		U
75-09-2	Methylene chloride	0.63	10	1.6	JB
108-10-1	4-Methyl-2-pentanone	0.59	10		U
1634-04-4	Methyl tert-butyl ether	0.32	10		U
100-42-5	Styrene	0.36	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.44	10		U
127-18-4	Tetrachloroethene	0.99	10		U
108-88-3	Toluene	0.88	10		U
87-61-6	1,2,3-Trichlorobenzene	0.43	10		U
120-82-1	1,2,4-Trichlorobenzene	0.18	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0912703A

Level: (low/med) LOW Date Sampled: 09/11/08 08:20

% Moisture: not dec. 9 Date Analyzed: 09/15/08 14:11

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane	0.92	10		U
79-00-5-----	1,1,2-Trichloroethane	0.36	10		U
79-01-6-----	Trichloroethene	0.86	10		U
76-13-1-----	Trichlorotrifluoroethane	0.56	10		U
75-01-4-----	Vinyl chloride	1.1	10		U
1330-20-7-----	Xylene (total)	0.71	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-04

Sample wt/vol: 4.4 (g/mL) G Lab File ID: 0912704A

Level: (low/med) LOW Date Sampled: 09/11/08 09:00

% Moisture: not dec. 7 Date Analyzed: 09/15/08 14:50

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1-----	Acetone	2.4	12		U
71-43-2-----	Benzene	0.57	12		U
74-97-5-----	Bromochloromethane	0.51	12		U
75-27-4-----	Bromodichloromethane	0.36	12		U
75-25-2-----	Bromoform	1.2	12		U
74-83-9-----	Bromomethane	0.88	12		U
78-93-3-----	2-Butanone	1.7	12		U
75-15-0-----	Carbon disulfide	1.6	12		U
56-23-5-----	Carbon tetrachloride	1.1	12		U
108-90-7-----	Chlorobenzene	0.41	12		U
75-00-3-----	Chloroethane	1.3	12		U
67-66-3-----	Chloroform	0.67	12		U
74-87-3-----	Chloromethane	0.63	12		U
110-82-7-----	Cyclohexane	0.66	12		U
124-48-1-----	Dibromochloromethane	0.41	12		U
106-93-4-----	1,2-Dibromoethane	0.52	12		U
75-34-3-----	1,1-Dichloroethane	0.66	12		U
107-06-2-----	1,2-Dichloroethane	0.56	12		U
75-35-4-----	1,1-Dichloroethene	1.5	12		U
156-59-2-----	cis-1,2-Dichloroethene	1.5	12		U
156-60-5-----	trans-1,2-Dichloroethene	1.3	12		U
540-59-0-----	1,2-Dichloroethene (total)	1.5	12		U
78-87-5-----	1,2-Dichloropropane	0.56	12		U
10061-01-5----	cis-1,3-Dichloropropene	0.61	12		U
10061-02-6----	trans-1,3-Dichloropropene	0.39	12		U
100-41-4-----	Ethylbenzene	0.91	12		U
591-78-6-----	2-Hexanone	2.8	12		U
98-82-8-----	Isopropylbenzene	1.1	12		U
79-20-9-----	Methyl acetate	2.0	12		U
108-87-2-----	Methyl cyclohexane	0.36	12		U
75-09-2-----	Methylene chloride	0.76	12	2.0	JB
108-10-1-----	4-Methyl-2-pentanone	0.71	12		U
1634-04-4----	Methyl tert-butyl ether	0.39	12		U
100-42-5-----	Styrene	0.43	12		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.52	12		U
127-18-4-----	Tetrachloroethene	1.2	12		U
108-88-3-----	Toluene	1.0	12		U
87-61-6-----	1,2,3-Trichlorobenzene	0.51	12		U
120-82-1-----	1,2,4-Trichlorobenzene	0.22	12		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05
 Sample wt/vol: 4.9 (g/mL) G Lab File ID: 0912705A
 Level: (low/med) LOW Date Sampled: 09/11/08 09:20
 % Moisture: not dec. 24 Date Analyzed: 09/15/08 15:29
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1-----	Acetone	2.7	13	7.0	J
71-43-2-----	Benzene	0.63	13		U
74-97-5-----	Bromochloromethane	0.56	13		U
75-27-4-----	Bromodichloromethane	0.40	13		U
75-25-2-----	Bromoform	1.3	13		U
74-83-9-----	Bromomethane	0.96	13		U
78-93-3-----	2-Butanone	1.9	13		U
75-15-0-----	Carbon disulfide	1.7	13		U
56-23-5-----	Carbon tetrachloride	1.2	13		U
108-90-7-----	Chlorobenzene	0.46	13		U
75-00-3-----	Chloroethane	1.5	13		U
67-66-3-----	Chloroform	0.74	13		U
74-87-3-----	Chloromethane	0.70	13		U
110-82-7-----	Cyclohexane	0.72	13		U
124-48-1-----	Dibromochloromethane	0.46	13		U
106-93-4-----	1,2-Dibromoethane	0.58	13		U
75-34-3-----	1,1-Dichloroethane	0.72	13		U
107-06-2-----	1,2-Dichloroethane	0.62	13		U
75-35-4-----	1,1-Dichloroethene	1.6	13		U
156-59-2-----	cis-1,2-Dichloroethene	1.6	13		U
156-60-5-----	trans-1,2-Dichloroethene	1.5	13		U
540-59-0-----	1,2-Dichloroethene (total)	1.6	13		U
78-87-5-----	1,2-Dichloropropane	0.62	13		U
10061-01-5----	cis-1,3-Dichloropropene	0.67	13		U
10061-02-6----	trans-1,3-Dichloropropene	0.43	13		U
100-41-4-----	Ethylbenzene	1.0	13		U
591-78-6-----	2-Hexanone	3.1	13		U
98-82-8-----	Isopropylbenzene	1.2	13		U
79-20-9-----	Methyl acetate	2.1	13		U
108-87-2-----	Methyl cyclohexane	0.40	13		U
75-09-2-----	Methylene chloride	0.83	13	2.3	JB
108-10-1-----	4-Methyl-2-pentanone	0.78	13		U
1634-04-4----	Methyl tert-butyl ether	0.43	13		U
100-42-5-----	Styrene	0.47	13		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.58	13		U
127-18-4-----	Tetrachloroethene	1.3	13		U
108-88-3-----	Toluene	1.2	13		U
87-61-6-----	1,2,3-Trichlorobenzene	0.56	13		U
120-82-1-----	1,2,4-Trichlorobenzene	0.24	13		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 0912705A

Level: (low/med) LOW Date Sampled: 09/11/08 09:20

% Moisture: not dec. 24 Date Analyzed: 09/15/08 15:29

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	1.2	13		U
79-00-5-----	1,1,2-Trichloroethane	0.47	13		U
79-01-6-----	Trichloroethene	1.1	13		U
76-13-1-----	Trichlorotrifluoroethane	0.74	13		U
75-01-4-----	Vinyl chloride	1.5	13		U
1330-20-7-----	Xylene(total)	0.94	13		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 0912706A

Level: (low/med) LOW Date Sampled: 09/11/08 09:40

% Moisture: not dec. 7 Date Analyzed: 09/15/08 16:09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.8	9.3		U
71-43-2-----	Benzene	0.44	9.3		U
74-97-5-----	Bromochloromethane	0.39	9.3		U
75-27-4-----	Bromodichloromethane	0.28	9.3		U
75-25-2-----	Bromoform	0.93	9.3		U
74-83-9-----	Bromomethane	0.67	9.3		U
78-93-3-----	2-Butanone	1.3	9.3		U
75-15-0-----	Carbon disulfide	1.2	9.3		U
56-23-5-----	Carbon tetrachloride	0.82	9.3		U
108-90-7-----	Chlorobenzene	0.32	9.3		U
75-00-3-----	Chloroethane	1.0	9.3		U
67-66-3-----	Chloroform	0.51	9.3		U
74-87-3-----	Chloromethane	0.48	9.3		U
110-82-7-----	Cyclohexane	0.50	9.3		U
124-48-1-----	Dibromochloromethane	0.32	9.3		U
106-93-4-----	1,2-Dibromoethane	0.40	9.3		U
75-34-3-----	1,1-Dichloroethane	0.50	9.3		U
107-06-2-----	1,2-Dichloroethane	0.43	9.3		U
75-35-4-----	1,1-Dichloroethene	1.1	9.3		U
156-59-2-----	cis-1,2-Dichloroethene	1.1	9.3		U
156-60-5-----	trans-1,2-Dichloroethene	1.0	9.3		U
540-59-0-----	1,2-Dichloroethene (total)	1.1	9.3		U
78-87-5-----	1,2-Dichloropropane	0.43	9.3		U
10061-01-5----	cis-1,3-Dichloropropene	0.46	9.3		U
10061-02-6----	trans-1,3-Dichloropropene	0.30	9.3		U
100-41-4-----	Ethylbenzene	0.70	9.3		U
591-78-6-----	2-Hexanone	2.1	9.3		U
98-82-8-----	Isopropylbenzene	0.82	9.3		U
79-20-9-----	Methyl acetate	1.5	9.3		U
108-87-2-----	Methyl cyclohexane	0.28	9.3		U
75-09-2-----	Methylene chloride	0.58	9.3	1.5	JB
108-10-1-----	4-Methyl-2-pentanone	0.54	9.3		U
1634-04-4----	Methyl tert-butyl ether	0.30	9.3		U
100-42-5-----	Styrene	0.32	9.3		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.40	9.3		U
127-18-4-----	Tetrachloroethene	0.90	9.3		U
108-88-3-----	Toluene	0.80	9.3		U
87-61-6-----	1,2,3-Trichlorobenzene	0.39	9.3		U
120-82-1-----	1,2,4-Trichlorobenzene	0.17	9.3		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 0912706A

Level: (low/med) LOW Date Sampled: 09/11/08 09:40

% Moisture: not dec. 7 Date Analyzed: 09/15/08 16:09

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane	0.84	9.3		U
79-00-5-----	1,1,2-Trichloroethane	0.32	9.3		U
79-01-6-----	Trichloroethene	0.79	9.3		U
76-13-1-----	Trichlorotrifluoroethane	0.51	9.3		U
75-01-4-----	Vinyl chloride	1.0	9.3		U
1330-20-7----	Xylene (total)	0.65	9.3		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-07

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 0912707A

Level: (low/med) LOW Date Sampled: 09/11/08 10:00

% Moisture: not dec. 19 Date Analyzed: 09/15/08 16:48

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG			Q
		MDL	RL	CONC	
67-64-1	Acetone	2.2	11	6.4	J
71-43-2	Benzene	0.51	11		U
74-97-5	Bromochloromethane	0.46	11		U
75-27-4	Bromodichloromethane	0.33	11		U
75-25-2	Bromoform	1.1	11		U
74-83-9	Bromomethane	0.78	11		U
78-93-3	2-Butanone	1.5	11	1.8	J
75-15-0	Carbon disulfide	1.4	11		U
56-23-5	Carbon tetrachloride	0.96	11		U
108-90-7	Chlorobenzene	0.37	11		U
75-00-3	Chloroethane	1.2	11		U
67-66-3	Chloroform	0.60	11		U
74-87-3	Chloromethane	0.56	11		U
110-82-7	Cyclohexane	0.59	11		U
124-48-1	Dibromochloromethane	0.37	11		U
106-93-4	1,2-Dibromoethane	0.47	11		U
75-34-3	1,1-Dichloroethane	0.59	11		U
107-06-2	1,2-Dichloroethane	0.50	11		U
75-35-4	1,1-Dichloroethene	1.3	11		U
156-59-2	cis-1,2-Dichloroethene	1.3	11		U
156-60-5	trans-1,2-Dichloroethene	1.2	11		U
540-59-0	1,2-Dichloroethene (total)	1.3	11		U
78-87-5	1,2-Dichloropropane	0.50	11		U
10061-01-5	cis-1,3-Dichloropropene	0.54	11		U
10061-02-6	trans-1,3-Dichloropropene	0.35	11		U
100-41-4	Ethylbenzene	0.82	11		U
591-78-6	2-Hexanone	2.5	11		U
98-82-8	Isopropylbenzene	0.96	11		U
79-20-9	Methyl acetate	1.7	11		U
108-87-2	Methyl cyclohexane	0.33	11		U
75-09-2	Methylene chloride	0.67	11	1.6	JB
108-10-1	4-Methyl-2-pentanone	0.63	11		U
1634-04-4	Methyl tert-butyl ether	0.35	11		U
100-42-5	Styrene	0.38	11		U
79-34-5	1,1,2,2-Tetrachloroethane	0.47	11		U
127-18-4	Tetrachloroethene	1.0	11		U
108-88-3	Toluene	0.93	11		U
87-61-6	1,2,3-Trichlorobenzene	0.46	11		U
120-82-1	1,2,4-Trichlorobenzene	0.20	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-07

Sample wt/vol: 5.7 (g/mL) G Lab File ID: 0912707A

Level: (low/med) LOW Date Sampled: 09/11/08 10:00

% Moisture: not dec. 19 Date Analyzed: 09/15/08 16:48

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane	0.98	11		U
79-00-5-----	1,1,2-Trichloroethane	0.38	11		U
79-01-6-----	Trichloroethene	0.92	11		U
76-13-1-----	Trichlorotrifluoroethane	0.60	11		U
75-01-4-----	Vinyl chloride	1.2	11		U
1330-20-7----	Xylene (total)	0.76	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08
 Sample wt/vol: 5.6 (g/mL) G Lab File ID: 0912708A
 Level: (low/med) LOW Date Sampled: 09/11/08 10:25
 % Moisture: not dec. 11 Date Analyzed: 09/15/08 17:27
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	2.0	10	15	
71-43-2	Benzene	0.47	10		U
74-97-5	Bromochloromethane	0.42	10		U
75-27-4	Bromodichloromethane	0.30	10		U
75-25-2	Bromoform	1.0	10		U
74-83-9	Bromomethane	0.72	10		U
78-93-3	2-Butanone	1.4	10	4.0	J
75-15-0	Carbon disulfide	1.3	10		U
56-23-5	Carbon tetrachloride	0.88	10		U
108-90-7	Chlorobenzene	0.34	10		U
75-00-3	Chloroethane	1.1	10		U
67-66-3	Chloroform	0.55	10		U
74-87-3	Chloromethane	0.52	10		U
110-82-7	Cyclohexane	0.54	10		U
124-48-1	Dibromochloromethane	0.34	10		U
106-93-4	1,2-Dibromoethane	0.43	10		U
75-34-3	1,1-Dichloroethane	0.54	10		U
107-06-2	1,2-Dichloroethane	0.46	10		U
75-35-4	1,1-Dichloroethene	1.2	10		U
156-59-2	cis-1,2-Dichloroethene	1.2	10		U
156-60-5	trans-1,2-Dichloroethene	1.1	10		U
540-59-0	1,2-Dichloroethene (total)	1.2	10		U
78-87-5	1,2-Dichloropropane	0.46	10		U
10061-01-5	cis-1,3-Dichloropropene	0.50	10		U
10061-02-6	trans-1,3-Dichloropropene	0.32	10		U
100-41-4	Ethylbenzene	0.75	10		U
591-78-6	2-Hexanone	2.3	10		U
98-82-8	Isopropylbenzene	0.88	10		U
79-20-9	Methyl acetate	1.6	10		U
108-87-2	Methyl cyclohexane	0.30	10		U
75-09-2	Methylene chloride	0.62	10	1.4	JB
108-10-1	4-Methyl-2-pentanone	0.58	10		U
1634-04-4	Methyl tert-butyl ether	0.32	10		U
100-42-5	Styrene	0.35	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.43	10		U
127-18-4	Tetrachloroethene	0.98	10		U
108-88-3	Toluene	0.86	10		U
87-61-6	1,2,3-Trichlorobenzene	0.42	10		U
120-82-1	1,2,4-Trichlorobenzene	0.18	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08

Sample wt/vol: 5.6 (g/mL) G Lab File ID: 0912708A

Level: (low/med) LOW Date Sampled: 09/11/08 10:25

% Moisture: not dec. 11 Date Analyzed: 09/15/08 17:27

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.90	10		U
79-00-5-----	1,1,2-Trichloroethane	0.35	10		U
79-01-6-----	Trichloroethene	0.85	10		U
76-13-1-----	Trichlorotrifluoroethane	0.55	10		U
75-01-4-----	Vinyl chloride	1.1	10		U
1330-20-7-----	Xylene (total)	0.70	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909101

Level: (low/med) LOW Date Sampled: 09/09/08 07:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 13:51

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			Q
		MDL	RL	UG/L CONC	
67-64-1	Acetone	1.7	5.0		U
71-43-2	Benzene	0.12	1.0		U
74-97-5	Bromochloromethane	0.15	1.0		U
75-27-4	Bromodichloromethane	0.12	1.0		U
75-25-2	Bromoform	0.13	1.0		U
74-83-9	Bromomethane	0.13	1.0		U
78-93-3	2-Butanone	1.4	5.0		U
75-15-0	Carbon disulfide	0.15	1.0		U
56-23-5	Carbon tetrachloride	0.11	1.0		U
108-90-7	Chlorobenzene	0.10	1.0		U
75-00-3	Chloroethane	0.14	1.0		U
67-66-3	Chloroform	0.13	1.0		U
74-87-3	Chloromethane	0.28	1.0		U
110-82-7	Cyclohexane	0.12	1.0		U
124-48-1	Dibromochloromethane	0.14	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U
106-93-4	1,2-Dibromoethane	0.14	1.0		U
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U
75-71-8	Dichlorodifluoromethane	0.25	1.0		U
75-34-3	1,1-Dichloroethane	0.11	1.0		U
107-06-2	1,2-Dichloroethane	0.13	1.0		U
75-35-4	1,1-Dichloroethene	0.13	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U
78-87-5	1,2-Dichloropropane	0.11	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4	Ethylbenzene	0.35	1.0		U
591-78-6	2-Hexanone	0.18	5.0		U
98-82-8	Isopropylbenzene	0.11	1.0		U
79-20-9	Methyl acetate	0.36	1.0		U
108-87-2	Methyl cyclohexane	0.12	1.0		U
75-09-2	Methylene chloride	0.23	2.0		U
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U
100-42-5	Styrene	0.090	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4	Tetrachloroethene	0.10	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0909101

Level: (low/med) LOW Date Sampled: 09/09/08 07:45

% Moisture: not dec. _____ Date Analyzed: 09/12/08 13:51

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----	Trichlorofluoromethane	0.12	5.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene(total)	0.47	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0912701

Level: (low/med) LOW Date Sampled: 09/11/08 07:20

% Moisture: not dec. _____ Date Analyzed: 09/15/08 12:52

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC	UG/L Q
		MDL	RL			
67-64-1-----	Acetone	1.7	5.0		U	
71-43-2-----	Benzene	0.12	1.0		U	
74-97-5-----	Bromochloromethane	0.15	1.0		U	
75-27-4-----	Bromodichloromethane	0.12	1.0		U	
75-25-2-----	Bromoform	0.13	1.0		U	
74-83-9-----	Bromomethane	0.13	1.0		U	
78-93-3-----	2-Butanone	1.4	5.0		U	
75-15-0-----	Carbon disulfide	0.15	1.0		U	
56-23-5-----	Carbon tetrachloride	0.11	1.0		U	
108-90-7-----	Chlorobenzene	0.10	1.0		U	
75-00-3-----	Chloroethane	0.14	1.0		U	
67-66-3-----	Chloroform	0.13	1.0		U	
74-87-3-----	Chloromethane	0.28	1.0		U	
110-82-7-----	Cyclohexane	0.12	1.0		U	
124-48-1-----	Dibromochloromethane	0.14	1.0		U	
106-93-4-----	1,2-Dibromoethane	0.14	1.0		U	
75-34-3-----	1,1-Dichloroethane	0.11	1.0		U	
107-06-2-----	1,2-Dichloroethane	0.13	1.0		U	
75-35-4-----	1,1-Dichloroethene	0.13	1.0		U	
156-59-2-----	cis-1,2-Dichloroethene	0.14	1.0		U	
156-60-5-----	trans-1,2-Dichloroethene	0.15	1.0		U	
540-59-0-----	1,2-Dichloroethene (total)	0.40	1.0		U	
78-87-5-----	1,2-Dichloropropane	0.11	1.0		U	
10061-01-5----	cis-1,3-Dichloropropene	0.080	1.0		U	
10061-02-6----	trans-1,3-Dichloropropene	0.12	1.0		U	
100-41-4-----	Ethylbenzene	0.35	1.0		U	
591-78-6-----	2-Hexanone	0.18	5.0		U	
98-82-8-----	Isopropylbenzene	0.11	1.0		U	
79-20-9-----	Methyl acetate	0.36	1.0		U	
108-87-2-----	Methyl cyclohexane	0.12	1.0		U	
75-09-2-----	Methylene chloride	0.23	2.0	0.24	JB	
108-10-1-----	4-Methyl-2-pentanone	0.35	5.0		U	
1634-04-4-----	Methyl tert-butyl ether	0.10	1.0		U	
100-42-5-----	Styrene	0.090	1.0		U	
79-34-5-----	1,1,2,2-Tetrachloroethane	0.13	1.0		U	
127-18-4-----	Tetrachloroethene	0.10	1.0		U	
108-88-3-----	Toluene	0.16	1.0		U	
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U	
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0912701

Level: (low/med) LOW Date Sampled: 09/11/08 07:20

% Moisture: not dec. _____ Date Analyzed: 09/15/08 12:52

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-03
 Sample wt/vol: 1070 (g/mL) ML Lab File ID: 0909103
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:30
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 13:57
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: MDL	(ug/L or ug/Kg) RL	UG/L CONC	UG/L Q
83-32-9	Acenaphthene	0.59	9.3		U
208-96-8	Acenaphthylene	0.44	9.3		U
98-86-2	Acetophenone	0.70	9.3		U
1912-24-9	Atrazine	0.64	9.3		U
120-12-7	Anthracene	0.72	9.3		U
100-52-7	Benzaldehyde	0.53	9.3		U
56-55-3	Benzo (a) anthracene	0.85	9.3		U
205-99-2	Benzo (b) fluoranthene	0.66	9.3		U
207-08-9	Benzo (k) fluoranthene	0.47	9.3		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.3		U
50-32-8	Benzo (a) pyrene	0.56	9.3		U
92-52-4	1,1'-Biphenyl	0.36	9.3		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.3		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.3		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.3		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.7	1.7	J
101-55-3	4-Bromophenyl-phenylether	0.53	9.3		U
85-68-7	Butylbenzylphthalate	0.77	9.3		U
105-60-2	Caprolactam	0.34	9.3		U
106-47-8	4-Chloroaniline	0.89	9.3		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.3		U
91-58-7	2-Chloronaphthalene	0.54	9.3		U
95-57-8	2-Chlorophenol	0.55	9.3		U
7005-72-3	4-Chlorophenyl-phenylether	0.83	9.3		U
218-01-9	Chrysene	0.94	9.3		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.3		U
132-64-9	Dibenzofuran	0.61	9.3		U
91-94-1	3,3'-Dichlorobenzidine	0.83	9.3		U
120-83-2	2,4-Dichlorophenol	0.41	9.3		U
84-66-2	Diethylphthalate	0.95	9.3		U
105-67-9	2,4-Dimethylphenol	0.66	9.3		U
131-11-3	Dimethylphthalate	0.69	9.3		U
84-74-2	Di-n-butylphthalate	1.2	9.3		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-03
 Sample wt/vol: 1070 (g/mL) ML Lab File ID: 0909103
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:30
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 13:57
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: MDL	(ug/L or ug/Kg) RL	UG/L CONC	UG/L Q
534-52-1-----	4,6-Dinitro-2-methylphenol	0.69	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.46	9.3		U
606-20-2-----	2,6-Dinitrotoluene	0.62	9.3		U
117-84-0-----	Di-n-octylphthalate	0.31	9.3		U
206-44-0-----	Fluoranthene	0.65	9.3		U
86-73-7-----	Fluorene	0.51	9.3		U
118-74-1-----	Hexachlorobenzene	0.44	9.3		U
87-68-3-----	Hexachlorobutadiene	0.87	9.3		U
77-47-4-----	Hexachlorocyclopentadiene	0.83	9.3		U
67-72-1-----	Hexachloroethane	0.43	9.3		U
193-39-5-----	Indeno (1,2,3-cd) pyrene	1.3	9.3		U
78-59-1-----	Isophorone	0.51	9.3		U
91-57-6-----	2-Methylnaphthalene	0.64	9.3		U
91-20-3-----	Naphthalene	0.42	9.3		U
95-48-7-----	2-Methylphenol	0.78	9.3		U
106-44-5-----	4-Methylphenol	0.72	9.3		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.98	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.58	9.3		U
88-75-5-----	2-Nitrophenol	0.69	9.3		U
100-02-7-----	4-Nitrophenol	0.78	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.43	9.3		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.84	9.3		U
87-86-5-----	Pentachlorophenol	0.93	23		U
85-01-8-----	Phenanthrene	0.72	9.3		U
108-95-2-----	Phenol	0.43	9.3		U
129-00-0-----	Pyrene	0.61	9.3		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.3		U
95-95-4-----	2,4,5-Trichlorophenol	0.47	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.3		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-02
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909102
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 13:21
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6		U
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-02
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909102
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 13:21
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol__	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno (1,2,3-cd) pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-05
 Sample wt/vol: 1040 (g/mL) ML Lab File ID: 0909105
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:25
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 15:10
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L Q
		MDL	(ug/L or ug/Kg) RL CONC	
83-32-9	Acenaphthene	0.60	9.6	U
208-96-8	Acenaphthylene	0.45	9.6	U
98-86-2	Acetophenone	0.72	9.6	U
1912-24-9	Atrazine	0.66	9.6	U
120-12-7	Anthracene	0.74	9.6	U
100-52-7	Benzaldehyde	0.55	9.6	U
56-55-3	Benzo (a) anthracene	0.88	9.6	U
205-99-2	Benzo (b) fluoranthene	0.68	9.6	U
207-08-9	Benzo (k) fluoranthene	0.48	9.6	U
191-24-2	Benzo (g, h, i) perylene	1.4	9.6	U
50-32-8	Benzo (a) pyrene	0.58	9.6	U
92-52-4	1,1'-Biphenyl	0.38	9.6	U
111-91-1	bis (2-Chloroethoxy) methane	0.50	9.6	U
111-44-4	bis (2-Chloroethyl) ether	0.43	9.6	U
108-60-1	bis (2-Chloroisopropyl) ether	0.82	9.6	U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.8	J
101-55-3	4-Bromophenyl-phenylether	0.55	9.6	U
85-68-7	Butylbenzylphthalate	0.79	9.6	U
105-60-2	Caprolactam	0.35	9.6	U
106-47-8	4-Chloroaniline	0.91	9.6	U
59-50-7	4-Chloro-3-methylphenol	0.56	9.6	U
91-58-7	2-Chloronaphthalene	0.56	9.6	U
95-57-8	2-Chlorophenol	0.57	9.6	U
7005-72-3	4-Chlorophenyl-phenylether	0.86	9.6	U
218-01-9	Chrysene	0.97	9.6	U
53-70-3	Dibenz (a, h) anthracene	1.6	9.6	U
132-64-9	Dibenzofuran	0.62	9.6	U
91-94-1	3,3'-Dichlorobenzidine	0.86	9.6	U
120-83-2	2,4-Dichlorophenol	0.42	9.6	U
84-66-2	Diethylphthalate	0.98	9.6	U
105-67-9	2,4-Dimethylphenol	0.68	9.6	U
131-11-3	Dimethylphthalate	0.71	9.6	U
84-74-2	Di-n-butylphthalate	1.2	9.6	U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-05
 Sample wt/vol: 1040 (g/mL) ML Lab File ID: 0909105
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:25
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 15:10
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	ug/L or RL	ug/Kg CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.71	24		U
51-28-5-----	2,4-Dinitrophenol	0.82	24		U
121-14-2-----	2,4-Dinitrotoluene	0.47	9.6		U
606-20-2-----	2,6-Dinitrotoluene	0.63	9.6		U
117-84-0-----	Di-n-octylphthalate	0.32	9.6		U
206-44-0-----	Fluoranthene	0.67	9.6		U
86-73-7-----	Fluorene	0.53	9.6		U
118-74-1-----	Hexachlorobenzene	0.45	9.6		U
87-68-3-----	Hexachlorobutadiene	0.89	9.6		U
77-47-4-----	Hexachlorocyclopentadiene	0.86	9.6		U
67-72-1-----	Hexachloroethane	0.44	9.6		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	9.6		U
78-59-1-----	Isophorone	0.53	9.6		U
91-57-6-----	2-Methylnaphthalene	0.65	9.6		U
91-20-3-----	Naphthalene	0.43	9.6		U
95-48-7-----	2-Methylphenol	0.80	9.6		U
106-44-5-----	4-Methylphenol	0.74	9.6		U
88-74-4-----	2-Nitroaniline	1.1	24		U
99-09-2-----	3-Nitroaniline	1.0	24		U
100-01-6-----	4-Nitroaniline	2.0	24		U
98-95-3-----	Nitrobenzene	0.60	9.6		U
88-75-5-----	2-Nitrophenol	0.71	9.6		U
100-02-7-----	4-Nitrophenol	0.80	24		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.44	9.6		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.86	9.6		U
87-86-5-----	Pentachlorophenol	0.96	24		U
85-01-8-----	Phenanthrene	0.74	9.6		U
108-95-2-----	Phenol	0.44	9.6		U
129-00-0-----	Pyrene	0.62	9.6		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.9	9.6		U
95-95-4-----	2,4,5-Trichlorophenol	0.48	24		U
88-06-2-----	2,4,6-Trichlorophenol	0.70	9.6		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-04
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909104
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:30
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 14:34
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1, 1' -Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	2.0	J
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3, 3' -Dichlorobenzidine	0.82	9.2		U
120-83-2	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909104

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 14:34

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23	U
51-28-5-----	2,4-Dinitrophenol	0.79	23	U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2	U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2	U
117-84-0-----	Di-n-octylphthalate	0.30	9.2	U
206-44-0-----	Fluoranthene	0.65	9.2	U
86-73-7-----	Fluorene	0.51	9.2	U
118-74-1-----	Hexachlorobenzene	0.44	9.2	U
87-68-3-----	Hexachlorobutadiene	0.86	9.2	U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2	U
67-72-1-----	Hexachloroethane	0.42	9.2	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2	U
78-59-1-----	Isophorone	0.51	9.2	U
91-57-6-----	2-Methylnaphthalene	0.63	9.2	U
91-20-3-----	Naphthalene	0.42	9.2	U
95-48-7-----	2-Methylphenol	0.77	9.2	U
106-44-5-----	4-Methylphenol	0.71	9.2	U
88-74-4-----	2-Nitroaniline	1.1	23	U
99-09-2-----	3-Nitroaniline	0.97	23	U
100-01-6-----	4-Nitroaniline	1.9	23	U
98-95-3-----	Nitrobenzene	0.57	9.2	U
88-75-5-----	2-Nitrophenol	0.68	9.2	U
100-02-7-----	4-Nitrophenol	0.77	23	U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2	U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2	U
87-86-5-----	Pentachlorophenol	0.92	23	U
85-01-8-----	Phenanthrene	0.71	9.2	U
108-95-2-----	Phenol	0.42	9.2	U
129-00-0-----	Pyrene	0.60	9.2	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2	U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23	U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-07
 Sample wt/vol: 1020 (g/mL) ML Lab File ID: 0909107
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 13:40
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 16:23
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	0.62	9.8		U
208-96-8-----	Acenaphthylene	0.46	9.8		U
98-86-2-----	Acetophenone	0.74	9.8		U
1912-24-9----	Atrazine	0.68	9.8		U
120-12-7-----	Anthracene	0.75	9.8		U
100-52-7-----	Benzaldehyde	0.56	9.8		U
56-55-3-----	Benzo (a) anthracene	0.89	9.8		U
205-99-2-----	Benzo (b) fluoranthene	0.70	9.8		U
207-08-9-----	Benzo (k) fluoranthene	0.49	9.8		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.8		U
50-32-8-----	Benzo (a) pyrene	0.59	9.8		U
92-52-4-----	1,1'-Biphenyl	0.38	9.8		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.51	9.8		U
111-44-4-----	bis (2-Chloroethyl) ether	0.44	9.8		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.83	9.8		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.9	2.0	J
101-55-3-----	4-Bromophenyl-phenylether	0.56	9.8		U
85-68-7-----	Butylbenzylphthalate	0.80	9.8		U
105-60-2-----	Caprolactam	0.35	9.8		U
106-47-8-----	4-Chloroaniline	0.93	9.8		U
59-50-7-----	4-Chloro-3-methylphenol	0.57	9.8		U
91-58-7-----	2-Chloronaphthalene	0.57	9.8		U
95-57-8-----	2-Chlorophenol	0.58	9.8		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.87	9.8		U
218-01-9-----	Chrysene	0.99	9.8		U
53-70-3-----	Dibenz (a, h) anthracene	1.7	9.8		U
132-64-9-----	Dibenzofuran	0.64	9.8		U
91-94-1-----	3,3'-Dichlorobenzidine	0.87	9.8		U
120-83-2-----	2,4-Dichlorophenol	0.43	9.8		U
84-66-2-----	Diethylphthalate	1.0	9.8		U
105-67-9-----	2,4-Dimethylphenol	0.70	9.8		U
131-11-3-----	Dimethylphthalate	0.72	9.8		U
84-74-2-----	Di-n-butylphthalate	1.3	9.8		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-07
 Sample wt/vol: 1020 (g/mL) ML Lab File ID: 0909107
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 13:40
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 16:23
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.72	24		U
51-28-5-----	2,4-Dinitrophenol	0.83	24		U
121-14-2-----	2,4-Dinitrotoluene	0.48	9.8		U
606-20-2-----	2,6-Dinitrotoluene	0.65	9.8		U
117-84-0-----	Di-n-octylphthalate	0.32	9.8		U
206-44-0-----	Fluoranthene	0.69	9.8		U
86-73-7-----	Fluorene	0.54	9.8		U
118-74-1-----	Hexachlorobenzene	0.46	9.8		U
87-68-3-----	Hexachlorobutadiene	0.91	9.8		U
77-47-4-----	Hexachlorocyclopentadiene	0.87	9.8		U
67-72-1-----	Hexachloroethane	0.45	9.8		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	9.8		U
78-59-1-----	Isophorone	0.54	9.8		U
91-57-6-----	2-Methylnaphthalene	0.67	9.8		U
91-20-3-----	Naphthalene	0.44	9.8	6.7	J
95-48-7-----	2-Methylphenol	0.81	9.8		U
106-44-5-----	4-Methylphenol	0.75	9.8		U
88-74-4-----	2-Nitroaniline	1.2	24		U
99-09-2-----	3-Nitroaniline	1.0	24		U
100-01-6-----	4-Nitroaniline	2.0	24		U
98-95-3-----	Nitrobenzene	0.61	9.8		U
88-75-5-----	2-Nitrophenol	0.72	9.8		U
100-02-7-----	4-Nitrophenol	0.81	24		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.45	9.8		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.88	9.8		U
87-86-5-----	Pentachlorophenol	0.98	24		U
85-01-8-----	Phenanthrene	0.75	9.8		U
108-95-2-----	Phenol	0.45	9.8		U
129-00-0-----	Pyrene	0.64	9.8		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.9	9.8		U
95-95-4-----	2,4,5-Trichlorophenol	0.49	24		U
88-06-2-----	2,4,6-Trichlorophenol	0.72	9.8		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-06
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909106
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 12:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/16/08
 Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 09/18/08 15:47
 Injection Volume: 0.5(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo(a)anthracene	0.84	9.2		U
205-99-2-----	Benzo(b)fluoranthene	0.66	9.2		U
207-08-9-----	Benzo(k)fluoranthene	0.46	9.2		U
191-24-2-----	Benzo(g,h,i)perylene	1.4	9.2		U
50-32-8-----	Benzo(a)pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis(2-Chloroethoxy)methane	0.48	9.2		U
111-44-4-----	bis(2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis(2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis(2-ethylhexyl)phthalate	1.2	4.6	1.7	J
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz(a,h)anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-06
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0909106
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 12:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 15:47
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-08
 Sample wt/vol: 1030 (g/mL) ML Lab File ID: 0909108
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 15:00
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 17:00
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			Q
		MDL	(ug/L or ug/Kg) RL	UG/L CONC	
83-32-9	Acenaphthene	0.61	9.7		U
208-96-8	Acenaphthylene	0.46	9.7		U
98-86-2	Acetophenone	0.73	9.7		U
1912-24-9	Atrazine	0.67	9.7		U
120-12-7	Anthracene	0.75	9.7		U
100-52-7	Benzaldehyde	0.55	9.7		U
56-55-3	Benzo (a) anthracene	0.88	9.7		U
205-99-2	Benzo (b) fluoranthene	0.69	9.7		U
207-08-9	Benzo (k) fluoranthene	0.48	9.7		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.7		U
50-32-8	Benzo (a) pyrene	0.58	9.7		U
92-52-4	1,1'-Biphenyl	0.38	9.7		U
111-91-1	bis (2-Chloroethoxy) methane	0.50	9.7		U
111-44-4	bis (2-Chloroethyl) ether	0.44	9.7		U
108-60-1	bis (2-Chloroisopropyl) ether	0.82	9.7		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.8	1.3	J
101-55-3	4-Bromophenyl-phenylether	0.55	9.7		U
85-68-7	Butylbenzylphthalate	0.80	9.7		U
105-60-2	Caprolactam	0.35	9.7		U
106-47-8	4-Chloroaniline	0.92	9.7		U
59-50-7	4-Chloro-3-methylphenol	0.56	9.7		U
91-58-7	2-Chloronaphthalene	0.56	9.7		U
95-57-8	2-Chlorophenol	0.57	9.7		U
7005-72-3	4-Chlorophenyl-phenylether	0.86	9.7		U
218-01-9	Chrysene	0.98	9.7		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.7		U
132-64-9	Dibenzofuran	0.63	9.7		U
91-94-1	3,3'-Dichlorobenzidine	0.86	9.7		U
120-83-2	2,4-Dichlorophenol	0.43	9.7		U
84-66-2	Diethylphthalate	0.99	9.7	26	U
105-67-9	2,4-Dimethylphenol	0.69	9.7		U
131-11-3	Dimethylphthalate	0.72	9.7	2.4	J
84-74-2	Di-n-butylphthalate	1.3	9.7		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-08
 Sample wt/vol: 1030 (g/mL) ML Lab File ID: 0909108
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 15:00
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 17:00
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol__	0.72	24		U
51-28-5-----	2,4-Dinitrophenol	0.82	24		U
121-14-2-----	2,4-Dinitrotoluene	0.48	9.7		U
606-20-2-----	2,6-Dinitrotoluene	0.64	9.7		U
117-84-0-----	Di-n-octylphthalate	0.32	9.7		U
206-44-0-----	Fluoranthene	0.68	9.7		U
86-73-7-----	Fluorene	0.53	9.7		U
118-74-1-----	Hexachlorobenzene	0.46	9.7		U
87-68-3-----	Hexachlorobutadiene	0.90	9.7		U
77-47-4-----	Hexachlorocyclopentadiene	0.86	9.7		U
67-72-1-----	Hexachloroethane	0.45	9.7		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	9.7		U
78-59-1-----	Isophorone	0.53	9.7		U
91-57-6-----	2-Methylnaphthalene	0.66	9.7		U
91-20-3-----	Naphthalene	0.44	9.7		U
95-48-7-----	2-Methylphenol	0.80	9.7		U
106-44-5-----	4-Methylphenol	0.75	9.7		U
88-74-4-----	2-Nitroaniline	1.2	24		U
99-09-2-----	3-Nitroaniline	1.0	24		U
100-01-6-----	4-Nitroaniline	2.0	24		U
98-95-3-----	Nitrobenzene	0.60	9.7		U
88-75-5-----	2-Nitrophenol	0.72	9.7		U
100-02-7-----	4-Nitrophenol	0.80	24		U
86-30-6-----	N-Nitrosodiphenylamine_(1)	0.45	9.7		U
621-64-7-----	N-Nitroso-di-n-propylamine__	0.87	9.7		U
87-86-5-----	Pentachlorophenol	0.97	24		U
85-01-8-----	Phenanthrene	0.75	9.7		U
108-95-2-----	Phenol	0.45	9.7		U
129-00-0-----	Pyrene	0.63	9.7		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene__	2.9	9.7		U
95-95-4-----	2,4,5-Trichlorophenol	0.48	24		U
88-06-2-----	2,4,6-Trichlorophenol	0.71	9.7		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809127-02
 Sample wt/vol: 1060 (g/mL) ML Lab File ID: 0912702
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/11/08 07:20
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/18/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 17:36
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			Q
		MDL	(ug/L or ug/Kg) RL	UG/L CONC	
83-32-9	Acenaphthene	0.59	9.4		U
208-96-8	Acenaphthylene	0.44	9.4		U
98-86-2	Acetophenone	0.71	9.4		U
1912-24-9	Atrazine	0.65	9.4		U
120-12-7	Anthracene	0.73	9.4		U
100-52-7	Benzaldehyde	0.54	9.4		U
56-55-3	Benzo (a) anthracene	0.86	9.4		U
205-99-2	Benzo (b) fluoranthene	0.67	9.4		U
207-08-9	Benzo (k) fluoranthene	0.47	9.4		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.4		U
50-32-8	Benzo (a) pyrene	0.57	9.4		U
92-52-4	1, 1'-Biphenyl	0.37	9.4		U
111-91-1	bis (2-Chloroethoxy) methane	0.49	9.4		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.4		U
108-60-1	bis (2-Chloroisopropyl) ether	0.80	9.4		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.7		U
101-55-3	4-Bromophenyl-phenylether	0.54	9.4		U
85-68-7	Butylbenzylphthalate	0.77	9.4		U
105-60-2	Caprolactam	0.34	9.4		U
106-47-8	4-Chloroaniline	0.90	9.4		U
59-50-7	4-Chloro-3-methylphenol	0.55	9.4		U
91-58-7	2-Chloronaphthalene	0.55	9.4		U
95-57-8	2-Chlorophenol	0.56	9.4		U
7005-72-3	4-Chlorophenyl-phenylether	0.84	9.4		U
218-01-9	Chrysene	0.95	9.4		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.4		U
132-64-9	Dibenzofuran	0.61	9.4		U
91-94-1	3, 3'-Dichlorobenzidine	0.84	9.4		U
120-83-2	2, 4-Dichlorophenol	0.42	9.4		U
84-66-2	Diethylphthalate	0.96	9.4	41	
105-67-9	2, 4-Dimethylphenol	0.67	9.4		U
131-11-3	Dimethylphthalate	0.70	9.4	4.1	J
84-74-2	Di-n-butylphthalate	1.2	9.4		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-02

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 0912702

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/11/08 07:20

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/18/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 17:36

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION MDL	UNITS: RL	(ug/L or ug/Kg) CONC	UG/L Q
534-52-1-----	4,6-Dinitro-2-methylphenol	0.70	24		U
51-28-5-----	2,4-Dinitrophenol	0.80	24		U
121-14-2-----	2,4-Dinitrotoluene	0.46	9.4		U
606-20-2-----	2,6-Dinitrotoluene	0.62	9.4		U
117-84-0-----	Di-n-octylphthalate	0.31	9.4		U
206-44-0-----	Fluoranthene	0.66	9.4		U
86-73-7-----	Fluorene	0.52	9.4		U
118-74-1-----	Hexachlorobenzene	0.44	9.4		U
87-68-3-----	Hexachlorobutadiene	0.88	9.4		U
77-47-4-----	Hexachlorocyclopentadiene	0.84	9.4		U
67-72-1-----	Hexachloroethane	0.43	9.4		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.4		U
78-59-1-----	Isophorone	0.52	9.4		U
91-57-6-----	2-Methylnaphthalene	0.64	9.4		U
91-20-3-----	Naphthalene	0.42	9.4		U
95-48-7-----	2-Methylphenol	0.78	9.4		U
106-44-5-----	4-Methylphenol	0.73	9.4		U
88-74-4-----	2-Nitroaniline	1.1	24		U
99-09-2-----	3-Nitroaniline	0.99	24		U
100-01-6-----	4-Nitroaniline	1.9	24		U
98-95-3-----	Nitrobenzene	0.58	9.4		U
88-75-5-----	2-Nitrophenol	0.70	9.4		U
100-02-7-----	4-Nitrophenol	0.78	24		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.43	9.4		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.85	9.4		U
87-86-5-----	Pentachlorophenol	0.94	24		U
85-01-8-----	Phenanthrene	0.73	9.4		U
108-95-2-----	Phenol	0.43	9.4		U
129-00-0-----	Pyrene	0.61	9.4		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.4		U
95-95-4-----	2,4,5-Trichlorophenol	0.47	24		U
88-06-2-----	2,4,6-Trichlorophenol	0.69	9.4		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912703
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/11/08 08:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 15:42
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	29	370		U
208-96-8	Acenaphthylene	22	370		U
98-86-2	Acetophenone	45	370		U
120-12-7	Anthracene	30	370		U
1912-24-9	Atrazine	31	370		U
100-52-7	Benzaldehyde	61	370		U
56-55-3	Benzo (a) anthracene	40	370		U
205-99-2	Benzo (b) fluoranthene	35	370		U
207-08-9	Benzo (k) fluoranthene	43	370		U
191-24-2	Benzo (g, h, i) perylene	78	370		U
50-32-8	Benzo (a) pyrene	25	370		U
111-91-1	bis (2-Chloroethoxy) methane	34	370		U
92-52-4	1,1'-Biphenyl	32	370		U
111-44-4	bis (2-Chloroethyl) ether	45	370		U
108-60-1	bis (2-Chloroisopropyl) ether	56	370		U
117-81-7	Bis (2-ethylhexyl) phthalate	40	370	200	JB
101-55-3	4-Bromophenyl-phenylether	28	370		U
85-68-7	Butylbenzylphthalate	33	370		U
86-74-8	Carbazole	40	370		U
106-47-8	4-Chloroaniline	53	370		U
105-60-2	Caprolactam	74	370		U
59-50-7	4-Chloro-3-methylphenol	30	370		U
91-58-7	2-Chloronaphthalene	35	370		U
95-57-8	2-Chlorophenol	45	370		U
7005-72-3	4-Chlorophenyl-phenylether	34	370		U
218-01-9	Chrysene	34	370		U
53-70-3	Dibenz (a, h) anthracene	66	370		U
132-64-9	Dibenzofuran	27	370		U
91-94-1	3,3'-Dichlorobenzidine	34	370		U
120-83-2	2,4-Dichlorophenol	21	370		U
84-66-2	Diethylphthalate	37	370		U
105-67-9	2,4-Dimethylphenol	23	370		U
131-11-3	Dimethylphthalate	34	370		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912703
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/11/08 08:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 15:42
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	33	370	190	JB
534-52-1-----	4,6-Dinitro-2-methylphenol	24	920		U
51-28-5-----	2,4-Dinitrophenol	150	920		U
121-14-2-----	2,4-Dinitrotoluene	26	370		U
606-20-2-----	2,6-Dinitrotoluene	42	370		U
117-84-0-----	Di-n-octylphthalate	30	370		U
206-44-0-----	Fluoranthene	59	370		U
86-73-7-----	Fluorene	29	370		U
118-74-1-----	Hexachlorobenzene	38	370		U
87-68-3-----	Hexachlorobutadiene	36	370		U
77-47-4-----	Hexachlorocyclopentadiene	67	370		U
67-72-1-----	Hexachloroethane	43	370		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	51	370		U
78-59-1-----	Isophorone	31	370		U
91-57-6-----	2-Methylnaphthalene	38	370		U
95-48-7-----	2-Methylphenol	42	370		U
106-44-5-----	4-Methylphenol	29	370		U
91-20-3-----	Naphthalene	36	370		U
88-74-4-----	2-Nitroaniline	35	370		U
99-09-2-----	3-Nitroaniline	52	920		U
100-01-6-----	4-Nitroaniline	110	920		U
98-95-3-----	Nitrobenzene	38	370		U
88-75-5-----	2-Nitrophenol	24	370		U
100-02-7-----	4-Nitrophenol	89	920		U
86-30-6-----	N-Nitrosodiphenylamine (1)	35	370		U
621-64-7-----	N-Nitroso-di-n-propylamine	60	370		U
87-86-5-----	Pentachlorophenol	37	920		U
85-01-8-----	Phenanthrene	25	370		U
108-95-2-----	Phenol	40	370		U
129-00-0-----	Pyrene	44	370		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370		U
95-95-4-----	2,4,5-Trichlorophenol	29	920		U
88-06-2-----	2,4,6-Trichlorophenol	38	370		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-04
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912704
 % Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 16:18
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	(ug/Kg) CONC	
83-32-9-----	Acenaphthene	28	360		U
208-96-8-----	Acenaphthylene	21	360		U
98-86-2-----	Acetophenone	44	360		U
120-12-7-----	Anthracene	29	360		U
1912-24-9----	Atrazine	30	360		U
100-52-7-----	Benzaldehyde	60	360		U
56-55-3-----	Benzo (a) anthracene	39	360		U
205-99-2-----	Benzo (b) fluoranthene	34	360		U
207-08-9-----	Benzo (k) fluoranthene	42	360		U
191-24-2-----	Benzo (g, h, i) perylene	76	360		U
50-32-8-----	Benzo (a) pyrene	24	360		U
111-91-1-----	bis (2-Chloroethoxy) methane	33	360		U
92-52-4-----	1, 1'-Biphenyl	32	360		U
111-44-4-----	bis (2-Chloroethyl) ether	44	360		U
108-60-1-----	bis (2-Chloroisopropyl) ether	55	360		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	39	360	160	JB
101-55-3-----	4-Bromophenyl-phenylether	28	360		U
85-68-7-----	Butylbenzylphthalate	32	360		U
86-74-8-----	Carbazole	39	360		U
106-47-8-----	4-Chloroaniline	51	360		U
105-60-2-----	Caprolactam	72	360		U
59-50-7-----	4-Chloro-3-methylphenol	30	360		U
91-58-7-----	2-Chloronaphthalene	34	360		U
95-57-8-----	2-Chlorophenol	44	360		U
7005-72-3----	4-Chlorophenyl-phenylether	33	360		U
218-01-9-----	Chrysene	33	360		U
53-70-3-----	Dibenz (a, h) anthracene	64	360		U
132-64-9-----	Dibenzofuran	26	360		U
91-94-1-----	3, 3'-Dichlorobenzidine	34	360		U
120-83-2-----	2, 4-Dichlorophenol	20	360		U
84-66-2-----	Diethylphthalate	36	360		U
105-67-9-----	2, 4-Dimethylphenol	23	360		U
131-11-3-----	Dimethylphthalate	33	360		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-04
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912704
 % Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 16:18
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	33	360	140	JB
534-52-1-----	4,6-Dinitro-2-methylphenol	23	890		U
51-28-5-----	2,4-Dinitrophenol	140	890		U
121-14-2-----	2,4-Dinitrotoluene	26	360		U
606-20-2-----	2,6-Dinitrotoluene	41	360		U
117-84-0-----	Di-n-octylphthalate	29	360		U
206-44-0-----	Fluoranthene	57	360		U
86-73-7-----	Fluorene	28	360		U
118-74-1-----	Hexachlorobenzene	37	360		U
87-68-3-----	Hexachlorobutadiene	35	360		U
77-47-4-----	Hexachlorocyclopentadiene	66	360		U
67-72-1-----	Hexachloroethane	42	360		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	49	360		U
78-59-1-----	Isophorone	30	360		U
91-57-6-----	2-Methylnaphthalene	37	360		U
95-48-7-----	2-Methylphenol	41	360		U
106-44-5-----	4-Methylphenol	28	360		U
91-20-3-----	Naphthalene	35	360		U
88-74-4-----	2-Nitroaniline	34	360		U
99-09-2-----	3-Nitroaniline	51	890		U
100-01-6-----	4-Nitroaniline	110	890		U
98-95-3-----	Nitrobenzene	37	360		U
88-75-5-----	2-Nitrophenol	24	360		U
100-02-7-----	4-Nitrophenol	87	890		U
86-30-6-----	N-Nitrosodiphenylamine (1)	34	360		U
621-64-7-----	N-Nitroso-di-n-propylamine	59	360		U
87-86-5-----	Pentachlorophenol	36	890		U
85-01-8-----	Phenanthrene	24	360		U
108-95-2-----	Phenol	39	360		U
129-00-0-----	Pyrene	43	360		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	360		U
95-95-4-----	2,4,5-Trichlorophenol	29	890		U
88-06-2-----	2,4,6-Trichlorophenol	37	360		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912705R
 % Moisture: 24 decanted: (Y/N) N Date Sampled: 09/11/08 09:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/24/08 14:28
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	35	440		U
208-96-8-----	Acenaphthylene	26	440		U
98-86-2-----	Acetophenone	54	440		U
120-12-7-----	Anthracene	36	440		U
1912-24-9-----	Atrazine	37	440		U
100-52-7-----	Benzaldehyde	73	440		U
56-55-3-----	Benzo (a) anthracene	48	440		U
205-99-2-----	Benzo (b) fluoranthene	41	440		U
207-08-9-----	Benzo (k) fluoranthene	52	440		U
191-24-2-----	Benzo (g, h, i) perylene	93	440		U
50-32-8-----	Benzo (a) pyrene	30	440		U
111-91-1-----	bis (2-Chloroethoxy) methane	41	440		U
92-52-4-----	1,1'-Biphenyl	39	440		U
111-44-4-----	bis (2-Chloroethyl) ether	54	440		U
108-60-1-----	bis (2-Chloroisopropyl) ether	67	440		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	47	440	130	JB
101-55-3-----	4-Bromophenyl-phenylether	34	440		U
85-68-7-----	Butylbenzylphthalate	39	440		U
86-74-8-----	Carbazole	48	440		U
106-47-8-----	4-Chloroaniline	63	440		U
105-60-2-----	Caprolactam	88	440	300	J
59-50-7-----	4-Chloro-3-methylphenol	36	440		U
91-58-7-----	2-Chloronaphthalene	42	440		U
95-57-8-----	2-Chlorophenol	54	440		U
7005-72-3-----	4-Chlorophenyl-phenylether	40	440		U
218-01-9-----	Chrysene	41	440		U
53-70-3-----	Dibenz (a, h) anthracene	79	440		U
132-64-9-----	Dibenzofuran	32	440		U
91-94-1-----	3,3'-Dichlorobenzidine	41	440		U
120-83-2-----	2,4-Dichlorophenol	25	440		U
84-66-2-----	Diethylphthalate	44	440		U
105-67-9-----	2,4-Dimethylphenol	28	440		U
131-11-3-----	Dimethylphthalate	40	440		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912705R
 % Moisture: 24 decanted: (Y/N) N Date Sampled: 09/11/08 09:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/24/08 14:28
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	40	440		U
534-52-1-----	4,6-Dinitro-2-methylphenol	29	1100		U
51-28-5-----	2,4-Dinitrophenol	180	1100		U
121-14-2-----	2,4-Dinitrotoluene	32	440		U
606-20-2-----	2,6-Dinitrotoluene	50	440		U
117-84-0-----	Di-n-octylphthalate	35	440		U
206-44-0-----	Fluoranthene	70	440		U
86-73-7-----	Fluorene	34	440		U
118-74-1-----	Hexachlorobenzene	46	440		U
87-68-3-----	Hexachlorobutadiene	43	440		U
77-47-4-----	Hexachlorocyclopentadiene	80	440		U
67-72-1-----	Hexachloroethane	52	440		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	60	440		U
78-59-1-----	Isophorone	37	440		U
91-57-6-----	2-Methylnaphthalene	46	440		U
95-48-7-----	2-Methylphenol	51	440		U
106-44-5-----	4-Methylphenol	35	440		U
91-20-3-----	Naphthalene	43	440		U
88-74-4-----	2-Nitroaniline	42	440		U
99-09-2-----	3-Nitroaniline	62	1100		U
100-01-6-----	4-Nitroaniline	130	1100		U
98-95-3-----	Nitrobenzene	45	440		U
88-75-5-----	2-Nitrophenol	29	440		U
100-02-7-----	4-Nitrophenol	110	1100		U
86-30-6-----	N-Nitrosodiphenylamine (1)	42	440		U
621-64-7-----	N-Nitroso-di-n-propylamine	72	440		U
87-86-5-----	Pentachlorophenol	44	1100		U
85-01-8-----	Phenanthrene	30	440		U
108-95-2-----	Phenol	47	440		U
129-00-0-----	Pyrene	52	440		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	130	440		U
95-95-4-----	2,4,5-Trichlorophenol	35	1100		U
88-06-2-----	2,4,6-Trichlorophenol	46	440		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912706

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/24/08 12:39

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	28	360		U
208-96-8-----	Acenaphthylene	21	360		U
98-86-2-----	Acetophenone	44	360		U
120-12-7-----	Anthracene	29	360		U
1912-24-9-----	Atrazine	31	360		U
100-52-7-----	Benzaldehyde	60	360		U
56-55-3-----	Benzo (a) anthracene	39	360		U
205-99-2-----	Benzo (b) fluoranthene	34	360		U
207-08-9-----	Benzo (k) fluoranthene	42	360		U
191-24-2-----	Benzo (g, h, i) perylene	76	360		U
50-32-8-----	Benzo (a) pyrene	25	360		U
111-91-1-----	bis(2-Chloroethoxy)methane	33	360		U
92-52-4-----	1,1'-Biphenyl	32	360		U
111-44-4-----	bis(2-Chloroethyl) ether	44	360		U
108-60-1-----	bis(2-Chloroisopropyl) ether	55	360		U
117-81-7-----	Bis(2-ethylhexyl) phthalate	39	360	99	JB
101-55-3-----	4-Bromophenyl-phenylether	28	360		U
85-68-7-----	Butylbenzylphthalate	32	360		U
86-74-8-----	Carbazole	39	360		U
106-47-8-----	4-Chloroaniline	52	360		U
105-60-2-----	Caprolactam	73	360		U
59-50-7-----	4-Chloro-3-methylphenol	30	360		U
91-58-7-----	2-Chloronaphthalene	34	360		U
95-57-8-----	2-Chlorophenol	44	360		U
7005-72-3-----	4-Chlorophenyl-phenylether	33	360		U
218-01-9-----	Chrysene	33	360		U
53-70-3-----	Dibenz (a, h) anthracene	65	360		U
132-64-9-----	Dibenzofuran	26	360		U
91-94-1-----	3,3'-Dichlorobenzidine	34	360		U
120-83-2-----	2,4-Dichlorophenol	20	360		U
84-66-2-----	Diethylphthalate	36	360		U
105-67-9-----	2,4-Dimethylphenol	23	360		U
131-11-3-----	Dimethylphthalate	33	360		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912706
 % Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:40
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:09/23/08
 Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 09/24/08 12:39
 Injection Volume: 0.5(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	33	360		U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	900		U
51-28-5-----	2,4-Dinitrophenol	140	900		U
121-14-2-----	2,4-Dinitrotoluene	26	360		U
606-20-2-----	2,6-Dinitrotoluene	41	360		U
117-84-0-----	Di-n-octylphthalate	29	360		U
206-44-0-----	Fluoranthene	58	360		U
86-73-7-----	Fluorene	28	360		U
118-74-1-----	Hexachlorobenzene	37	360		U
87-68-3-----	Hexachlorobutadiene	35	360		U
77-47-4-----	Hexachlorocyclopentadiene	66	360		U
67-72-1-----	Hexachloroethane	42	360		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	50	360		U
78-59-1-----	Isophorone	30	360		U
91-57-6-----	2-Methylnaphthalene	38	360		U
95-48-7-----	2-Methylphenol	42	360		U
106-44-5-----	4-Methylphenol	29	360		U
91-20-3-----	Naphthalene	35	360		U
88-74-4-----	2-Nitroaniline	35	360		U
99-09-2-----	3-Nitroaniline	51	900		U
100-01-6-----	4-Nitroaniline	110	900		U
98-95-3-----	Nitrobenzene	37	360		U
88-75-5-----	2-Nitrophenol	24	360		U
100-02-7-----	4-Nitrophenol	87	900		U
86-30-6-----	N-Nitrosodiphenylamine (1)	34	360		U
621-64-7-----	N-Nitroso-di-n-propylamine	59	360		U
87-86-5-----	Pentachlorophenol	36	900		U
85-01-8-----	Phenanthrene	25	360		U
108-95-2-----	Phenol	39	360		U
129-00-0-----	Pyrene	43	360		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	360		U
95-95-4-----	2,4,5-Trichlorophenol	29	900		U
88-06-2-----	2,4,6-Trichlorophenol	38	360		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-07
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912707
 % Moisture: 19 decanted: (Y/N) N Date Sampled: 09/11/08 10:00
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:09/23/08
 Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 09/24/08 13:15
 Injection Volume: 0.5(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	33	410		U
208-96-8	Acenaphthylene	24	410		U
98-86-2	Acetophenone	51	410		U
120-12-7	Anthracene	34	410		U
1912-24-9	Atrazine	35	410		U
100-52-7	Benzaldehyde	69	410		U
56-55-3	Benzo(a)anthracene	45	410		U
205-99-2	Benzo(b)fluoranthene	39	410		U
207-08-9	Benzo(k)fluoranthene	49	410		U
191-24-2	Benzo(g,h,i)perylene	87	410		U
50-32-8	Benzo(a)pyrene	28	410		U
111-91-1	bis(2-Chloroethoxy)methane	38	410		U
92-52-4	1,1'-Biphenyl	36	410		U
111-44-4	bis(2-Chloroethyl) ether	50	410		U
108-60-1	bis(2-Chloroisopropyl) ether	64	410		U
117-81-7	Bis(2-ethylhexyl)phthalate	45	410	220	JB
101-55-3	4-Bromophenyl-phenylether	32	410		U
85-68-7	Butylbenzylphthalate	37	410		U
86-74-8	Carbazole	45	410		U
106-47-8	4-Chloroaniline	59	410		U
105-60-2	Caprolactam	83	410	140	J
59-50-7	4-Chloro-3-methylphenol	34	410		U
91-58-7	2-Chloronaphthalene	40	410		U
95-57-8	2-Chlorophenol	50	410		U
7005-72-3	4-Chlorophenyl-phenylether	38	410		U
218-01-9	Chrysene	38	410		U
53-70-3	Dibenz(a,h)anthracene	74	410		U
132-64-9	Dibenzofuran	30	410		U
91-94-1	3,3'-Dichlorobenzidine	39	410		U
120-83-2	2,4-Dichlorophenol	23	410		U
84-66-2	Diethylphthalate	42	410	50	J
105-67-9	2,4-Dimethylphenol	26	410		U
131-11-3	Dimethylphthalate	38	410		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912708
 % Moisture: 11 decanted: (Y/N) N Date Sampled: 09/11/08 10:25
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/24/08 13:52
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	(ug/Kg) CONC	
83-32-9	Acenaphthene	30	380		U
208-96-8	Acenaphthylene	22	380		U
98-86-2	Acetophenone	46	380		U
120-12-7	Anthracene	31	380		U
1912-24-9	Atrazine	32	380		U
100-52-7	Benzaldehyde	62	380		U
56-55-3	Benzo (a) anthracene	41	380		U
205-99-2	Benzo (b) fluoranthene	36	380		U
207-08-9	Benzo (k) fluoranthene	44	380		U
191-24-2	Benzo (g, h, i) perylene	79	380		U
50-32-8	Benzo (a) pyrene	26	380		U
111-91-1	bis (2-Chloroethoxy) methane	35	380		U
92-52-4	1,1'-Biphenyl	33	380		U
111-44-4	bis (2-Chloroethyl) ether	46	380		U
108-60-1	bis (2-Chloroisopropyl) ether	58	380		U
117-81-7	Bis (2-ethylhexyl) phthalate	41	380	87	JB
101-55-3	4-Bromophenyl-phenylether	29	380		U
85-68-7	Butylbenzylphthalate	33	380		U
86-74-8	Carbazole	41	380		U
106-47-8	4-Chloroaniline	54	380		U
105-60-2	Caprolactam	76	380	210	J
59-50-7	4-Chloro-3-methylphenol	31	380		U
91-58-7	2-Chloronaphthalene	36	380		U
95-57-8	2-Chlorophenol	46	380		U
7005-72-3	4-Chlorophenyl-phenylether	35	380		U
218-01-9	Chrysene	35	380		U
53-70-3	Dibenz (a, h) anthracene	68	380		U
132-64-9	Dibenzofuran	28	380		U
91-94-1	3,3'-Dichlorobenzidine	35	380		U
120-83-2	2,4-Dichlorophenol	21	380		U
84-66-2	Diethylphthalate	38	380	40	J
105-67-9	2,4-Dimethylphenol	24	380		U
131-11-3	Dimethylphthalate	34	380		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0912708
 % Moisture: 11 decanted: (Y/N) N Date Sampled: 09/11/08 10:25
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:09/23/08
 Concentrated Extract Volume: 1000.0(uL) Date Analyzed: 09/24/08 13:52
 Injection Volume: 0.5(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	34	380		U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	940		U
51-28-5-----	2,4-Dinitrophenol	150	940		U
121-14-2-----	2,4-Dinitrotoluene	27	380		U
606-20-2-----	2,6-Dinitrotoluene	43	380		U
117-84-0-----	Di-n-octylphthalate	30	380		U
206-44-0-----	Fluoranthene	60	380		U
86-73-7-----	Fluorene	29	380		U
118-74-1-----	Hexachlorobenzene	39	380		U
87-68-3-----	Hexachlorobutadiene	37	380		U
77-47-4-----	Hexachlorocyclopentadiene	69	380		U
67-72-1-----	Hexachloroethane	44	380		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	52	380		U
78-59-1-----	Isophorone	32	380		U
91-57-6-----	2-Methylnaphthalene	39	380		U
95-48-7-----	2-Methylphenol	43	380		U
106-44-5-----	4-Methylphenol	30	380		U
91-20-3-----	Naphthalene	36	380		U
88-74-4-----	2-Nitroaniline	36	380		U
99-09-2-----	3-Nitroaniline	53	940		U
100-01-6-----	4-Nitroaniline	110	940		U
98-95-3-----	Nitrobenzene	39	380		U
88-75-5-----	2-Nitrophenol	25	380		U
100-02-7-----	4-Nitrophenol	91	940		U
86-30-6-----	N-Nitrosodiphenylamine (1)	36	380		U
621-64-7-----	N-Nitroso-di-n-propylamine	62	380		U
87-86-5-----	Pentachlorophenol	38	940		U
85-01-8-----	Phenanthrene	26	380		U
108-95-2-----	Phenol	40	380		U
129-00-0-----	Pyrene	45	380		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	380		U
95-95-4-----	2,4,5-Trichlorophenol	30	940		U
88-06-2-----	2,4,6-Trichlorophenol	39	380		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-03

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 015F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 19:12

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL CONC		
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-02
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 014F0201
 % Moisture: _____ decanted: (Y/N)____ Date Sampled: 09/09/08 08:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/15/08
 Concentrated Extract Volume: 10.0(mL) Date Analyzed: 09/28/08 18:32
 Injection Volume: 2.0(uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-05

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 019F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 21:47

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL CONC		
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 018F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 21:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L CONC	UG/L Q
		MDL	(ug/L or ug/Kg) RL		
94-75-7-----2,4-D		0.23	0.46		U
93-72-1-----2,4,5-TP (Silvex)		0.023	0.046		U
93-76-5-----2,4,5-T		0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-07
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 021F0201
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 13:40
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 23:05
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-06

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 020F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 22:26

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L CONC	UG/L Q
		MDL	(ug/L or ug/Kg) RL		
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-08

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 022F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 15:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 23:44

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809127-02
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 023F0201
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/11/08 07:20
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/29/08 00:23
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L Q
		MDL	RL CONC	
94-75-7-----	2,4-D	0.23	0.46	U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046	U
93-76-5-----	2,4,5-T	0.023	0.046	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 014F0201

% Moisture: 9 decanted: (Y/N) N Date Sampled: 09/11/08 08:20

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 03:35

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	9.2	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.92	1.8	U
93-76-5-----	2,4,5-T	0.92	1.8	U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 017F0201

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 05:32

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	8.9	18	U
93-72-1-----	2,4,5-TP (Silvex)	0.89	1.8	U
93-76-5-----	2,4,5-T	0.89	1.8	6.0

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 018F0201

% Moisture: 24 decanted: (Y/N) N Date Sampled: 09/11/08 09:20

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 06:11

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	11	22		U
93-72-1-----	2,4,5-TP (Silvex)	1.1	2.2		U
93-76-5-----	2,4,5-T	1.1	2.2		U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 019F0201

% Moisture: .7 decanted: (Y/N) N Date Sampled: 09/11/08 09:40

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 06:50

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	9.0	18		U
93-72-1-----	2,4,5-TP (Silvex)	0.90	1.8		U
93-76-5-----	2,4,5-T	0.90	1.8	1.2	JPM

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 020F0201

% Moisture: 19 decanted: (Y/N) N Date Sampled: 09/11/08 10:00

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 07:29

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	21	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.1	U
93-76-5-----	2,4,5-T	1.0	2.1	U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 021F0201

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/11/08 10:25

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 08:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	9.4	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.94	1.9	U
93-76-5-----	2,4,5-T	0.94	1.9	5.1

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2201

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-03

Sample wt/vol: 1050 (g/mL) ML Lab File ID: 021F2101

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 09/09/08 08:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/16/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/29/08 23:57

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0031	0.0095		U
319-84-6-----	Alpha-BHC	0.0031	0.0095		U
5103-71-9-----	Alpha-Chlordane	0.0031	0.0095		U
319-85-7-----	Beta-BHC	0.0031	0.0095		U
72-54-8-----	4,4'-DDD	0.0048	0.019		U
72-55-9-----	4,4'-DDE	0.0048	0.019		U
50-29-3-----	4,4'-DDT	0.0048	0.019		U
319-86-8-----	Delta-BHC	0.0031	0.0095		U
60-57-1-----	Dieldrin	0.0048	0.019		U
959-98-8-----	Endosulfan I	0.0031	0.0095		U
33213-65-9----	Endosulfan II	0.0048	0.019		U
1031-07-8-----	Endosulfan Sulfate	0.0048	0.019		U
72-20-8-----	Endrin	0.0048	0.019		U
7421-93-4-----	Endrin Aldehyde	0.0048	0.019		U
53494-70-5----	Endrin Ketone	0.0048	0.019		U
58-89-9-----	Gamma-BHC	0.0031	0.0095		U
5103-74-2-----	Gamma-Chlordane	0.0031	0.0095		U
76-44-8-----	Heptachlor	0.0031	0.0095		U
1024-57-3-----	Heptachlor Epoxide	0.0031	0.0095		U
72-43-5-----	Methoxychlor	0.0031	0.0095		U
8001-35-2-----	Toxaphene	0.31	0.95		U
12674-11-2----	PCB-1016	0.12	0.48		U
11104-28-2----	PCB-1221	0.12	0.48		U
11141-16-5----	PCB-1232	0.12	0.48		U
53469-21-9----	PCB-1242	0.12	0.48		U
12672-29-6----	PCB-1248	0.12	0.48		U
11097-69-1----	PCB-1254	0.12	0.48		U
11096-82-5----	PCB-1260	0.12	0.48		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2301

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 020F2001

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 08:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/29/08 23:39

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9---	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: GULFPORT
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-05
 Sample wt/vol: 1020 (g/mL) ML Lab File ID: 027F2701
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:25
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 01:48
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:			Q
		MDL	(ug/L or ug/Kg) RL	UG/L CONC	
309-00-2-----	Aldrin	0.0032	0.0098		U
319-84-6-----	Alpha-BHC	0.0032	0.0098		U
5103-71-9-----	Alpha-Chlordane	0.0032	0.0098		U
319-85-7-----	Beta-BHC	0.0032	0.0098	0.0048	JPM
72-54-8-----	4,4'-DDD	0.0049	0.020		U
72-55-9-----	4,4'-DDE	0.0049	0.020		U
50-29-3-----	4,4'-DDT	0.0049	0.020	0.0068	J
319-86-8-----	Delta-BHC	0.0032	0.0098		U
60-57-1-----	Dieldrin	0.0049	0.020		U
959-98-8-----	Endosulfan I	0.0032	0.0098		U
33213-65-9---	Endosulfan II	0.0049	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0049	0.020		U
72-20-8-----	Endrin	0.0049	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0049	0.020		U
53494-70-5----	Endrin Ketone	0.0049	0.020		U
58-89-9-----	Gamma-BHC	0.0032	0.0098		U
5103-74-2-----	Gamma-Chlordane	0.0032	0.0098		U
76-44-8-----	Heptachlor	0.0032	0.0098		U
1024-57-3-----	Heptachlor Epoxide	0.0032	0.0098		U
72-43-5-----	Methoxychlor	0.0032	0.0098		U
8001-35-2-----	Toxaphene	0.32	0.98		U
12674-11-2----	PCB-1016	0.12	0.49		U
11104-28-2----	PCB-1221	0.12	0.49		U
11141-16-5----	PCB-1232	0.12	0.49		U
53469-21-9----	PCB-1242	0.12	0.49		U
12672-29-6----	PCB-1248	0.12	0.49		U
11097-69-1----	PCB-1254	0.12	0.49		U
11096-82-5----	PCB-1260	0.12	0.49		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2501

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809091-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 026F2601

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 01:29

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9-----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5-----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2-----	PCB-1016	0.12	0.46		U
11104-28-2-----	PCB-1221	0.12	0.46		U
11141-16-5-----	PCB-1232	0.12	0.46		U
53469-21-9-----	PCB-1242	0.12	0.46		U
12672-29-6-----	PCB-1248	0.12	0.46		U
11097-69-1-----	PCB-1254	0.12	0.46		U
11096-82-5-----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: GULFPORT
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-07
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: 029F2901
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 13:40
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 02:25
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0033	0.010		U
319-84-6-----	Alpha-BHC	0.0033	0.010		U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010		U
319-85-7-----	Beta-BHC	0.0033	0.010	0.0062	PM
72-54-8-----	4,4'-DDD	0.0050	0.020		U
72-55-9-----	4,4'-DDE	0.0050	0.020		U
50-29-3-----	4,4'-DDT	0.0050	0.020		U
319-86-8-----	Delta-BHC	0.0033	0.010		U
60-57-1-----	Dieldrin	0.0050	0.020		U
959-98-8-----	Endosulfan I	0.0033	0.010		U
33213-65-9----	Endosulfan II	0.0050	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020		U
72-20-8-----	Endrin	0.0050	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020		U
53494-70-5----	Endrin Ketone	0.0050	0.020		U
58-89-9-----	Gamma-BHC	0.0033	0.010		U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010		U
76-44-8-----	Heptachlor	0.0033	0.010		U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010		U
72-43-5-----	Methoxychlor	0.0033	0.010		U
8001-35-2-----	Toxaphene	0.33	1.0		U
12674-11-2----	PCB-1016	0.12	0.50		U
11104-28-2----	PCB-1221	0.12	0.50		U
11141-16-5----	PCB-1232	0.12	0.50		U
53469-21-9----	PCB-1242	0.12	0.50		U
12672-29-6----	PCB-1248	0.12	0.50		U
11097-69-1----	PCB-1254	0.12	0.50		U
11096-82-5----	PCB-1260	0.12	0.50		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2701

Lab Name: EMPIRICAL LABS Contract: GULFPORT
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-06
 Sample wt/vol: 1070 (g/mL) ML Lab File ID: 028F2801
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 12:45
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 02:06
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC Q
		MDL	RL		
309-00-2-----	Aldrin	0.0031	0.0093		U
319-84-6-----	Alpha-BHC	0.0031	0.0093		U
5103-71-9-----	Alpha-Chlordane	0.0031	0.0093		U
319-85-7-----	Beta-BHC	0.0031	0.0093		U
72-54-8-----	4,4'-DDD	0.0047	0.019		U
72-55-9-----	4,4'-DDE	0.0047	0.019		U
50-29-3-----	4,4'-DDT	0.0047	0.019		U
319-86-8-----	Delta-BHC	0.0031	0.0093		U
60-57-1-----	Dieldrin	0.0047	0.019		U
959-98-8-----	Endosulfan I	0.0031	0.0093		U
33213-65-9----	Endosulfan II	0.0047	0.019		U
1031-07-8-----	Endosulfan Sulfate	0.0047	0.019		U
72-20-8-----	Endrin	0.0047	0.019		U
7421-93-4-----	Endrin Aldehyde	0.0047	0.019		U
53494-70-5----	Endrin Ketone	0.0047	0.019		U
58-89-9-----	Gamma-BHC	0.0031	0.0093		U
5103-74-2-----	Gamma-Chlordane	0.0031	0.0093		U
76-44-8-----	Heptachlor	0.0031	0.0093		U
1024-57-3-----	Heptachlor Epoxide	0.0031	0.0093		U
72-43-5-----	Methoxychlor	0.0031	0.0093		U
8001-35-2-----	Toxaphene	0.31	0.93		U
12674-11-2----	PCB-1016	0.12	0.47		U
11104-28-2----	PCB-1221	0.12	0.47		U
11141-16-5----	PCB-1232	0.12	0.47		U
53469-21-9----	PCB-1242	0.12	0.47		U
12672-29-6----	PCB-1248	0.12	0.47		U
11097-69-1----	PCB-1254	0.12	0.47		U
11096-82-5----	PCB-1260	0.12	0.47		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: GULFPORT
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: 0809091-08
 Sample wt/vol: 1020 (g/mL) ML Lab File ID: 030F3001
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/09/08 15:00
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 02:43
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0032	0.0098		U
319-84-6-----	Alpha-BHC	0.0032	0.0098		U
5103-71-9-----	Alpha-Chlordane	0.0032	0.0098		U
319-85-7-----	Beta-BHC	0.0032	0.0098	0.0049	PM
72-54-8-----	4,4'-DDD	0.0049	0.020		U
72-55-9-----	4,4'-DDE	0.0049	0.020		U
50-29-3-----	4,4'-DDT	0.0049	0.020	0.0092	J
319-86-8-----	Delta-BHC	0.0032	0.0098		U
60-57-1-----	Dieldrin	0.0049	0.020		U
959-98-8-----	Endosulfan I	0.0032	0.0098		U
33213-65-9----	Endosulfan II	0.0049	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0049	0.020		U
72-20-8-----	Endrin	0.0049	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0049	0.020		U
53494-70-5----	Endrin Ketone	0.0049	0.020		U
58-89-9-----	Gamma-BHC	0.0032	0.0098		U
5103-74-2-----	Gamma-Chlordane	0.0032	0.0098		U
76-44-8-----	Heptachlor	0.0032	0.0098		U
1024-57-3-----	Heptachlor Epoxide	0.0032	0.0098		U
72-43-5-----	Methoxychlor	0.0032	0.0098		U
8001-35-2-----	Toxaphene	0.32	0.98		U
12674-11-2----	PCB-1016	0.12	0.49		U
11104-28-2----	PCB-1221	0.12	0.49		U
11141-16-5----	PCB-1232	0.12	0.49		U
53469-21-9----	PCB-1242	0.12	0.49		U
12672-29-6----	PCB-1248	0.12	0.49		U
11097-69-1----	PCB-1254	0.12	0.49		U
11096-82-5----	PCB-1260	0.12	0.49		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: 0809127-02

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: 031F3101

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 09/11/08 07:20

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/30/08 03:01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			Q
		MDL	RL	CONC	
15972-60-8	Alachlor	0.0035	0.010		U
309-00-2	Aldrin	0.0035	0.010	0.020	PM
319-84-6	Alpha-BHC	0.0035	0.010		U
5103-71-9	Alpha-Chlordane	0.0035	0.010		U
319-85-7	Beta-BHC	0.0035	0.010	0.0045	PM
72-54-8	4,4'-DDD	0.0053	0.021		U
72-55-9	4,4'-DDE	0.0053	0.021		U
50-29-3	4,4'-DDT	0.0053	0.021		U
319-86-8	Delta-BHC	0.0035	0.010	0.012	
60-57-1	Dieldrin	0.0053	0.021		U
959-98-8	Endosulfan I	0.0035	0.010		U
33213-65-9	Endosulfan II	0.0053	0.021		U
1031-07-8	Endosulfan Sulfate	0.0053	0.021		U
72-20-8	Endrin	0.0053	0.021		U
7421-93-4	Endrin Aldehyde	0.0053	0.021		U
53494-70-5	Endrin Ketone	0.0053	0.021		U
58-89-9	Gamma-BHC	0.0035	0.010	0.0059	J
5103-74-2	Gamma-Chlordane	0.0035	0.010		U
76-44-8	Heptachlor	0.0035	0.010		U
1024-57-3	Heptachlor Epoxide	0.0035	0.010		U
72-43-5	Methoxychlor	0.0035	0.010		U
8001-35-2	Toxaphene	0.35	2.1		U
12674-11-2	PCB-1016	0.13	0.53		U
11104-28-2	PCB-1221	0.13	0.53		U
11141-16-5	PCB-1232	0.13	0.53		U
53469-21-9	PCB-1242	0.13	0.53		U
12672-29-6	PCB-1248	0.13	0.53		U
11097-69-1	PCB-1254	0.13	0.53		U
11096-82-5	PCB-1260	0.13	0.53		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: 0809127-03
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: 026F2601
 % Moisture: 9 decanted: (Y/N) N Date Sampled: 09/11/08 08:20
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08
 Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/07/08 22:29
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	ug/Kg) CONC	
309-00-2-----	Aldrin	0.12	0.37		U
319-84-6-----	Alpha-BHC	0.12	0.37		U
5103-71-9-----	Alpha-Chlordane	0.12	0.37	0.57	
319-85-7-----	Beta-BHC	0.12	0.37		U
72-54-8-----	4,4'-DDD	0.18	0.73		U
72-55-9-----	4,4'-DDE	0.18	0.73		U
50-29-3-----	4,4'-DDT	0.18	0.73		U
319-86-8-----	Delta-BHC	0.12	0.37		U
60-57-1-----	Dieldrin	0.18	0.73		U
959-98-8-----	Endosulfan I	0.12	0.37		U
33213-65-9---	Endosulfan II	0.18	0.73		U
1031-07-8-----	Endosulfan Sulfate	0.18	0.73		U
72-20-8-----	Endrin	0.18	0.73		U
7421-93-4-----	Endrin Aldehyde	0.18	0.73		U
53494-70-5---	Endrin Ketone	0.18	0.73		U
58-89-9-----	Gamma-BHC	0.12	0.37		U
5103-74-2-----	Gamma-Chlordane	0.12	0.37	0.22	J
76-44-8-----	Heptachlor	0.12	0.37		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37		U
72-43-5-----	Methoxychlor	0.12	0.37		U
8001-35-2-----	Toxaphene	12	37		U
12674-11-2----	PCB-1016	4.6	18		U
11104-28-2----	PCB-1221	4.6	18		U
11141-16-5----	PCB-1232	4.6	18		U
53469-21-9----	PCB-1242	4.6	18		U
12672-29-6----	PCB-1248	4.6	18		U
11097-69-1----	PCB-1254	4.6	18		U
11096-82-5----	PCB-1260	4.6	18		U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 031F3101

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/08/08 00:01

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
309-00-2-----	Aldrin	0.12	0.36		U
319-84-6-----	Alpha-BHC	0.12	0.36		U
5103-71-9-----	Alpha-Chlordane	0.12	0.36		U
319-85-7-----	Beta-BHC	0.12	0.36	0.36	J
72-54-8-----	4,4'-DDD	0.18	0.72		U
72-55-9-----	4,4'-DDE	0.18	0.72		U
50-29-3-----	4,4'-DDT	0.18	0.72		U
319-86-8-----	Delta-BHC	0.12	0.36		U
60-57-1-----	Dieldrin	0.18	0.72	0.91	U
959-98-8-----	Endosulfan I	0.12	0.36		U
33213-65-9----	Endosulfan II	0.18	0.72	0.32	J
1031-07-8-----	Endosulfan Sulfate	0.18	0.72		U
72-20-8-----	Endrin	0.18	0.72		U
7421-93-4-----	Endrin Aldehyde	0.18	0.72		U
53494-70-5----	Endrin Ketone	0.18	0.72		U
58-89-9-----	Gamma-BHC	0.12	0.36		U
5103-74-2-----	Gamma-Chlordane	0.12	0.36		U
76-44-8-----	Heptachlor	0.12	0.36	0.19	J
1024-57-3-----	Heptachlor Epoxide	0.12	0.36	0.16	PM
72-43-5-----	Methoxychlor	0.12	0.36		U
8001-35-2-----	Toxaphene	12	36		U
12674-11-2----	PCB-1016	4.5	18		U
11104-28-2----	PCB-1221	4.5	18		U
11141-16-5----	PCB-1232	4.5	18		U
53469-21-9----	PCB-1242	4.5	18		U
12672-29-6----	PCB-1248	4.5	18		U
11097-69-1----	PCB-1254	4.5	18		U
11096-82-5----	PCB-1260	4.5	18		U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 032F3201

% Moisture: 24 decanted: (Y/N) N Date Sampled: 09/11/08 09:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/08/08 00:20

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG
		MDL	RL		CONC
309-00-2-----	Aldrin	0.14	0.44	U
319-84-6-----	Alpha-BHC	0.14	0.44	U
5103-71-9-----	Alpha-Chlordane	0.14	0.44	U
319-85-7-----	Beta-BHC	0.14	0.44	U
72-54-8-----	4,4'-DDD	0.22	0.88	U
72-55-9-----	4,4'-DDE	0.22	0.88	U
50-29-3-----	4,4'-DDT	0.22	0.88	U
319-86-8-----	Delta-BHC	0.14	0.44	U
60-57-1-----	Dieldrin	0.22	0.88	9.5 U
959-98-8-----	Endosulfan I	0.14	0.44	U
33213-65-9----	Endosulfan II	0.22	0.88	U
1031-07-8-----	Endosulfan Sulfate	0.22	0.88	U
72-20-8-----	Endrin	0.22	0.88	U
7421-93-4-----	Endrin Aldehyde	0.22	0.88	U
53494-70-5----	Endrin Ketone	0.22	0.88	U
58-89-9-----	Gamma-BHC	0.14	0.44	U
5103-74-2-----	Gamma-Chlordane	0.14	0.44	U
76-44-8-----	Heptachlor	0.14	0.44	U
1024-57-3-----	Heptachlor Epoxide	0.14	0.44	U
72-43-5-----	Methoxychlor	0.14	0.44	U
8001-35-2-----	Toxaphene	14	44	U
12674-11-2----	PCB-1016	5.5	22	U
11104-28-2----	PCB-1221	5.5	22	U
11141-16-5----	PCB-1232	5.5	22	U
53469-21-9----	PCB-1242	5.5	22	U
12672-29-6----	PCB-1248	5.5	22	U
11097-69-1----	PCB-1254	5.5	22	U
11096-82-5----	PCB-1260	5.5	22	U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1001*

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-06

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 033F3301

% Moisture: 7 decanted: (Y/N) N Date Sampled: 09/11/08 09:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/08/08 00:38

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.12	0.36		U
319-84-6-----	Alpha-BHC	0.12	0.36		U
5103-71-9-----	Alpha-Chlordane	0.12	0.36	2.1	
319-85-7-----	Beta-BHC	0.12	0.36		U
72-54-8-----	4,4'-DDD	0.18	0.72	0.55	PM
72-55-9-----	4,4'-DDE	0.18	0.72	1.5	P
50-29-3-----	4,4'-DDT	0.18	0.72	2.0	PM
319-86-8-----	Delta-BHC	0.12	0.36		U
60-57-1-----	Dieldrin	0.18	0.72	15	
959-98-8-----	Endosulfan I	0.12	0.36		U
33213-65-9----	Endosulfan II	0.18	0.72	0.24	J
1031-07-8----	Endosulfan Sulfate	0.18	0.72		U
72-20-8-----	Endrin	0.18	0.72		U
7421-93-4----	Endrin Aldehyde	0.18	0.72	2.0	
53494-70-5----	Endrin Ketone	0.18	0.72		U
58-89-9-----	Gamma-BHC	0.12	0.36		U
5103-74-2----	Gamma-Chlordane	0.12	0.36	1.4	P
76-44-8-----	Heptachlor	0.12	0.36		U
1024-57-3----	Heptachlor Epoxide	0.12	0.36	1.7	P
72-43-5-----	Methoxychlor	0.12	0.36	4.5	P
8001-35-2----	Toxaphene	12	36		U
12674-11-2----	PCB-1016	4.5	18		U
11104-28-2----	PCB-1221	4.5	18		U
11141-16-5----	PCB-1232	4.5	18		U
53469-21-9----	PCB-1242	4.5	18		U
12672-29-6----	PCB-1248	4.5	18		U
11097-69-1----	PCB-1254	4.5	18		U
11096-82-5----	PCB-1260	4.5	18	17	J

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

* = THE REPORTED CONCENTRATION FOR THE PESTICIDES MAY BE DUE TO THE PRESENCE OF PCB-1260.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-07

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 034F3401

% Moisture: 19 decanted: (Y/N) N Date Sampled: 09/11/08 10:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/08/08 00:56

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
309-00-2-----	Aldrin	0.14	0.41		U
319-84-6-----	Alpha-BHC	0.14	0.41		U
5103-71-9-----	Alpha-Chlordane	0.14	0.41		U
319-85-7-----	Beta-BHC	0.14	0.41		U
72-54-8-----	4,4'-DDD	0.21	0.83		U
72-55-9-----	4,4'-DDE	0.21	0.83		U
50-29-3-----	4,4'-DDT	0.21	0.83		U
319-86-8-----	Delta-BHC	0.14	0.41		U
60-57-1-----	Dieldrin	0.21	0.83	2.1	U
959-98-8-----	Endosulfan I	0.14	0.41		U
33213-65-9----	Endosulfan II	0.21	0.83	0.69	JP
1031-07-8-----	Endosulfan Sulfate	0.21	0.83		U
72-20-8-----	Endrin	0.21	0.83		U
7421-93-4-----	Endrin Aldehyde	0.21	0.83		U
53494-70-5----	Endrin Ketone	0.21	0.83		U
58-89-9-----	Gamma-BHC	0.14	0.41		U
5103-74-2-----	Gamma-Chlordane	0.14	0.41		U
76-44-8-----	Heptachlor	0.14	0.41		U
1024-57-3-----	Heptachlor Epoxide	0.14	0.41	1.0	U
72-43-5-----	Methoxychlor	0.14	0.41		U
8001-35-2-----	Toxaphene	14	41		U
12674-11-2----	PCB-1016	5.2	21		U
11104-28-2----	PCB-1221	5.2	21		U
11141-16-5----	PCB-1232	5.2	21		U
53469-21-9----	PCB-1242	5.2	21		U
12672-29-6----	PCB-1248	5.2	21		U
11097-69-1----	PCB-1254	5.2	21		U
11096-82-5----	PCB-1260	5.2	21		U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: 0809127-08

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 035F3501

% Moisture: 11 decanted: (Y/N) N Date Sampled: 09/11/08 10:25

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 10/03/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/08/08 01:15

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

309-00-2-----Aldrin	0.12	0.38		U
319-84-6-----Alpha-BHC	0.12	0.38		U
5103-71-9-----Alpha-Chlordane	0.12	0.38		U
319-85-7-----Beta-BHC	0.12	0.38		U
72-54-8-----4,4'-DDD	0.19	0.75		U
72-55-9-----4,4'-DDE	0.19	0.75		U
50-29-3-----4,4'-DDT	0.19	0.75		U
319-86-8-----Delta-BHC	0.12	0.38		U
60-57-1-----Dieldrin	0.19	0.75		U
959-98-8-----Endosulfan I	0.12	0.38		U
33213-65-9----Endosulfan II	0.19	0.75		U
1031-07-8-----Endosulfan Sulfate	0.19	0.75		U
72-20-8-----Endrin	0.19	0.75		U
7421-93-4-----Endrin Aldehyde	0.19	0.75		U
53494-70-5----Endrin Ketone	0.19	0.75		U
58-89-9-----Gamma-BHC	0.12	0.38		U
5103-74-2-----Gamma-Chlordane	0.12	0.38		U
76-44-8-----Heptachlor	0.12	0.38		U
1024-57-3-----Heptachlor Epoxide	0.12	0.38		U
72-43-5-----Methoxychlor	0.12	0.38		U
8001-35-2-----Toxaphene	12	38		U
12674-11-2----PCB-1016	4.7	19		U
11104-28-2----PCB-1221	4.7	19		U
11141-16-5----PCB-1232	4.7	19		U
53469-21-9----PCB-1242	4.7	19		U
12672-29-6----PCB-1248	4.7	19		U
11097-69-1----PCB-1254	4.7	19		U
11096-82-5----PCB-1260	4.7	19		U

NOTE: SAMPLES WERE EXTRACTED OUTSIDE OF USEPA HOLDING TIME AT THE CLIENT'S REQUEST. RESULTS SHOULD BE CONSIDERED AS ESTIMATED.

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG GULFPORT-0

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	%	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	%	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	%	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	%	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	%	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	%	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/29/2008	5	13	18
HERB	%	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	%	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	UG/KG	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/KG	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
HERB	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/29/2008	5	13	18
HERB	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HERB	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/28/2008	7	12	19
HG	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/17/2008	9/18/2008	6	1	7
HG	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/17/2008	5	1	6
HG	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
HG	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/15/2008	3	3	6
M	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1201	0809127-08	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS1101	0809127-07	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS0901	0809127-05	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0801	0809127-04	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
M	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	MG/KG	01SS0701	0809127-03	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	MG/KG	01SS1001	0809127-06	NM	9/11/2008	9/17/2008	9/22/2008	6	5	11
M	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
M	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/29/2008	9/30/2008	18	1	19
M	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/15/2008	9/30/2008	6	15	21
M	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
M	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/15/2008	9/16/2008	6	1	7
M	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OS	%	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01SS0701	0809127-03	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	%	01SS1101	0809127-07	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS1001	0809127-06	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS0901	0809127-05	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01SS0801	0809127-04	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	%	01SS1201	0809127-08	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	%	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	%	01RB091108	0809127-02	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
OS	UG/KG	01SS0701	0809127-03	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12
OS	UG/KG	01SS0801	0809127-04	NM	9/11/2008	9/23/2008	9/23/2008	12	0	12

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	UG/KG	01SS0901	0809127-05	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	UG/KG	01SS1001	0809127-06	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	UG/KG	01SS1101	0809127-07	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	UG/KG	01SS1201	0809127-08	NM	9/11/2008	9/23/2008	9/24/2008	12	1	13
OS	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OS	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/18/2008	9/18/2008	7	0	7
OS	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/18/2008	7	2	9
OV	%	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01TB090908	0809091-01	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01SS1201	0809127-08	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01SS1101	0809127-07	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01SS1001	0809127-06	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01SS0901	0809127-05	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP_DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	%	01SS0801	0809127-04	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01SS0701	0809127-03	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01TB091108	0809127-01	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	%	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	%	01RB091108	0809127-02	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS1001	0809127-06	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS1201	0809127-08	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS1101	0809127-07	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS0701	0809127-03	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS0801	0809127-04	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/KG	01SS0901	0809127-05	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
OV	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01TB091108	0809127-01	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OV	UG/L	01TB090908	0809091-01	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/12/2008	9/12/2008	3	0	3
OV	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/15/2008	9/15/2008	4	0	4
PCB	%	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/30/2008	5	14	19
PCB	%	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	%	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	%	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
PCB	%	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	%	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	%	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	%	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	%	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	%	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	%	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PCB	%	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PCB	%	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	%	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/KG	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
PCB	UG/KG	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	UG/KG	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	UG/KG	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	UG/KG	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	UG/KG	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PCB	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/30/2008	5	14	19
PCB	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PCB	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PCB	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
PEST	%	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	%	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	%	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	%	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	%	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	%	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	%	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	%	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	%	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	%	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PEST	%	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PEST	%	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	%	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/30/2008	5	14	19
PEST	UG/KG	01SS0901	0809127-05	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	UG/KG	01SS1201	0809127-08	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	UG/KG	01SS1001	0809127-06	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	UG/KG	01SS0801	0809127-04	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42075

SHIP TO: 227 French Landing Drive, Suite 550 + Nashville, TN 37228 + 615-345-1115 + (fax) 615-846-5426

Send Results to:	Send Invoice to:	Analysis Requirements:	Lab Use Only:
Name: <u>Bob Fisher</u>	Name: <u>PER WR</u>	<p style="text-align: center;">Analysis Requirements</p> <p>TCL VOC Pb, Sn, Fe, Ni, Cu, Hg, Cd TAL metals / CN TAL metals CN</p>	VOA Headspace <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
Company: <u>Tetra Tech</u>	Company: _____		Field Filtered <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
Address: <u>3360 Capital Circle NW</u>	Address: _____		Correct Containers <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
City: <u>Tallahassee</u>	City: _____		Discrepancies <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
State, Zip: <u>FL 32308</u>	State, Zip: _____		Cust. Seals Intact <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
Phone: <u>905 385 9877</u>	Phone: _____		Containers Intact <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N NA
Fax: _____	Fax: _____	Airbill #: <u>4582</u>	
E-mail: _____	E-mail: _____	CAR #: _____	
Project No./Name:	Sampler's (Signature): <u>[Signature]</u>		

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	TCL VOC	Pb, Sn, Fe, Ni, Cu, Hg, Cd	TAL metals / CN	TAL metals	CN	Comments	No. of Bottles	Lab Use Only Containers/Pies
08091127-01	0720 ⁹⁻¹¹⁻⁰⁸	01TB091108	QA	2						2	
-02	0720 ⁹⁻¹¹⁻⁰⁸	01RB091108	QA	3	5	1	1			10	
-03	0826 ⁹⁻¹¹⁻⁰⁸	01SS0701	SO	3	1	1	1			5	
-05	0826 ⁹⁻¹¹⁻⁰⁸	01SS0701MS	SO	3	1	1	1			5	
-06	0826 ⁹⁻¹¹⁻⁰⁸	01SS0701MSD	SO	3	1	1	1			5	
-04	0900 ⁹⁻¹¹⁻⁰⁸	01SS0801	SO	3	1	1	1			5	
-05	0920 ⁹⁻¹¹⁻⁰⁸	01SS0901	SO	3	1	1	1			5	
-06	0940 ⁹⁻¹¹⁻⁰⁸	01SS1001	SO	3	1	1	1			5	
-07	1000	01SS1101	SO	3	1	1	1			5	
-08	1025	01SS1201	SO	3	1	1	1			5	

Sample Kit Prep'd by: (Signature)	Date/Time	Received By: (Signature)	REMARKS: FEDEX 8640 4207 4582	Details:
Relinquished by: (Signature)	Date/Time	Received By: (Signature)		Page _____ of _____
Relinquished by: (Signature)	Date/Time	Received By: (Signature)		Cooler No. _____ of _____
Received for Laboratory by: (Signature)	Date/Time	Temperature		Date Shipped _____
				Shipped By _____
				Turnaround _____

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/KG	01SS0701	0809127-03	NM	9/11/2008	10/3/2008	10/7/2008	22	4	26
PEST	UG/KG	01SS1101	0809127-07	NM	9/11/2008	10/3/2008	10/8/2008	22	5	27
PEST	UG/L	01RB091108	0809127-02	NM	9/11/2008	9/16/2008	9/30/2008	5	14	19
PEST	UG/L	01GW2201	0809091-03	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PEST	UG/L	01GW2301	0809091-02	NM	9/9/2008	9/16/2008	9/29/2008	7	13	20
PEST	UG/L	01GW2401	0809091-05	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	UG/L	01GW2501	0809091-04	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	UG/L	01GW2601	0809091-07	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	UG/L	01GW2701	0809091-06	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21
PEST	UG/L	01RB090908	0809091-08	NM	9/9/2008	9/16/2008	9/30/2008	7	14	21

Volatile Section

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-011

Date Sampled	Date Received	Lab ID	Client ID
9/9/2008	9/10/2008	0809091-01	01GWTB090908
9/9/2008	9/10/2008	0809091-02	01GW2301
9/9/2008	9/10/2008	0809091-03	01GW2201
9/9/2008	9/10/2008	0809091-04	01GW2501
9/9/2008	9/10/2008	0809091-05	01GW2401
9/9/2008	9/10/2008	0809091-06	01GW2701
9/9/2008	9/10/2008	0809091-07	01GW2601
9/9/2008	9/10/2008	0809091-08	01RB090908
9/11/2008	9/12/2008	0809127-01	01TB091108
9/11/2008	9/12/2008	0809127-02	01RB091108
9/11/2008	9/12/2008	0809127-03	01SS0701
9/11/2008	9/12/2008	0809127-04	01SS0801
9/11/2008	9/12/2008	0809127-05	01SS0901
9/11/2008	9/12/2008	0809127-06	01SS1001
9/11/2008	9/12/2008	0809127-07	01SS1101
9/11/2008	9/12/2008	0809127-08	01SS1201

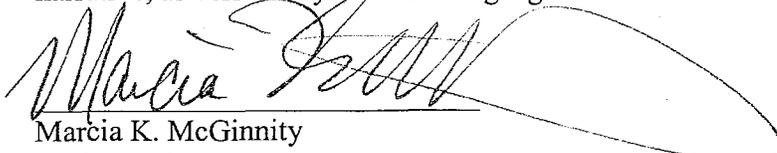
Volatiles

Method: The samples were extracted/analyzed for the SOW specified analyte lists by USEPA SW-846 Methods 5030B/8260B (purge and trap then capillary column GC/MS) for waters or 5035B/8260B (Encore field sampling followed by laboratory preservation the purge and trap followed by capillary column GC/MS) for solids upon receipt to the laboratory in satisfactory condition.

Comments: The volatile analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following note/exceptions:

- The method blanks associated with these samples had reported concentrations of methylene chloride at concentrations less than 1/2 the quantitation limit. Reported concentrations in the associated samples are qualified with a "B".
- In spike samples V3BLK0915LCS/LCSD, the relative percent difference for bromomethane exceeded the limit of 30 at 44.
- In spike samples 01GW2201MS/MSD, the relative percent difference for bromomethane exceeded the limit of 30 at 32. Analysis of the MSD was started 12 hours 4 minutes after the associated tune standard.
- In spike samples 01SS0701MS/MSD, 39 of 88 recoveries were outside the acceptance limits with all relative percent differences within limits. See form 3. This is attributed to the sample matrix.
- Manual integrations: Quantitation signals were manually integrated in order to accurately reflect the peak areas based on the technical judgment of the analyst. A listing of the manual integrations performed and reason for the integration is attached to this case narrative. Before and after "pictures" are included with the raw data for each integration performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


 Marcia K. McGinnity
 Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

VOLATILE ORGANICS INITIAL CALIBRATION DATA						
Lab Name: EMPIRICAL LABS						
Instrument ID: VOA1(SOILS)	Calibration Date(s): 07/15/08					
Column: RTX-VRX ID: 0.25 (mm) 60MT.						
COMPOUND	V1STD07	V1STD06	V1STD05	V1STD03	V1STD02	V1STD01
Acetone	A					
Acrolein						
Acrylonitrile						
Benzene						
Bromobenzene						
Bromochloromethane						
Bromodichloromethane						
Bromoform						
Bromomethane						
2-Butanone	A					
n-Butylbenzene						
sec-Butylbenzene						
tert-Butylbenzene						
Carbon disulfide						
Carbon tetrachloride						
Chlorobenzene						
Chlorobenzene-d5	A					
Chloroethane						
2-Chloroethyl vinyl ether						A
Chloroform						
1-Chlorohexane						
Chloromethane						
2-Chlorotoluene						
4-Chlorotoluene						
Cyclohexane						
Dibromochloromethane						
1,2-Dibromo-3-chloropropane						
1,2-Dibromoethane						
Dibromomethane						
1,2-Dichlorobenzene						
1,3-Dichlorobenzene						
1,4-Dichlorobenzene	B	B	B	B	B	B
Dichlorodifluoromethane						
1,1-Dichloroethane						
1,2-Dichloroethane						
1,1-Dichloroethene						
cis-1,2-Dichloroethene						
trans-1,2-Dichloroethene						
1,2-Dichloroethene(total)						
1,2-Dichloropropane						
1,3-Dichloropropane						
2,2-Dichloropropane						
1,1-Dichloropropene						
cis-1,3-Dichloropropene						
trans-1,3-Dichloropropene						
Ethylbenzene						
Ethyl methacrylate						
Hexachlorobutadiene						
2-Hexanone	A					
Iodomethane		A				
Isopropylbenzene						
p-Isopropyltoluene						
Methyl acetate						
Methyl cyclohexane						
Methylene chloride						
Methyl methacrylate						
4-Methyl-2-pentanone						
MTBE						
Naphthalene						
n-Propylbenzene						
Styrene			A	A	A	A
1,1,1,2-Tetrachloroethane						
1,1,2,2-Tetrachloroethane						
Tetrachloroethene						
Tetrahydrofuran						
Toluene						
1,2,3-Trichlorobenzene	A					
1,2,4-Trichlorobenzene						
1,1,1-Trichloroethane						
1,1,2-Trichloroethane						
Trichloroethene						
Trichlorofluoromethane						
Trichlorotrifluoroethane						
1,2,3-Trichloropropane						
1,2,4-Trimethylbenzene						
1,3,5-Trimethylbenzene						
Vinyl acetate						
Vinyl chloride						
m,p-Xylene						
Xylene(total)						
Dibromofluoromethane						
1,2-Dichloroethane-d4						
Toluene-d8						
Bromofluorobenzene						

A: The peak was manually integrated as it was not integrated in the original chromatogram.
B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
C: The peak was manually integrated to correct baseline from the original chromatogram.
D: The peak was manually integrated to identify the correct peak as the incorrect peak was identified in the original chromatogram.
E: The peak was manually integrated to include entire peak as the original chromatogram only integrated part of the peak.

LSAMP_ID	SAMP_ID	LAB_CHEM	MANUAL
0809127-03MS	01SS0701MS	4-Methyl-2-pentanone	A
0809127-03MSD	01SS0701MSD	4-Methyl-2-pentanone	A
0809127-03MSD	01SS0701MSD	Toluene	A
V1CCV01	09/15/08V1	4-Methyl-2-pentanone	A

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V1BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: V1BLK01 Lab Sample ID: V1BLK0915

Date Analyzed: 09/15/08 Time Analyzed: 1253

Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1BLK0915LCS	V1BLK0915LCS	V1LCS01	1135
02	01SS0701	0809127-03	0912703A	1411
03	01SS0801	0809127-04	0912704A	1450
04	01SS0901	0809127-05	0912705A	1529
05	01SS1001	0809127-06	0912706A	1609
06	01SS1101	0809127-07	0912707A	1648
07	01SS1201	0809127-08	0912708A	1727
08	01SS0701MS	0809127-03MS	0912703AM	1806
09	01SS0701MSD	0809127-03MSD	0912703AS	1845
10				
11				
12				
13				
14				
15				
16				
17				
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19				
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COMMENTS:

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: V1BLK0915

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 09/15/08 12:53

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	2.0	10		U
71-43-2	Benzene	0.47	10		U
74-97-5	Bromochloromethane	0.42	10		U
75-27-4	Bromodichloromethane	0.30	10		U
75-25-2	Bromoform	1.0	10		U
74-83-9	Bromomethane	0.72	10		U
78-93-3	2-Butanone	1.4	10		U
75-15-0	Carbon disulfide	1.3	10		U
56-23-5	Carbon tetrachloride	0.88	10		U
108-90-7	Chlorobenzene	0.34	10		U
75-00-3	Chloroethane	1.1	10		U
67-66-3	Chloroform	0.55	10		U
74-87-3	Chloromethane	0.52	10		U
110-82-7	Cyclohexane	0.54	10		U
124-48-1	Dibromochloromethane	0.34	10		U
106-93-4	1,2-Dibromoethane	0.43	10		U
75-34-3	1,1-Dichloroethane	0.54	10		U
107-06-2	1,2-Dichloroethane	0.46	10		U
75-35-4	1,1-Dichloroethene	1.2	10		U
156-59-2	cis-1,2-Dichloroethene	1.2	10		U
156-60-5	trans-1,2-Dichloroethene	1.1	10		U
540-59-0	1,2-Dichloroethene (total)	1.2	10		U
78-87-5	1,2-Dichloropropane	0.46	10		U
10061-01-5	cis-1,3-Dichloropropene	0.50	10		U
10061-02-6	trans-1,3-Dichloropropene	0.32	10		U
100-41-4	Ethylbenzene	0.75	10		U
591-78-6	2-Hexanone	2.3	10		U
98-82-8	Isopropylbenzene	0.88	10		U
79-20-9	Methyl acetate	1.6	10		U
108-87-2	Methyl cyclohexane	0.30	10		U
75-09-2	Methylene chloride	0.62	10	1.0	J
108-10-1	4-Methyl-2-pentanone	0.58	10		U
1634-04-4	Methyl tert-butyl ether	0.32	10		U
100-42-5	Styrene	0.35	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.43	10		U
127-18-4	Tetrachloroethene	0.97	10		U
108-88-3	Toluene	0.86	10		U
87-61-6	1,2,3-Trichlorobenzene	0.42	10		U
120-82-1	1,2,4-Trichlorobenzene	0.18	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: V1BLK0915

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 09/15/08 12:53

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.90	10		U
79-00-5-----	1,1,2-Trichloroethane	0.35	10		U
79-01-6-----	Trichloroethene	0.85	10		U
76-13-1-----	Trichlorotrifluoroethane	0.55	10		U
75-01-4-----	Vinyl chloride	1.1	10		U
1330-20-7-----	Xylene(total)	0.70	10		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V3BLK0912

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: V3BLK01 Lab Sample ID: V3BLK0912

Date Analyzed: 09/12/08 Time Analyzed: 1251

Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V3BLK0912LCS	V3BLK0912LCS	V3LCS01	1052
02	01TB090908	0809091-01	0909101	1351
03	01RB090908	0809091-08	0909108	1422
04	01GW2301	0809091-02	0909102	1755
05	01GW2201	0809091-03	0909103	1825
06	01GW2501	0809091-04	0909104	1854
07	01GW2401	0809091-05	0909105	1925
08	01GW2701	0809091-06	0909106	1955
09	01GW2601	0809091-07	0909107	2025
10	01GW2201MS	0809091-03MS	0909103M	2126
11	01GW2201MSD	0809091-03MSD	0909103S	2156
12				
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COMMENTS:

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V3BLK0912

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: V3BLK0912
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3BLK01
 Level: (low/med) LOW Date Sampled: _____
 % Moisture: not dec. _____ Date Analyzed: 09/12/08 12:51
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC	Q
		MDL	RL	CONC		
67-64-1	Acetone	1.7	5.0		U	
71-43-2	Benzene	0.12	1.0		U	
74-97-5	Bromochloromethane	0.15	1.0		U	
75-27-4	Bromodichloromethane	0.12	1.0		U	
75-25-2	Bromoform	0.13	1.0		U	
74-83-9	Bromomethane	0.13	1.0		U	
78-93-3	2-Butanone	1.4	5.0		U	
75-15-0	Carbon disulfide	0.15	1.0		U	
56-23-5	Carbon tetrachloride	0.11	1.0		U	
108-90-7	Chlorobenzene	0.10	1.0		U	
75-00-3	Chloroethane	0.14	1.0		U	
67-66-3	Chloroform	0.13	1.0		U	
74-87-3	Chloromethane	0.28	1.0		U	
110-82-7	Cyclohexane	0.12	1.0		U	
124-48-1	Dibromochloromethane	0.14	1.0		U	
96-12-8	1,2-Dibromo-3-chloropropane	0.090	2.0		U	
106-93-4	1,2-Dibromoethane	0.14	1.0		U	
95-50-1	1,2-Dichlorobenzene	0.11	1.0		U	
541-73-1	1,3-Dichlorobenzene	0.38	1.0		U	
106-46-7	1,4-Dichlorobenzene	0.10	1.0		U	
75-71-8	Dichlorodifluoromethane	0.25	1.0		U	
75-34-3	1,1-Dichloroethane	0.11	1.0		U	
107-06-2	1,2-Dichloroethane	0.13	1.0		U	
75-35-4	1,1-Dichloroethene	0.13	1.0		U	
156-59-2	cis-1,2-Dichloroethene	0.14	1.0		U	
78-87-5	1,2-Dichloropropane	0.11	1.0		U	
10061-01-5	cis-1,3-Dichloropropene	0.080	1.0		U	
10061-02-6	trans-1,3-Dichloropropene	0.12	1.0		U	
100-41-4	Ethylbenzene	0.35	1.0		U	
591-78-6	2-Hexanone	0.18	5.0		U	
98-82-8	Isopropylbenzene	0.11	1.0		U	
79-20-9	Methyl acetate	0.36	1.0		U	
108-87-2	Methyl cyclohexane	0.12	1.0		U	
75-09-2	Methylene chloride	0.23	2.0	0.30	J	
1634-04-4	Methyl tert-butyl ether	0.10	1.0		U	
108-10-1	4-Methyl-2-pentanone	0.35	5.0		U	
100-42-5	Styrene	0.090	1.0		U	
79-34-5	1,1,2,2-Tetrachloroethane	0.13	1.0		U	
127-18-4	Tetrachloroethene	0.10	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V3BLK0912

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: V3BLK0912

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/12/08 12:51

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----Toluene	0.16	1.0		U
87-61-6-----1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----1,2,4-Trichlorobenzene	0.57	1.0		U
71-55-6-----1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----Trichloroethene	0.23	1.0		U
76-13-1-----Trichlorotrifluoroethane	0.11	1.0		U
75-69-4-----Trichlorofluoromethane	0.12	5.0		U
75-01-4-----Vinyl chloride	0.20	1.0		U
1330-20-7-----Xylene(total)	0.47	1.0		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V3BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: V3BLK01 Lab Sample ID: V3BLK0915

Date Analyzed: 09/15/08 Time Analyzed: 1151

Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA3

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V3BLK0915LCS	V3BLK0915LCS	V3LCS01	1024
02	01TB091108	0809127-01	0912701	1252
03	01RB091108	0809127-02	0912702	1322
04	V3BLK0915LCS	V3BLK0915LCSD	V3LCSD01	1749
05				
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COMMENTS:

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V3BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: V3BLK0915

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/15/08 11:51

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.7	5.0		U
71-43-2-----	Benzene	0.12	1.0		U
74-97-5-----	Bromochloromethane	0.15	1.0		U
75-27-4-----	Bromodichloromethane	0.12	1.0		U
75-25-2-----	Bromoform	0.13	1.0		U
74-83-9-----	Bromomethane	0.13	1.0		U
78-93-3-----	2-Butanone	1.4	5.0		U
75-15-0-----	Carbon disulfide	0.15	1.0		U
56-23-5-----	Carbon tetrachloride	0.11	1.0		U
108-90-7-----	Chlorobenzene	0.10	1.0		U
75-00-3-----	Chloroethane	0.14	1.0		U
67-66-3-----	Chloroform	0.13	1.0		U
74-87-3-----	Chloromethane	0.28	1.0		U
110-82-7-----	Cyclohexane	0.12	1.0		U
124-48-1-----	Dibromochloromethane	0.14	1.0		U
106-93-4-----	1,2-Dibromoethane	0.14	1.0		U
75-34-3-----	1,1-Dichloroethane	0.11	1.0		U
107-06-2-----	1,2-Dichloroethane	0.13	1.0		U
75-35-4-----	1,1-Dichloroethene	0.13	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.14	1.0		U
156-60-5-----	trans-1,2-Dichloroethene	0.15	1.0		U
540-59-0-----	1,2-Dichloroethene (total)	0.40	1.0		U
78-87-5-----	1,2-Dichloropropane	0.11	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.080	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.12	1.0		U
100-41-4-----	Ethylbenzene	0.35	1.0		U
591-78-6-----	2-Hexanone	0.18	5.0		U
98-82-8-----	Isopropylbenzene	0.11	1.0		U
79-20-9-----	Methyl acetate	0.36	1.0		U
108-87-2-----	Methyl cyclohexane	0.12	1.0		U
75-09-2-----	Methylene chloride	0.23	2.0	0.35	J
108-10-1-----	4-Methyl-2-pentanone	0.35	5.0		U
1634-04-4----	Methyl tert-butyl ether	0.10	1.0		U
100-42-5-----	Styrene	0.090	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.13	1.0		U
127-18-4-----	Tetrachloroethene	0.10	1.0		U
108-88-3-----	Toluene	0.16	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.57	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.57	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V3BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: V3BLK0915

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V3BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/15/08 11:51

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane	0.12	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.10	1.0		U
79-01-6-----	Trichloroethene	0.23	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.11	1.0		U
75-01-4-----	Vinyl chloride	0.20	1.0		U
1330-20-7-----	Xylene (total)	0.47	1.0		U

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
Acetone	LINR	0.00000000	0.16867200		0.999
Acrolein	AVRG		9.715e-002		8.8
Acrylonitrile	AVRG		0.12266200		13.2
Benzene	AVRG		1.33587687		9.7
Bromobenzene	AVRG		0.94794697		4.8
Bromochloromethane	AVRG		0.14380220		6.4
Bromodichloromethane	AVRG		0.43509742		8.6
Bromoform	AVRG		0.50984111		10.3
Bromomethane	AVRG		0.25459401		4.1
2-Butanone	AVRG		0.24154135		9.5
n-Butylbenzene	AVRG		3.61865967		8.6
sec-Butylbenzene	AVRG		4.43290996		4.9
tert-Butylbenzene	AVRG		2.73121674		4.6
Carbon disulfide	AVRG		1.05515651		7.8
Carbon tetrachloride	AVRG		0.32486819		6.8
Chlorobenzene	AVRG		1.77199232		8.4
Chloroethane	AVRG		0.30289460		3.6
<u>2-Chloroethyl vinyl ether</u>	AVRG		<u>8.02e-003</u>		8.7
Chloroform	AVRG		0.54788372		8.6
1-Chlorohexane	AVRG		1.18483941		7.9
Chloromethane	AVRG		0.63660637		10.1
2-Chlorotoluene	AVRG		3.01071640		8.3
4-Chlorotoluene	AVRG		3.56083133		8.6
Cyclohexane	AVRG		0.66632072		7.3
Dibromochloromethane	AVRG		0.63606894		7.0
1,2-Dibromo-3-chloropropane	AVRG		0.19255214		7.0
1,2-Dibromoethane	AVRG		0.59341812		7.7
Dibromomethane	AVRG		0.18745901		6.2
1,2-Dichlorobenzene	AVRG		1.65260940		5.5
1,3-Dichlorobenzene	AVRG		1.91829586		9.4
1,4-Dichlorobenzene	AVRG		1.80294674		6.2
Dichlorodifluoromethane	AVRG		0.36598229		5.9
1,1-Dichloroethane	AVRG		0.65872275		7.7
1,2-Dichloroethane	AVRG		0.41181821		9.5
1,1-Dichloroethene	AVRG		0.30044052		13.6
cis-1,2-Dichloroethene	AVRG		0.36121839		8.2
trans-1,2-Dichloroethene	AVRG		0.34799935		12.5

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08
 Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,2-Dichloroethene (total)	AVRG		0.35460887		9.3
1,2-Dichloropropane	AVRG		0.37473122		8.3
1,3-Dichloropropane	AVRG		1.21093857		10.5
2,2-Dichloropropane	AVRG		0.45392947		4.8
1,1-Dichloropropene	AVRG		0.48750758		7.7
cis-1,3-Dichloropropene	AVRG		0.56027427		5.4
trans-1,3-Dichloropropene	AVRG		1.03397113		6.9
Ethylbenzene	AVRG		3.34080314		11.4
Ethyl methacrylate	AVRG		0.98262203		9.2
Hexachlorobutadiene	AVRG		0.55135670		4.6
2-Hexanone	AVRG		0.69124575		8.3
Iodomethane	AVRG		0.25164697		7.8
Isopropylbenzene	AVRG		2.67414890		7.8
p-Isopropyltoluene	AVRG		3.38886123		6.8
Methyl acetate	LINR	0.00000000	0.24887272		0.996
Methyl cyclohexane	AVRG		0.58511106		6.4
Methylene chloride	2ORDR	0.00000000	2.09759334	0.37931720	0.996
Methyl methacrylate	AVRG		0.35065631		10.2
4-Methyl-2-pentanone	AVRG		0.38948663		10.0
MTBE	AVRG		0.82199075		7.2
Naphthalene	AVRG		2.70510421		9.6
n-Propylbenzene	AVRG		5.03806141		5.6
Styrene	AVRG		2.09825928		7.3
1,1,1,2-Tetrachloroethane	AVRG		0.60894757		8.8
1,1,2,2-Tetrachloroethane	AVRG		1.10031995		9.9
Tetrachloroethene	AVRG		0.64414215		6.5
Tetrahydrofuran	LINR	0.00000000	0.10861936		0.999
Toluene	LINR	0.00000000	1.61432372		0.995
1,2,3-Trichlorobenzene	AVRG		1.02938180		2.2
1,2,4-Trichlorobenzene	AVRG		1.13030132		2.2
1,1,1-Trichloroethane	AVRG		0.40567891		5.6
1,1,2-Trichloroethane	AVRG		0.51052664		10.2
Trichloroethene	AVRG		0.32013960		7.0
Trichlorofluoromethane	AVRG		0.41959725		6.2
Trichlorotrifluoroethane	AVRG		0.26295622		6.9
1,2,3-Trichloropropane	AVRG		0.23802416		8.4
1,2,4-Trimethylbenzene	AVRG		3.25974582		5.6

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,3,5-Trimethylbenzene	AVRG		3.14162294		5.2
Vinyl acetate	AVRG		0.79262107		7.2
Vinyl chloride	AVRG		0.50928006		4.3
m,p-Xylene	AVRG		2.35776090		12.8
Xylene (total)	AVRG		2.41422843		9.6
Dibromofluoromethane	AVRG		0.23904864		3.1
1,2-Dichloroethane-d4	AVRG		6.567e-002		1.5
Toluene-d8	AVRG		2.04581326		3.2
Bromofluorobenzene	AVRG		0.81243215		2.7

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.213	0.181	100.0	107.3		LINR	7.3	25.0
Acrolein	0.097	0.094	250.0	242.7		AVRG	-2.9	25.0
Acrylonitrile	0.123	0.120	250.0	245.2		AVRG	-1.9	25.0
Benzene	1.336	1.297	50.00	48.55		AVRG	-2.9	25.0
Bromobenzene	0.948	0.895	50.00	47.21		AVRG	-5.6	25.0
Bromochloromethane	0.144	0.143	50.00	49.77		AVRG	-0.5	25.0
Bromodichloromethane	0.435	0.422	50.00	48.47		AVRG	-3.1	25.0
Bromoform	0.510	0.515	50.00	50.51	0.100	AVRG	1.0	25.0
Bromomethane	0.254	0.249	50.00	48.91		AVRG	-2.2	25.0
2-Butanone	0.241	0.229	100.0	94.98		AVRG	-5.0	25.0
n-Butylbenzene	3.619	3.564	50.00	49.24		AVRG	-1.5	25.0
sec-Butylbenzene	4.433	4.383	50.00	49.44		AVRG	-1.1	25.0
tert-Butylbenzene	2.731	2.810	50.00	51.45		AVRG	2.9	25.0
Carbon disulfide	1.055	1.210	50.00	57.34		AVRG	14.7	25.0
Carbon tetrachloride	0.325	0.324	50.00	49.96		AVRG	-0.1	25.0
Chlorobenzene	1.772	1.759	50.00	49.64	0.300	AVRG	-0.7	25.0
Chloroethane	0.303	0.307	50.00	50.69		AVRG	1.4	25.0
2-Chloroethyl vinyl ether	0.008	0.009	100.0	115.8		AVRG	15.8	25.0
Chloroform	0.548	0.525	50.00	47.92		AVRG	-4.2	25.0
1-Chlorohexane	1.184	1.198	50.00	50.56		AVRG	1.1	25.0
Chloromethane	0.636	0.651	50.00	51.13	0.100	AVRG	2.3	25.0
2-Chlorotoluene	3.011	3.087	50.00	51.27		AVRG	2.5	25.0
4-Chlorotoluene	3.561	3.394	50.00	47.66		AVRG	-4.7	25.0
Cyclohexane	0.666	0.710	50.00	53.31		AVRG	6.6	25.0
Dibromochloromethane	0.636	0.623	50.00	48.98		AVRG	-2.0	25.0
1,2-Dibromo-3-chloropropane	0.192	0.190	50.00	49.44		AVRG	-1.1	25.0
1,2-Dibromoethane	0.594	0.576	50.00	48.57		AVRG	-2.9	25.0
Dibromomethane	0.187	0.182	50.00	48.57		AVRG	-2.8	25.0
1,2-Dichlorobenzene	1.652	1.558	50.00	47.14		AVRG	-5.7	25.0
1,3-Dichlorobenzene	1.918	1.849	50.00	48.19		AVRG	-3.6	25.0
1,4-Dichlorobenzene	1.803	1.776	50.00	49.24		AVRG	-1.5	25.0
Dichlorodifluoromethane	0.366	0.416	50.00	56.79		AVRG	13.6	25.0
1,1-Dichloroethane	0.659	0.647	50.00	49.13	0.100	AVRG	-1.7	25.0
1,2-Dichloroethane	0.412	0.394	50.00	47.91		AVRG	-4.2	25.0
1,1-Dichloroethene	0.300	0.291	50.00	48.45		AVRG	-3.1	25.0
cis-1,2-Dichloroethene	0.361	0.339	50.00	46.91		AVRG	-6.2	25.0
trans-1,2-Dichloroethene	0.348	0.326	50.00	46.80		AVRG	-6.4	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.354	0.332	100.0	93.71		AVRG	-6.3	25.0
1,2-Dichloropropane	0.375	0.359	50.00	47.87		AVRG	-4.3	25.0
1,3-Dichloropropane	1.211	1.122	50.00	46.31		AVRG	-7.4	25.0
2,2-Dichloropropane	0.454	0.442	50.00	48.67		AVRG	-2.6	25.0
1,1-Dichloropropene	0.488	0.468	50.00	48.04		AVRG	-3.9	25.0
cis-1,3-Dichloropropene	0.560	0.556	50.00	49.64		AVRG	-0.7	25.0
trans-1,3-Dichloropropene	1.034	1.108	50.00	53.57		AVRG	7.1	25.0
Ethylbenzene	3.341	3.334	50.00	49.89		AVRG	-0.2	25.0
Ethyl methacrylate	0.983	1.007	50.00	51.23		AVRG	2.5	25.0
Hexachlorobutadiene	0.551	0.553	50.00	50.15		AVRG	0.3	25.0
2-Hexanone	0.691	0.707	100.0	102.2		AVRG	2.2	25.0
Iodomethane	0.252	0.260	50.00	51.66		AVRG	3.3	25.0
Isopropylbenzene	2.674	2.937	50.00	54.92		AVRG	9.8	25.0
p-Isopropyltoluene	3.389	3.447	50.00	50.86		AVRG	1.7	25.0
Methyl acetate	0.323	0.289	50.00	58.14		LINR	16.3	25.0
Methyl cyclohexane	0.585	0.620	50.00	52.96		AVRG	5.9	25.0
Methylene chloride	0.785	0.409	50.00	48.21		2ORDR	-3.6	25.0
Methyl methacrylate	0.351	0.340	50.00	48.54		AVRG	-2.9	25.0
4-Methyl-2-pentanone	0.390	0.383	100.0	98.23		AVRG	-1.8	25.0
MTBE	0.822	0.805	50.00	48.96		AVRG	-2.1	25.0
Naphthalene	2.705	2.469	50.00	45.64		AVRG	-8.7	25.0
n-Propylbenzene	5.038	5.131	50.00	50.92		AVRG	1.8	25.0
Styrene	2.098	2.128	50.00	50.71		AVRG	1.4	25.0
1,1,1,2-Tetrachloroethane	0.609	0.580	50.00	47.62		AVRG	-4.8	25.0
1,1,2,2-Tetrachloroethane	1.100	1.051	50.00	47.77	0.300	AVRG	-4.5	25.0
Tetrachloroethene	0.644	0.632	50.00	49.10		AVRG	-1.8	25.0
Tetrahydrofuran	0.129	0.121	50.00	55.61		LINR	11.2	25.0
Toluene	1.966	1.860	50.00	57.60		LINR	15.2	25.0
1,2,3-Trichlorobenzene	1.029	0.984	50.00	47.80		AVRG	-4.4	25.0
1,2,4-Trichlorobenzene	1.130	1.038	50.00	45.92		AVRG	-8.2	25.0
1,1,1-Trichloroethane	0.406	0.399	50.00	49.19		AVRG	-1.6	25.0
1,1,2-Trichloroethane	0.510	0.523	50.00	51.20		AVRG	2.4	25.0
Trichloroethene	0.320	0.297	50.00	46.39		AVRG	-7.2	25.0
Trichlorofluoromethane	0.420	0.425	50.00	50.68		AVRG	1.4	25.0
Trichlorotrifluoroethane	0.263	0.291	50.00	55.31		AVRG	10.6	25.0
1,2,3-Trichloropropane	0.238	0.226	50.00	47.54		AVRG	-4.9	25.0
1,2,4-Trimethylbenzene	3.260	3.224	50.00	49.45		AVRG	-1.1	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	3.142	3.161	50.00	50.31		AVRG	0.6	25.0
Vinyl acetate	0.792	0.829	100.0	104.6		AVRG	4.6	25.0
Vinyl chloride	0.509	0.530	50.00	52.06		AVRG	4.1	25.0
m,p-Xylene	2.358	2.376	100.0	100.8		AVRG	0.8	25.0
Xylene (total)	2.414	2.526	150.0	150.7		AVRG	4.6	25.0
Dibromofluoromethane	0.239	0.233	30.00	29.22		AVRG	-2.6	25.0
1,2-Dichloroethane-d4	0.066	0.065	30.00	29.81		AVRG	-0.6	25.0
Toluene-d8	2.046	2.066	30.00	30.30		AVRG	1.0	25.0
Bromofluorobenzene	0.812	0.830	30.00	30.65		AVRG	2.2	25.0

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID: V1BFB01 BFB Injection Date: 09/15/08
 Instrument ID: VOA1 BFB Injection Time: 0906
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.0
75	30.0 - 60.0% of mass 95	48.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	65.1
175	5.0 - 9.0% of mass 174	4.8 (7.4)1
176	95.0 - 101.0% of mass 174	65.1 (100.0)1
177	5.0 - 9.0% of mass 176	4.4 (6.8)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V1STD50PPB	V1STD50PPB	V1CCV01	09/15/08	0938
02	V1BLK0915LCS	V1BLK0915LCS	V1LCS01	09/15/08	1135
03	V1BLK0915	V1BLK0915	V1BLK01	09/15/08	1253
04	01SS0701	0809127-03	0912703A	09/15/08	1411
05	01SS0801	0809127-04	0912704A	09/15/08	1450
06	01SS0901	0809127-05	0912705A	09/15/08	1529
07	01SS1001	0809127-06	0912706A	09/15/08	1609
08	01SS1101	0809127-07	0912707A	09/15/08	1648
09	01SS1201	0809127-08	0912708A	09/15/08	1727
10	01SS0701MS	0809127-03MS	0912703AM	09/15/08	1806
11	01SS0701MSD	0809127-03MSD	0912703AS	09/15/08	1845
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA1 Calibration Date: 09/15/08 Time: 0938
 Lab File ID: V1CCV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.213	0.163	100.0	96.51		LINR	-3.5	
Acrolein	0.097	0.071	250.0	183.8		AVRG	-26.5	
Acrylonitrile	0.123	0.102	250.0	207.8		AVRG	-16.9	
Benzene	1.336	1.162	50.00	43.48		AVRG	-13.0	
Bromobenzene	0.948	0.841	50.00	44.38		AVRG	-11.2	
Bromochloromethane	0.144	0.136	50.00	47.29		AVRG	-5.4	
Bromodichloromethane	0.435	0.391	50.00	44.91		AVRG	-10.2	
Bromoform	0.510	0.505	50.00	49.51	0.100	AVRG	-1.0	
Bromomethane	0.254	0.275	50.00	53.94		AVRG	7.9	
2-Butanone	0.241	0.213	100.0	88.32		AVRG	-11.7	
n-Butylbenzene	3.619	3.071	50.00	42.43		AVRG	-15.1	
sec-Butylbenzene	4.433	4.041	50.00	45.58		AVRG	-8.8	
tert-Butylbenzene	2.731	2.446	50.00	44.77		AVRG	-10.4	
Carbon disulfide	1.055	0.874	50.00	41.43		AVRG	-17.1	
Carbon tetrachloride	0.325	0.296	50.00	45.59		AVRG	-8.8	
Chlorobenzene	1.772	1.446	50.00	40.80	0.300	AVRG	-18.4	
Chloroethane	0.303	0.267	50.00	44.10		AVRG	-11.8	
2-Chloroethyl vinyl ether	0.008	0.003	100.0	32.69		AVRG	-67.3	
Chloroform	0.548	0.511	50.00	46.63		AVRG	-6.7	20.0
1-Chlorohexane	1.184	0.940	50.00	39.66		AVRG	-20.7	
Chloromethane	0.636	0.484	50.00	38.06	0.100	AVRG	-23.9	
2-Chlorotoluene	3.011	2.840	50.00	47.16		AVRG	-5.7	
4-Chlorotoluene	3.561	3.364	50.00	47.24		AVRG	-5.5	
Cyclohexane	0.666	0.603	50.00	45.27		AVRG	-9.4	
Dibromochloromethane	0.636	0.510	50.00	40.07		AVRG	-19.9	
1,2-Dibromo-3-chloropropane	0.192	0.164	50.00	42.69		AVRG	-14.6	
1,2-Dibromoethane	0.594	0.497	50.00	41.90		AVRG	-16.2	
Dibromomethane	0.187	0.172	50.00	45.94		AVRG	-8.1	
1,2-Dichlorobenzene	1.652	1.431	50.00	43.31		AVRG	-13.4	
1,3-Dichlorobenzene	1.918	1.644	50.00	42.85		AVRG	-14.3	
1,4-Dichlorobenzene	1.803	1.601	50.00	44.41		AVRG	-11.2	
Dichlorodifluoromethane	0.366	0.305	50.00	41.72		AVRG	-16.6	
1,1-Dichloroethane	0.659	0.588	50.00	44.64	0.100	AVRG	-10.7	
1,2-Dichloroethane	0.412	0.367	50.00	44.54		AVRG	-10.9	
1,1-Dichloroethene	0.300	0.259	50.00	43.16		AVRG	-13.7	20.0
cis-1,2-Dichloroethene	0.361	0.314	50.00	43.41		AVRG	-13.2	
trans-1,2-Dichloroethene	0.348	0.288	50.00	41.36		AVRG	-17.3	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA1 Calibration Date: 09/15/08 Time: 0938
 Lab File ID: V1CCV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.354	0.301	100.0	84.80		AVRG	-15.2	
1,2-Dichloropropane	0.375	0.332	50.00	44.36		AVRG	-11.3	20.0
1,3-Dichloropropane	1.211	1.028	50.00	42.44		AVRG	-15.1	
2,2-Dichloropropane	0.454	0.418	50.00	46.10		AVRG	-7.8	
1,1-Dichloropropene	0.488	0.431	50.00	44.16		AVRG	-11.7	
cis-1,3-Dichloropropene	0.560	0.476	50.00	42.51		AVRG	-15.0	
trans-1,3-Dichloropropene	1.034	0.834	50.00	40.34		AVRG	-19.3	
Ethylbenzene	3.341	2.704	50.00	40.47		AVRG	-19.1	20.0
Ethyl methacrylate	0.983	0.915	50.00	46.57		AVRG	-6.9	
Hexachlorobutadiene	0.551	0.402	50.00	36.48		AVRG	-27.0	
2-Hexanone	0.691	0.640	100.0	92.54		AVRG	-7.5	
Iodomethane	0.252	0.353	50.00	70.08		AVRG	40.2	
Isopropylbenzene	2.674	2.126	50.00	39.76		AVRG	-20.5	
p-Isopropyltoluene	3.389	2.957	50.00	43.62		AVRG	-12.8	
Methyl acetate	0.323	0.253	50.00	50.79		LINR	1.6	
Methyl cyclohexane	0.585	0.488	50.00	41.70		AVRG	-16.6	
Methylene chloride	0.785	0.344	50.00	39.84		2ORDR	-20.3	
Methyl methacrylate	0.351	0.309	50.00	44.08		AVRG	-11.8	
4-Methyl-2-pentanone	0.390	0.390	100.0	100.1		AVRG	0.1	
MTBE	0.822	0.705	50.00	42.86		AVRG	-14.3	
Naphthalene	2.705	1.973	50.00	36.46		AVRG	-27.1	
n-Propylbenzene	5.038	4.976	50.00	49.39		AVRG	-1.2	
Styrene	2.098	1.608	50.00	38.32		AVRG	-23.4	
1,1,1,2-Tetrachloroethane	0.609	0.482	50.00	39.59		AVRG	-20.8	
1,1,2,2-Tetrachloroethane	1.100	1.214	50.00	55.17	0.300	AVRG	10.3	
Tetrachloroethene	0.644	0.539	50.00	41.83		AVRG	-16.3	
Tetrahydrofuran	0.129	0.111	50.00	51.18		LINR	2.4	
Toluene	1.966	1.468	50.00	45.48		LINR	-9.0	20.0
1,2,3-Trichlorobenzene	1.029	0.774	50.00	37.58		AVRG	-24.8	
1,2,4-Trichlorobenzene	1.130	0.824	50.00	36.44		AVRG	-27.1	
1,1,1-Trichloroethane	0.406	0.373	50.00	45.95		AVRG	-8.1	
1,1,2-Trichloroethane	0.510	0.467	50.00	45.75		AVRG	-8.5	
Trichloroethene	0.320	0.300	50.00	46.78		AVRG	-6.4	
Trichlorofluoromethane	0.420	0.387	50.00	46.16		AVRG	-7.7	
Trichlorotrifluoroethane	0.263	0.243	50.00	46.16		AVRG	-7.7	
1,2,3-Trichloropropane	0.238	0.200	50.00	42.02		AVRG	-16.0	
1,2,4-Trimethylbenzene	3.260	3.096	50.00	47.49		AVRG	-5.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA1 Calibration Date: 09/15/08 Time: 0938
 Lab File ID: V1CCV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	3.142	3.089	50.00	49.16		AVRG	-1.7	
Vinyl acetate	0.792	0.744	100.0	93.81		AVRG	-6.2	
Vinyl chloride	0.509	0.439	50.00	43.13		AVRG	-13.7	20.0
Xylene(total)	2.414	2.050	150.0	125.0		AVRG	-15.1	
Dibromofluoromethane	0.239	0.249	30.00	31.20		AVRG	4.0	
1,2-Dichloroethane-d4	0.066	0.071	30.00	32.40		AVRG	8.0	
Toluene-d8	2.046	2.030	30.00	29.76		AVRG	-0.8	
Bromofluorobenzene	0.812	0.758	30.00	27.98		AVRG	-6.7	

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA04575
 Lab File ID: V3BFB01 BFB Injection Date: 08/15/08
 Instrument ID: VOA3 BFB Injection Time: 1600
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.9
75	30.0 - 60.0% of mass 95	55.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	Greater than 50.0% of mass 95	84.4
175	5.0 - 9.0% of mass 174	6.4 (7.6)1
176	95.0 - 101.0% of mass 174	83.3 (98.7)1
177	5.0 - 9.0% of mass 176	6.2 (7.4)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V3STD0.25PPB	V3STD0.25PPB	V3STD01	08/15/08	1630
02	V3STD0.5PPB	V3STD0.5PPB	V3STD02	08/15/08	1701
03	V3STD1PPB	V3STD1PPB	V3STD03	08/15/08	1731
04	V3STD2PPB	V3STD2PPB	V3STD04	08/15/08	1801
05	V3STD10PPB	V3STD10PPB	V3STD05	08/15/08	1831
06	V3STD20PPB	V3STD20PPB	V3STD06	08/15/08	1901
07	V3STD50PPB	V3STD50PPB	V3STD07	08/15/08	1932
08	V3BLK0815LCS	V3BLK0815LCS	V3ICV01	08/15/08	2001
09	V3STD100PPB	V3STD100PPB	V3STD08	08/15/08	2031
10	V3STD200PPB	V3STD200PPB	V3STD09	08/15/08	2100
11					
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FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34713

Instrument ID: VOA3 Calibration Date(s): 08/15/08 08/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1630 2100

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
Acetone	LINR	0.00000000	6.641e-002	0.998
Acrolein	<u>LINR</u>	0.00000000	6.892e-003 <u>OK</u>	0.999
Acrylonitrile	AVRG		4.843e-002	8.8
Benzene	AVRG		0.80792914	5.6
Bromobenzene	AVRG		0.60647445	9.8
Bromochloromethane	AVRG		0.10650318	11.0
Bromodichloromethane	AVRG		0.33405165	3.5
Bromoform	AVRG		0.33840074	9.5
Bromomethane	LINR	0.00000000	0.14557102	0.998
2-Butanone	LINR	0.00000000	6.977e-002	1.000
n-Butylbenzene	AVRG		1.01298107	14.7
sec-Butylbenzene	AVRG		1.61997126	12.7
tert-Butylbenzene	AVRG		1.40235909	10.0
Carbon disulfide	AVRG		0.61984923	10.3
Carbon tetrachloride	AVRG		0.37223226	7.0
Chlorobenzene	AVRG		1.29535477	11.4
Chloroethane	AVRG		0.12018810	8.6
2-Chloroethyl vinyl ether	LINR	0.00000000	0.12982477	0.999
Chloroform	AVRG		0.40729616	8.3
Chloromethane	LINR	0.00000000	0.17370930	0.999
2-Chlorotoluene	AVRG		1.44948014	12.7
4-Chlorotoluene	AVRG		1.52225568	13.8
Cyclohexane	AVRG		0.27318221	9.4
Dibromochloromethane	AVRG		0.45786154	7.9
1,2-Dibromo-3-chloropropane	AVRG		0.10430158	10.0
1,2-Dibromoethane	AVRG		0.40310291	5.4
Dibromomethane	AVRG		0.14864003	14.1
1,2-Dichlorobenzene	AVRG		1.03256949	12.3
1,3-Dichlorobenzene	AVRG		1.06660916	10.6
1,4-Dichlorobenzene	AVRG		1.15826560	14.9
Dichlorodifluoromethane	AVRG		0.26004309	7.1
1,1-Dichloroethane	LINR	0.00000000	0.32975713	1.000
1,2-Dichloroethane	AVRG		0.35595078	11.2
1,1-Dichloroethene	AVRG		0.14734679	10.6
cis-1,2-Dichloroethene	AVRG		0.20048606	10.5
1,2-Dichloroethene (total)	AVRG		0.17624370	7.7
trans-1,2-Dichloroethene	AVRG		0.16392659	13.0

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34713
 Instrument ID: VOA3 Calibration Date(s): 08/15/08 08/15/08
 Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1630 2100

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
1,2-Dichloropropane	AVRG		0.20374023	8.2
1,3-Dichloropropane	AVRG		0.62974819	6.0
2,2-Dichloropropane	AVRG		0.30943986	9.4
1,1-Dichloropropene	AVRG		0.28231794	9.1
cis-1,3-Dichloropropene	AVRG		0.34659390	6.3
trans-1,3-Dichloropropene	AVRG		0.54042772	11.0
Ethylbenzene	AVRG		2.09303138	11.1
Ethyl methacrylate	LINR	0.00000000	0.60380544	0.998
Hexachlorobutadiene	LINR	0.00000000	0.28211935	0.998
2-Hexanone	LINR	0.00000000	0.20918969	0.998
Iodomethane	LINR	0.00000000	0.36015652	0.999
Isopropylbenzene	AVRG		1.84758561	10.7
p-Isopropyltoluene	AVRG		1.22991759	12.5
Methyl acetate	LINR	0.00000000	0.12638341	0.999
Methyl cyclohexane	AVRG		0.35248550	12.2
Methylene chloride	LINR	0.00000000	0.19693009	1.000
Methyl methacrylate	AVRG		0.17971585	14.1
MTBE	LINR	0.00000000	0.65509393	0.999
4-Methyl-2-pentanone	LINR	0.00000000	0.15852800	0.999
Naphthalene	LINR	0.00000000	0.85190297	0.996
n-Propylbenzene	AVRG		2.05043324	13.6
Styrene	AVRG		1.28926022	8.7
1,1,1,2-Tetrachloroethane	AVRG		0.47329111	5.0
1,1,2,2-Tetrachloroethane	AVRG		0.42545916	10.5
Tetrachloroethene	AVRG		0.52662449	9.8
Tetrahydrofuran	AVRG		4.458e-002	4.9
Toluene	AVRG		1.04118663	11.1
1,2,3-Trichlorobenzene	LINR	0.00000000	0.48902535	0.997
1,2,4-Trichlorobenzene	LINR	0.00000000	0.56678235	0.998
1,1,1-Trichloroethane	AVRG		0.39280891	9.4
1,1,2-Trichloroethane	AVRG		0.28622389	3.3
Trichloroethene	AVRG		0.24965864	9.6
Trichlorofluoromethane	AVRG		0.42969718	9.0
Trichlorotrifluoroethane	AVRG		0.21506452	9.4
1,2,3-Trichloropropane	AVRG		0.17831880	6.8
1,2,4-Trimethylbenzene	AVRG		1.42032195	9.6
1,3,5-Trimethylbenzene	AVRG		1.50435830	9.2

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34713
 Instrument ID: VOA3 Calibration Date: 08/15/08 Time: 2001
 Lab File ID: V3ICV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.067	0.073	100.0	109.7		LINR	9.7	25.0
Acrolein	0.006	0.010	250.0	363.5		LINR	45.4	25.0
Acrylonitrile	0.048	0.053	250.0	274.7		AVRG	9.9	25.0
Benzene	0.808	0.830	50.00	51.35		AVRG	2.7	25.0
Bromobenzene	0.606	0.556	50.00	45.84		AVRG	-8.3	25.0
Bromochloromethane	0.106	0.110	50.00	51.75		AVRG	3.5	25.0
Bromodichloromethane	0.334	0.341	50.00	51.06		AVRG	2.1	25.0
Bromoform	0.338	0.352	50.00	52.04	0.100	AVRG	4.1	25.0
Bromomethane	0.114	0.141	50.00	48.59		LINR	-2.8	25.0
2-Butanone	0.057	0.074	100.0	106.0		LINR	6.0	25.0
n-Butylbenzene	1.013	1.238	50.00	61.12		AVRG	22.2	25.0
sec-Butylbenzene	1.620	1.794	50.00	55.36		AVRG	10.7	25.0
tert-Butylbenzene	1.402	1.640	50.00	58.48		AVRG	17.0	25.0
Carbon disulfide	0.620	0.582	50.00	46.95		AVRG	-6.1	25.0
Carbon tetrachloride	0.372	0.355	50.00	47.65		AVRG	-4.7	25.0
Chlorobenzene	1.295	1.301	50.00	50.22	0.300	AVRG	0.4	25.0
Chloroethane	0.120	0.131	50.00	54.49		AVRG	9.0	25.0
2-Chloroethyl vinyl ether	0.110	0.138	100.0	106.3		LINR	6.3	25.0
Chloroform	0.407	0.397	50.00	48.76		AVRG	-2.5	25.0
Chloromethane	0.203	0.207	50.00	59.47	0.100	LINR	18.9	25.0
2-Chlorotoluene	1.449	1.401	50.00	48.33		AVRG	-3.3	25.0
4-Chlorotoluene	1.522	1.487	50.00	48.83		AVRG	-2.3	25.0
Cyclohexane	0.273	0.247	50.00	45.14		AVRG	-9.7	25.0
Dibromochloromethane	0.458	0.503	50.00	54.93		AVRG	9.9	25.0
1,2-Dibromo-3-chloropropane	0.104	0.107	50.00	51.19		AVRG	2.4	25.0
1,2-Dibromoethane	0.403	0.398	50.00	49.43		AVRG	-1.1	25.0
Dibromomethane	0.148	0.142	50.00	47.71		AVRG	-4.6	25.0
1,2-Dichlorobenzene	1.032	1.019	50.00	49.36		AVRG	-1.3	25.0
1,3-Dichlorobenzene	1.067	1.116	50.00	52.34		AVRG	4.7	25.0
1,4-Dichlorobenzene	1.158	1.184	50.00	51.12		AVRG	2.2	25.0
Dichlorodifluoromethane	0.260	0.280	50.00	53.90		AVRG	7.8	25.0
1,1-Dichloroethane	0.294	0.343	50.00	51.97	0.100	LINR	3.9	25.0
1,2-Dichloroethane	0.356	0.340	50.00	47.71		AVRG	-4.6	25.0
1,1-Dichloroethene	0.147	0.159	50.00	53.88		AVRG	7.8	25.0
cis-1,2-Dichloroethene	0.200	0.197	50.00	49.18		AVRG	-1.6	25.0
1,2-Dichloroethene (total)	0.176	0.186	100.0	105.4		AVRG	5.4	25.0
trans-1,2-Dichloroethene	0.164	0.174	50.00	53.13		AVRG	6.3	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34713
 Instrument ID: VOA3 Calibration Date: 08/15/08 Time: 2001
 Lab File ID: V3ICV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloropropane	0.204	0.202	50.00	49.70		AVRG	-0.6	25.0
1,3-Dichloropropane	0.630	0.600	50.00	47.66		AVRG	-4.7	25.0
2,2-Dichloropropane	0.309	0.298	50.00	48.21		AVRG	-3.6	25.0
1,1-Dichloropropene	0.282	0.290	50.00	51.29		AVRG	2.6	25.0
cis-1,3-Dichloropropene	0.347	0.374	50.00	54.01		AVRG	8.0	25.0
trans-1,3-Dichloropropene	0.540	0.656	50.00	60.66		AVRG	21.3	25.0
Ethylbenzene	2.093	2.277	50.00	54.40		AVRG	8.8	25.0
Ethyl methacrylate	0.530	0.508	50.00	42.05		LINR	-15.9	25.0
Hexachlorobutadiene	0.294	0.283	50.00	50.18		LINR	0.4	25.0
2-Hexanone	0.187	0.228	100.0	109.0		LINR	9.0	25.0
Iodomethane	0.286	0.343	50.00	47.58		LINR	-4.8	25.0
Isopropylbenzene	1.848	2.190	50.00	59.28		AVRG	18.6	25.0
p-Isopropyltoluene	1.230	1.326	50.00	53.91		AVRG	7.8	25.0
Methyl acetate	0.122	0.112	50.00	44.24		LINR	-11.5	25.0
Methyl cyclohexane	0.352	0.306	50.00	43.35		AVRG	-13.3	25.0
Methylene chloride	0.243	0.198	50.00	50.27		LINR	0.5	25.0
Methyl methacrylate	0.180	0.168	50.00	46.90		AVRG	-6.2	25.0
MTBE	0.586	0.527	50.00	40.25		LINR	-19.5	25.0
4-Methyl-2-pentanone	0.141	0.167	100.0	105.4		LINR	5.4	25.0
Naphthalene	0.734	0.839	50.00	49.22		LINR	-1.6	25.0
n-Propylbenzene	2.050	2.193	50.00	53.47		AVRG	6.9	25.0
Styrene	1.289	1.556	50.00	60.34		AVRG	20.7	25.0
1,1,1,2-Tetrachloroethane	0.473	0.475	50.00	50.23		AVRG	0.4	25.0
1,1,2,2-Tetrachloroethane	0.425	0.383	50.00	45.00	0.300	AVRG	-10.0	25.0
Tetrachloroethene	0.527	0.515	50.00	48.93		AVRG	-2.1	25.0
Tetrahydrofuran	0.044	0.038	50.00	42.46		AVRG	-15.1	25.0
Toluene	1.041	1.058	50.00	50.83		AVRG	1.7	25.0
1,2,3-Trichlorobenzene	0.419	0.494	50.00	50.52		LINR	1.0	25.0
1,2,4-Trichlorobenzene	0.520	0.558	50.00	49.20		LINR	-1.6	25.0
1,1,1-Trichloroethane	0.393	0.377	50.00	48.03		AVRG	-3.9	25.0
1,1,2-Trichloroethane	0.286	0.286	50.00	50.05		AVRG	0.1	25.0
Trichloroethene	0.250	0.246	50.00	49.32		AVRG	-1.4	25.0
Trichlorofluoromethane	0.430	0.422	50.00	49.10		AVRG	-1.8	25.0
Trichlorotrifluoroethane	0.215	0.179	50.00	41.54		AVRG	-16.9	25.0
1,2,3-Trichloropropane	0.178	0.164	50.00	45.98		AVRG	-8.0	25.0
1,2,4-Trimethylbenzene	1.420	1.695	50.00	59.68		AVRG	19.4	25.0
1,3,5-Trimethylbenzene	1.504	1.671	50.00	55.54		AVRG	11.1	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34713
 Instrument ID: VOA3 Calibration Date: 08/15/08 Time: 2001
 Lab File ID: V3ICV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Vinyl acetate	0.266	0.331	100.0	102.8		LINR	2.8	25.0
Vinyl chloride	0.204	0.211	50.00	51.53		AVRG	3.0	25.0
Xylene (total)	1.805	2.058	150.0	160.4		AVRG	14.0	25.0
1-Chlorohexane	0.636	0.542	50.00	54.28		LINR	8.6	25.0
Dibromofluoromethane	0.275	0.269	30.00	29.34		AVRG	-2.2	25.0
1,2-Dichloroethane-d4	0.052	0.051	30.00	29.50		AVRG	-1.6	25.0
Toluene-d8	1.950	1.921	30.00	29.55		AVRG	-1.5	25.0
Bromofluorobenzene	0.975	0.991	30.00	30.49		AVRG	1.6	25.0

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID: V3BFB01 BFB Injection Date: 09/12/08
 Instrument ID: VOA3 BFB Injection Time: 0952
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	55.4
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.5
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	Greater than 50.0% of mass 95	93.0
175	5.0 - 9.0% of mass 174	6.3 (6.8)1
176	95.0 - 101.0% of mass 174	89.9 (96.7)1
177	5.0 - 9.0% of mass 176	6.8 (7.6)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V3STD50PPB	V3STD50PPB	V3CCV01	09/12/08	1021
02	V3BLK0912LCS	V3BLK0912LCS	V3LCS01	09/12/08	1052
03	V3BLK0912	V3BLK0912	V3BLK01	09/12/08	1251
04	01TB090908	0809091-01	0909101	09/12/08	1351
05	01RB090908	0809091-08	0909108	09/12/08	1422
06	01GW2301	0809091-02	0909102	09/12/08	1755
07	01GW2201	0809091-03	0909103	09/12/08	1825
08	01GW2501	0809091-04	0909104	09/12/08	1854
09	01GW2401	0809091-05	0909105	09/12/08	1925
10	01GW2701	0809091-06	0909106	09/12/08	1955
11	01GW2601	0809091-07	0909107	09/12/08	2025
12	01GW2201MS	0809091-03MS	0909103M	09/12/08	2126
13	01GW2201MSD	0809091-03MSD	0909103S	09/12/08	2156
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FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL, LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/12/08 Time: 1021
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.067	0.082	100.0	123.6		LINR	23.6	
Acrolein	0.006	0.014	250.0	519.8		LINR	107.9	
Acrylonitrile	0.048	0.043	250.0	220.4		AVRG	-11.8	
Benzene	0.808	0.774	50.00	47.88		AVRG	-4.2	
Bromobenzene	0.606	0.572	50.00	47.15		AVRG	-5.7	
Bromochloromethane	0.106	0.114	50.00	53.38		AVRG	6.8	
Bromodichloromethane	0.334	0.364	50.00	54.45		AVRG	8.9	
Bromoform	0.338	0.420	50.00	62.09	0.100	AVRG	24.2	
Bromomethane	0.114	0.128	50.00	44.12		LINR	-11.8	
2-Butanone	0.057	0.068	100.0	98.18		LINR	-1.8	
n-Butylbenzene	1.013	1.000	50.00	49.34		AVRG	-1.3	
sec-Butylbenzene	1.620	1.613	50.00	49.78		AVRG	-0.4	
tert-Butylbenzene	1.402	1.418	50.00	50.54		AVRG	1.1	
<u>Carbon disulfide</u>	0.620	0.448	50.00	36.18		AVRG	<u>-27.6</u>	
Carbon tetrachloride	0.372	0.426	50.00	57.30		AVRG	14.6	
Chlorobenzene	1.295	1.278	50.00	49.33	0.300	AVRG	-1.3	
Chloroethane	0.120	0.114	50.00	47.33		AVRG	-5.3	
2-Chloroethyl vinyl ether	0.110	0.083	100.0	64.13		LINR	35.9	
Chloroform	0.407	0.415	50.00	50.90		AVRG	1.8	20.0
Chloromethane	0.203	0.170	50.00	49.09	0.100	LINR	-1.8	
2-Chlorotoluene	1.449	1.299	50.00	44.81		AVRG	-10.4	
4-Chlorotoluene	1.522	1.459	50.00	47.92		AVRG	-4.2	
Cyclohexane	0.273	0.215	50.00	39.37		AVRG	-21.3	
Dibromochloromethane	0.458	0.547	50.00	59.77		AVRG	19.5	
1,2-Dibromo-3-chloropropane	0.104	0.107	50.00	51.36		AVRG	2.7	
1,2-Dibromoethane	0.403	0.421	50.00	52.20		AVRG	4.4	
Dibromomethane	0.148	0.145	50.00	48.93		AVRG	-2.1	
1,2-Dichlorobenzene	1.032	0.996	50.00	48.23		AVRG	-3.5	
1,3-Dichlorobenzene	1.067	1.034	50.00	48.49		AVRG	-3.0	
1,4-Dichlorobenzene	1.158	1.095	50.00	47.28		AVRG	-5.4	
Dichlorodifluoromethane	0.260	0.313	50.00	60.18		AVRG	20.4	
1,1-Dichloroethane	0.294	0.325	50.00	49.23	0.100	LINR	-1.5	
1,2-Dichloroethane	0.356	0.363	50.00	51.03		AVRG	2.0	
1,1-Dichloroethene	0.147	0.156	50.00	53.03		AVRG	6.1	20.0
cis-1,2-Dichloroethene	0.200	0.193	50.00	48.26		AVRG	-3.5	
1,2-Dichloroethene (total)	0.176	0.183	100.0	104.0		AVRG	4.0	
trans-1,2-Dichloroethene	0.164	0.173	50.00	52.75		AVRG	5.5	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/12/08 Time: 1021
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloropropane	0.204	0.184	50.00	45.25		AVRG	-9.5	20.0
1,3-Dichloropropane	0.630	0.620	50.00	49.23		AVRG	-1.5	
2,2-Dichloropropane	0.309	0.363	50.00	58.66		AVRG	17.3	
1,1-Dichloropropene	0.282	0.300	50.00	53.15		AVRG	6.3	
cis-1,3-Dichloropropene	0.347	0.372	50.00	53.62		AVRG	7.2	
trans-1,3-Dichloropropene	0.540	0.626	50.00	57.89		AVRG	15.8	
Ethylbenzene	2.093	2.225	50.00	53.14		AVRG	6.3	20.0
Ethyl methacrylate	0.530	0.470	50.00	38.89		LINR	-22.2	
Hexachlorobutadiene	0.294	0.263	50.00	46.58		LINR	-6.8	
2-Hexanone	0.187	0.209	100.0	99.78		LINR	-0.2	
Iodomethane	0.286	0.301	50.00	41.82		LINR	-16.4	
Isopropylbenzene	1.848	2.064	50.00	55.85		AVRG	11.7	
p-Isopropyltoluene	1.230	1.224	50.00	49.77		AVRG	-0.4	
Methyl acetate	0.122	0.097	50.00	38.51		LINR	-23.0	
Methyl cyclohexane	0.352	0.285	50.00	40.46		AVRG	-19.1	
Methylene chloride	0.243	0.194	50.00	49.35		LINR	-1.3	
Methyl methacrylate	0.180	0.145	50.00	40.38		AVRG	-19.2	
MTBE	0.586	0.542	50.00	41.34		LINR	-17.3	
4-Methyl-2-pentanone	0.141	0.144	100.0	90.60		LINR	-9.4	
Naphthalene	0.734	0.654	50.00	38.37		LINR	-23.3	
n-Propylbenzene	2.050	2.002	50.00	48.83		AVRG	-2.3	
Styrene	1.289	1.472	50.00	57.08		AVRG	14.2	
1,1,1,2-Tetrachloroethane	0.473	0.525	50.00	55.50		AVRG	11.0	
1,1,2,2-Tetrachloroethane	0.425	0.345	50.00	40.54	0.300	AVRG	-18.9	
Tetrachloroethene	0.527	0.568	50.00	53.92		AVRG	7.8	
Tetrahydrofuran	0.044	0.030	50.00	34.23		AVRG	-31.5	
Toluene	1.041	0.988	50.00	47.43		AVRG	-5.1	20.0
1,2,3-Trichlorobenzene	0.419	0.423	50.00	43.28		LINR	-13.4	
1,2,4-Trichlorobenzene	0.520	0.494	50.00	43.61		LINR	-12.8	
1,1,1-Trichloroethane	0.393	0.441	50.00	56.12		AVRG	12.2	
1,1,2-Trichloroethane	0.286	0.287	50.00	50.08		AVRG	0.2	
Trichloroethene	0.250	0.254	50.00	50.93		AVRG	1.8	
Trichlorofluoromethane	0.430	0.490	50.00	56.96		AVRG	13.9	
Trichlorotrifluoroethane	0.215	0.176	50.00	41.05		AVRG	-17.9	
1,2,3-Trichloropropane	0.178	0.180	50.00	50.45		AVRG	0.9	
1,2,4-Trimethylbenzene	1.420	1.538	50.00	54.14		AVRG	8.3	
1,3,5-Trimethylbenzene	1.504	1.558	50.00	51.80		AVRG	3.6	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/12/08 Time: 1021
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Vinyl acetate	0.266	0.294	100.0	91.30		LINR	-8.7	
Vinyl chloride	0.204	0.209	50.00	51.05		AVRG	2.1	20.0
Xylene(total)	1.805	1.984	150.0	158.0		AVRG	9.9	
1-Chlorohexane	0.636	0.543	50.00	54.42		LINR	8.8	
Dibromofluoromethane	0.275	0.291	30.00	31.67		AVRG	5.6	
1,2-Dichloroethane-d4	0.052	0.050	30.00	29.23		AVRG	-2.6	
Toluene-d8	1.950	1.926	30.00	29.64		AVRG	-1.2	
Bromofluorobenzene	0.975	1.020	30.00	31.40		AVRG	4.7	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/15/08 Time: 0953
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.067	0.073	100.0	109.7		LINR	9.7	
Acrolein	0.006	0.014	250.0	503.3		LINR	101.3	
Acrylonitrile	0.048	0.042	250.0	217.0		AVRG	-13.2	
Benzene	0.808	0.791	50.00	48.94		AVRG	-2.1	
Bromobenzene	0.606	0.582	50.00	48.02		AVRG	-4.0	
Bromochloromethane	0.106	0.117	50.00	54.82		AVRG	9.6	
Bromodichloromethane	0.334	0.377	50.00	56.43		AVRG	12.9	
<u>Bromoform</u>	0.338	0.424	50.00	62.59	0.100	AVRG	<u>25.2</u>	
Bromomethane	0.114	0.131	50.00	45.15		LINR	-9.7	
2-Butanone	0.057	0.064	100.0	91.12		LINR	-8.9	
n-Butylbenzene	1.013	1.085	50.00	53.54		AVRG	7.1	
sec-Butylbenzene	1.620	1.646	50.00	50.81		AVRG	1.6	
tert-Butylbenzene	1.402	1.483	50.00	52.87		AVRG	5.7	
<u>Carbon disulfide</u>	0.620	0.454	50.00	36.64		AVRG	<u>-26.7</u>	
Carbon tetrachloride	0.372	0.441	50.00	59.24		AVRG	18.5	
Chlorobenzene	1.295	1.286	50.00	49.64	0.300	AVRG	-0.7	
Chloroethane	0.120	0.114	50.00	47.47		AVRG	-5.0	
2-Chloroethyl vinyl ether	0.110	0.071	100.0	54.71		LINR	45.3	
Chloroform	0.407	0.420	50.00	51.63		AVRG	3.3	20.0
Chloromethane	0.203	0.167	50.00	48.19	0.100	LINR	-3.6	
2-Chlorotoluene	1.449	1.315	50.00	45.35		AVRG	-9.3	
4-Chlorotoluene	1.522	1.496	50.00	49.13		AVRG	-1.7	
Cyclohexane	0.273	0.216	50.00	39.45		AVRG	-21.1	
Dibromochloromethane	0.458	0.560	50.00	61.14		AVRG	22.3	
1,2-Dibromo-3-chloropropane	0.104	0.102	50.00	49.09		AVRG	-1.8	
1,2-Dibromoethane	0.403	0.420	50.00	52.12		AVRG	4.2	
Dibromomethane	0.148	0.149	50.00	50.23		AVRG	0.5	
1,2-Dichlorobenzene	1.032	1.002	50.00	48.53		AVRG	-2.9	
1,3-Dichlorobenzene	1.067	1.062	50.00	49.80		AVRG	-0.4	
1,4-Dichlorobenzene	1.158	1.118	50.00	48.24		AVRG	-3.5	
Dichlorodifluoromethane	0.260	0.299	50.00	57.42		AVRG	14.8	
1,1-Dichloroethane	0.294	0.334	50.00	50.66	0.100	LINR	1.3	
1,2-Dichloroethane	0.356	0.375	50.00	52.74		AVRG	5.5	
1,1-Dichloroethene	0.147	0.156	50.00	53.11		AVRG	6.2	20.0
cis-1,2-Dichloroethene	0.200	0.196	50.00	48.99		AVRG	-2.0	
1,2-Dichloroethene (total)	0.176	0.186	100.0	105.3		AVRG	5.3	
trans-1,2-Dichloroethene	0.164	0.175	50.00	53.32		AVRG	6.6	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/15/08 Time: 0953
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloropropane	0.204	0.185	50.00	45.32		AVRG	-9.4	20.0
1,3-Dichloropropane	0.630	0.615	50.00	48.85		AVRG	-2.3	
2,2-Dichloropropane	0.309	0.371	50.00	59.90		AVRG	19.8	
1,1-Dichloropropene	0.282	0.310	50.00	54.85		AVRG	9.7	
cis-1,3-Dichloropropene	0.347	0.380	50.00	54.79		AVRG	9.6	
trans-1,3-Dichloropropene	0.540	0.637	50.00	58.96		AVRG	17.9	
Ethylbenzene	2.093	2.270	50.00	54.24		AVRG	8.5	20.0
Ethyl methacrylate	0.530	0.458	50.00	37.92		LINR	-24.2	
Hexachlorobutadiene	0.294	0.278	50.00	49.25		LINR	-1.5	
2-Hexanone	0.187	0.194	100.0	92.64		LINR	-7.4	
Iodomethane	0.286	0.322	50.00	44.68		LINR	-10.6	
Isopropylbenzene	1.848	2.116	50.00	57.28		AVRG	14.6	
p-Isopropyltoluene	1.230	1.270	50.00	51.62		AVRG	3.2	
Methyl acetate	0.122	0.093	50.00	36.76		LINR	-26.5	
Methyl cyclohexane	0.352	0.287	50.00	40.78		AVRG	-18.4	
Methylene chloride	0.243	0.188	50.00	47.73		LINR	-4.5	
Methyl methacrylate	0.180	0.139	50.00	38.71		AVRG	-22.6	
MTBE	0.586	0.540	50.00	41.25		LINR	-17.5	
4-Methyl-2-pentanone	0.141	0.132	100.0	83.35		LINR	-16.6	
Naphthalene	0.734	0.666	50.00	39.08		LINR	-21.8	
n-Propylbenzene	2.050	2.021	50.00	49.28		AVRG	-1.4	
Styrene	1.289	1.471	50.00	57.05		AVRG	14.1	
1,1,1,2-Tetrachloroethane	0.473	0.543	50.00	57.34		AVRG	14.7	
1,1,2,2-Tetrachloroethane	0.425	0.334	50.00	39.28	0.300	AVRG	-21.4	
Tetrachloroethene	0.527	0.575	50.00	54.59		AVRG	9.2	
Tetrahydrofuran	0.044	0.026	50.00	29.68		AVRG	-40.6	
Toluene	1.041	0.999	50.00	47.99		AVRG	-4.0	20.0
1,2,3-Trichlorobenzene	0.419	0.438	50.00	44.82		LINR	-10.4	
1,2,4-Trichlorobenzene	0.520	0.524	50.00	46.26		LINR	-7.5	
1,1,1-Trichloroethane	0.393	0.457	50.00	58.17		AVRG	16.3	
1,1,2-Trichloroethane	0.286	0.285	50.00	49.79		AVRG	-0.4	
Trichloroethene	0.250	0.256	50.00	51.18		AVRG	2.4	
Trichlorofluoromethane	0.430	0.492	50.00	57.29		AVRG	14.6	
Trichlorotrifluoroethane	0.215	0.179	50.00	41.69		AVRG	-16.6	
1,2,3-Trichloropropane	0.178	0.175	50.00	49.06		AVRG	-1.9	
1,2,4-Trimethylbenzene	1.420	1.593	50.00	56.09		AVRG	12.2	
1,3,5-Trimethylbenzene	1.504	1.594	50.00	52.98		AVRG	6.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/15/08 Time: 0953
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Vinyl acetate	0.266	0.293	100.0	90.84		LINR	-9.2	
Vinyl chloride	0.204	0.200	50.00	48.85		AVRG	-2.3	20.0
Xylene(total)	1.805	2.002	150.0	160.3		AVRG	10.9	
1-Chlorohexane	0.636	0.542	50.00	54.29		LINR	8.6	
Dibromofluoromethane	0.275	0.291	30.00	31.65		AVRG	5.5	
1,2-Dichloroethane-d4	0.052	0.050	30.00	29.09		AVRG	-3.0	
Toluene-d8	1.950	1.915	30.00	29.46		AVRG	-1.8	
Bromofluorobenzene	0.975	1.031	30.00	31.72		AVRG	5.8	

FORM 2
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Level: (low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	V1BLK0915LCS	106	104	99	94	0
02	V1BLK0915	100	92	105	95	0
03	01SS0701	105	98	102	92	0
04	01SS0801	99	100	102	94	0
05	01SS0901	105	107	100	89	0
06	01SS1001	102	101	102	95	0
07	01SS1101	104	101	100	92	0
08	01SS1201	103	110	102	95	0
09	01SS0701MS	109	106	95	94	0
10	01SS0701MSD	105	110	97	96	0
11						
12						
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27						
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29						
30						

	EL QC LIMITS	SPIKE CONC (ug/Kg)
SMC1 (DFM) = Dibromofluoromethane	(80-125)	30
SMC2 (DCE) = 1,2-Dichloroethane-d4	(75-140)	30
SMC3 (TOL) = Toluene-d8	(80-120)	30
SMC4 (BFB) = Bromofluorobenzene	(80-125)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	V3BLK0912LCS	108	102	97	103	0
02	V3BLK0912	109	106	101	102	0
03	01TB090908	111	110	102	99	0
04	01RB090908	114	105	102	101	0
05	01GW2301	113	106	100	97	0
06	01GW2201	114	104	102	98	0
07	01GW2501	116	105	99	98	0
08	01GW2401	115	106	99	98	0
09	01GW2701	118	109	100	99	0
10	01GW2601	114	111	100	99	0
11	01GW2201MS	110	101	96	102	0
12	01GW2201MSD	110	102	96	102	0
13	V3BLK0915LCS	102	96	98	103	0
14	V3BLK0915	112	108	102	103	0
15	01TB091108	112	105	101	102	0
16	01RB091108	112	103	101	97	0
17	V3BLK0915LCS	109	100	96	102	0
18						
19						
20						
21						
22						
23						
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25						
26						
27						
28						
29						
30						

	EL	SPIKE
	QC LIMITS	CONC (ug/L)
SMC1 (DFM) = Dibromofluoromethane	(85-120)	30
SMC2 (DCE) = 1,2-Dichloroethane-d4	(80-135)	30
SMC3 (TOL) = Toluene-d8	(85-115)	30
SMC4 (BFB) = Bromofluorobenzene	(85-120)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V1BLK0915 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	106.7	107	20-160
Benzene	50.00	0.0000	42.67	85	75-125
Bromochloromethane	50.00	0.0000	44.96	90	70-125
Bromodichloromethane	50.00	0.0000	44.53	89	70-130
Bromoform	50.00	0.0000	46.41	93	55-135
Bromomethane	50.00	0.0000	50.86	102	30-160
2-Butanone	100.0	0.0000	101.5	102	30-160
Carbon disulfide	50.00	0.0000	48.66	97	45-160
Carbon tetrachloride	50.00	0.0000	44.50	89	65-135
Chlorobenzene	50.00	0.0000	39.89	80	75-125
Chloroethane	50.00	0.0000	42.62	85	40-155
Chloroform	50.00	0.0000	45.99	92	70-125
Chloromethane	50.00	0.0000	36.31	73	50-130
Cyclohexane	50.00	0.0000	49.99	100	65-140
Dibromochloromethane	50.00	0.0000	38.98	78	65-130
1,2-Dibromoethane	50.00	0.0000	39.58	79	70-125
1,1-Dichloroethane	50.00	0.0000	45.35	91	75-125
1,2-Dichloroethane	50.00	0.0000	43.98	88	70-125
1,1-Dichloroethene	50.00	0.0000	43.44	87	65-135
cis-1,2-Dichloroethene	50.00	0.0000	41.91	84	65-125
trans-1,2-Dichloroethen	50.00	0.0000	40.32	81	65-135
1,2-Dichloropropane	50.00	0.0000	44.94	90	70-120
cis-1,3-Dichloropropene	50.00	0.0000	42.87	86	70-125
trans-1,3-Dichloroprope	50.00	0.0000	43.81	88	65-125
Ethylbenzene	50.00	0.0000	40.34	81	75-125
2-Hexanone	100.0	0.0000	100.8	101	45-145
Isopropylbenzene	50.00	0.0000	42.60	85	75-130
Methyl acetate	50.00	0.0000	53.18	106	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: V1BLK0915 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Methyl cyclohexane	50.00	0.0000	44.85	90	65-135
Methylene chloride	50.00	1.015	38.10	74	55-140
4-Methyl-2-pentanone	100.0	0.0000	106.9	107	45-145
Methyl tert-butyl ether	50.00	0.0000	43.87	88	55-150
Styrene	50.00	0.0000	39.00	78	75-125
1,1,2,2-Tetrachloroetha	50.00	0.0000	57.74	115	55-130
Tetrachloroethene	50.00	0.0000	39.31	79	65-140
Toluene	50.00	0.0000	45.72	91	70-125
1,2,3-Trichlorobenzene	50.00	0.0000	35.66	71	60-135
1,2,4-Trichlorobenzene	50.00	0.0000	34.22	68	65-130
1,1,1-Trichloroethane	50.00	0.0000	43.58	87	70-135
1,1,2-Trichloroethane	50.00	0.0000	44.02	88	60-125
Trichloroethene	50.00	0.0000	43.99	88	75-125
Trichlorotrifluoroethan	50.00	0.0000	51.30	103	60-140
Vinyl chloride	50.00	0.0000	40.78	82	60-125
Xylene (total)	150.0	0.0000	128.1	85	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 44 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0912

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	118.8	119	40-140
Benzene	50.00	0.0000	48.26	96	80-120
Bromochloromethane	50.00	0.0000	52.74	105	65-130
Bromodichloromethane	50.00	0.0000	54.03	108	75-120
Bromoform	50.00	0.0000	57.62	115	70-130
Bromomethane	50.00	0.0000	44.82	90	30-145
2-Butanone	100.0	0.0000	99.03	99	30-150
Carbon disulfide	50.00	0.0000	43.42	87	35-160
Carbon tetrachloride	50.00	0.0000	56.73	113	65-140
Chlorobenzene	50.00	0.0000	48.65	97	80-120
Chloroethane	50.00	0.0000	48.73	97	60-135
Chloroform	50.00	0.0000	50.30	101	65-135
Chloromethane	50.00	0.0000	51.82	104	40-125
Cyclohexane	50.00	0.0000	43.05	86	60-130
Dibromochloromethane	50.00	0.0000	57.47	115	60-135
1,2-Dibromo-3-chloropro	50.00	0.0000	52.02	104	50-130
1,2-Dibromoethane	50.00	0.0000	48.49	97	80-120
1,2-Dichlorobenzene	50.00	0.0000	48.25	96	70-120
1,3-Dichlorobenzene	50.00	0.0000	47.81	96	75-125
1,4-Dichlorobenzene	50.00	0.0000	48.77	98	75-125
Dichlorodifluoromethane	50.00	0.0000	54.11	108	30-155
1,1-Dichloroethane	50.00	0.0000	49.20	98	70-135
1,2-Dichloroethane	50.00	0.0000	50.01	100	70-130
1,1-Dichloroethene	50.00	0.0000	54.21	108	70-130
cis-1,2-Dichloroethene	50.00	0.0000	47.13	94	70-125
1,2-Dichloropropane	50.00	0.0000	44.45	89	75-125
cis-1,3-Dichloropropene	50.00	0.0000	55.32	111	70-130
trans-1,3-Dichloroprope	50.00	0.0000	60.68	121	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0912

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Ethylbenzene	50.00	0.0000	53.85	108	75-125
2-Hexanone	100.0	0.0000	99.31	99	55-130
Isopropylbenzene	50.00	0.0000	59.06	118	75-125
Methyl acetate	50.00	0.0000	40.47	81	55-150
Methyl cyclohexane	50.00	0.0000	42.84	86	60-125
Methylene chloride	50.00	0.3056	46.49	92	55-140
Methyl tert-butyl ether	50.00	0.0000	41.27	82	65-125
4-Methyl-2-pentanone	100.0	0.0000	93.96	94	60-135
Styrene	50.00	0.0000	57.02	114	65-135
1,1,2,2-Tetrachloroetha	50.00	0.0000	41.42	83	65-130
Tetrachloroethene	50.00	0.0000	50.44	101	45-150
Toluene	50.00	0.0000	47.10	94	75-120
1,2,3-Trichlorobenzene	50.00	0.0000	40.30	81	55-140
1,2,4-Trichlorobenzene	50.00	0.0000	39.38	79	65-135
1,1,1-Trichloroethane	50.00	0.0000	54.30	109	65-130
1,1,2-Trichloroethane	50.00	0.0000	47.24	94	75-125
Trichloroethene	50.00	0.0000	48.86	98	70-125
Trichlorotrifluoroethan	50.00	0.0000	46.24	92	60-130
Trichlorofluoromethane	50.00	0.0000	55.63	111	60-145
Vinyl chloride	50.00	0.0000	49.74	99	50-145
Xylene (total)	150.0	0.0000	158.1	105	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 49 outside limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0915

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	109.9	110	40-140
Benzene	50.00	0.0000	46.29	92	80-120
Bromochloromethane	50.00	0.0000	52.69	105	65-130
Bromodichloromethane	50.00	0.0000	54.28	108	75-120
Bromoform	50.00	0.0000	58.04	116	70-130
Bromomethane	50.00	0.0000	43.43	87	30-145
2-Butanone	100.0	0.0000	93.21	93	30-150
Carbon disulfide	50.00	0.0000	42.43	85	35-160
Carbon tetrachloride	50.00	0.0000	56.16	112	65-140
Chlorobenzene	50.00	0.0000	48.00	96	80-120
Chloroethane	50.00	0.0000	47.03	94	60-135
Chloroform	50.00	0.0000	48.46	97	65-135
Chloromethane	50.00	0.0000	48.26	96	40-125
Cyclohexane	50.00	0.0000	42.12	84	60-130
Dibromochloromethane	50.00	0.0000	58.40	117	60-135
1,2-Dibromoethane	50.00	0.0000	48.40	97	80-120
1,1-Dichloroethane	50.00	0.0000	47.48	95	70-135
1,2-Dichloroethane	50.00	0.0000	49.19	98	70-130
1,1-Dichloroethene	50.00	0.0000	52.19	104	70-130
cis-1,2-Dichloroethene	50.00	0.0000	46.67	93	70-125
trans-1,2-Dichloroethene	50.00	0.0000	51.24	102	60-140
1,2-Dichloropropane	50.00	0.0000	42.96	86	75-125
cis-1,3-Dichloropropene	50.00	0.0000	53.87	108	70-130
trans-1,3-Dichloroprope	50.00	0.0000	61.39	123	55-140
Ethylbenzene	50.00	0.0000	52.36	105	75-125
2-Hexanone	100.0	0.0000	91.49	91	55-130
Isopropylbenzene	50.00	0.0000	57.90	116	75-125
Methyl acetate	50.00	0.0000	37.92	76	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0915

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Methyl cyclohexane	50.00	0.0000	42.44	85	60-125
Methylene chloride	50.00	0.3515	45.23	90	55-140
4-Methyl-2-pentanone	100.0	0.0000	86.07	86	60-135
Methyl tert-butyl ether	50.00	0.0000	40.04	80	65-125
Styrene	50.00	0.0000	56.19	112	65-135
1,1,2,2-Tetrachloroetha	50.00	0.0000	40.25	80	65-130
Tetrachloroethene	50.00	0.0000	51.70	103	45-150
Toluene	50.00	0.0000	47.20	94	75-120
1,2,3-Trichlorobenzene	50.00	0.0000	40.23	80	55-140
1,2,4-Trichlorobenzene	50.00	0.0000	40.18	80	65-135
1,1,1-Trichloroethane	50.00	0.0000	53.27	106	65-130
1,1,2-Trichloroethane	50.00	0.0000	45.90	92	75-125
Trichloroethene	50.00	0.0000	48.36	97	70-125
Trichlorotrifluoroethan	50.00	0.0000	44.60	89	60-130
Vinyl chloride	50.00	0.0000	47.30	95	50-145
Xylene (total)	150.0	0.0000	155.9	104	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0915

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	104.7	105	5	30	40-140
Benzene	50.00	47.38	95	2	30	80-120
Bromochloromethane	50.00	53.49	107	2	30	65-130
Bromodichloromethane	50.00	54.97	110	1	30	75-120
Bromoform	50.00	55.46	111	4	30	70-130
<u>Bromomethane</u>	50.00	27.71	55	44*	30	30-145
2-Butanone	100.0	86.75	87	7	30	30-150
Carbon disulfide	50.00	43.99	88	4	30	35-160
Carbon tetrachloride	50.00	57.84	116	3	30	65-140
Chlorobenzene	50.00	46.77	94	2	30	80-120
Chloroethane	50.00	48.17	96	2	30	60-135
Chloroform	50.00	51.76	104	6	30	65-135
Chloromethane	50.00	47.44	95	2	30	40-125
Cyclohexane	50.00	43.13	86	2	30	60-130
Dibromochloromethane	50.00	56.07	112	4	30	60-135
1,2-Dibromoethane	50.00	47.25	94	2	30	80-120
1,1-Dichloroethane	50.00	50.40	101	6	30	70-135
1,2-Dichloroethane	50.00	51.98	104	6	30	70-130
1,1-Dichloroethene	50.00	53.24	106	2	30	70-130
cis-1,2-Dichloroethene	50.00	47.82	96	2	30	70-125
trans-1,2-Dichloroethene	50.00	52.77	106	3	30	60-140
1,2-Dichloropropane	50.00	43.35	87	1	30	75-125
cis-1,3-Dichloropropene	50.00	53.90	108	0	30	70-130
trans-1,3-Dichloroprope	50.00	58.98	118	4	30	55-140
Ethylbenzene	50.00	52.08	104	0	30	75-125
2-Hexanone	100.0	90.53	90	1	30	55-130
Isopropylbenzene	50.00	57.93	116	0	30	75-125
Methyl acetate	50.00	40.98	82	8	30	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: V3BLK0915

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Methyl cyclohexane	50.00	44.00	88	4	30	60-125
Methylene chloride	50.00	45.70	91	1	30	55-140
4-Methyl-2-pentanone	100.0	89.68	90	4	30	60-135
Methyl tert-butyl ether	50.00	40.20	80	0	30	65-125
Styrene	50.00	55.87	112	0	30	65-135
1,1,2,2-Tetrachloroetha	50.00	38.39	77	5	30	65-130
Tetrachloroethene	50.00	50.52	101	2	30	45-150
Toluene	50.00	46.71	93	1	30	75-120
1,2,3-Trichlorobenzene	50.00	42.64	85	6	30	55-140
1,2,4-Trichlorobenzene	50.00	43.59	87	8	30	65-135
1,1,1-Trichloroethane	50.00	54.76	110	3	30	65-130
1,1,2-Trichloroethane	50.00	44.60	89	3	30	75-125
Trichloroethene	50.00	50.30	101	4	30	70-125
Trichlorotrifluoroethan	50.00	47.83	96	7	30	60-130
Vinyl chloride	50.00	48.13	96	2	30	50-145
Xylene(total)	150.0	156.4	104	0	30	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 44 outside limits

Spike Recovery: 0 out of 88 outside limits

COMMENTS: _____

FORM 3
 WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	86.60	87	40-140
Benzene	50.00	0.0000	47.85	96	80-120
Bromochloromethane	50.00	0.0000	53.90	108	65-130
Bromodichloromethane	50.00	0.0000	55.32	111	75-120
Bromoform	50.00	0.0000	57.74	115	70-130
Bromomethane	50.00	0.0000	29.47	59	30-145
2-Butanone	100.0	0.0000	91.72	92	30-150
Carbon disulfide	50.00	0.0000	44.61	89	35-160
Carbon tetrachloride	50.00	0.0000	58.53	117	65-140
Chlorobenzene	50.00	0.0000	47.67	95	80-120
Chloroethane	50.00	0.0000	50.04	100	60-135
Chloroform	50.00	0.0000	52.81	106	65-135
Chloromethane	50.00	0.0000	52.34	105	40-125
Cyclohexane	50.00	0.0000	42.08	84	60-130
Dibromochloromethane	50.00	0.0000	57.26	114	60-135
1,2-Dibromo-3-chloropro	50.00	0.0000	54.12	108	50-130
1,2-Dibromoethane	50.00	0.0000	47.77	96	80-120
1,2-Dichlorobenzene	50.00	0.0000	46.78	94	70-120
1,3-Dichlorobenzene	50.00	0.0000	46.22	92	75-125
1,4-Dichlorobenzene	50.00	0.0000	50.12	100	75-125
Dichlorodifluoromethane	50.00	0.0000	56.67	113	30-155
1,1-Dichloroethane	50.00	0.0000	50.50	101	70-135
1,2-Dichloroethane	50.00	0.0000	54.40	109	70-130
1,1-Dichloroethene	50.00	0.0000	55.06	110	70-130
cis-1,2-Dichloroethene	50.00	0.0000	47.61	95	70-125
1,2-Dichloropropane	50.00	0.0000	44.01	88	75-125
cis-1,3-Dichloropropene	50.00	0.0000	52.68	105	70-130
trans-1,3-Dichloroprope	50.00	0.0000	58.14	116	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Ethylbenzene	50.00	0.0000	51.80	104	75-125
2-Hexanone	100.0	0.0000	94.89	95	55-130
Isopropylbenzene	50.00	0.0000	57.92	116	75-125
Methyl acetate	50.00	0.0000	37.16	74	55-150
Methyl cyclohexane	50.00	0.0000	41.40	83	60-125
Methylene chloride	50.00	0.0000	51.07	102	55-140
Methyl tert-butyl ether	50.00	0.0000	43.07	86	65-125
4-Methyl-2-pentanone	100.0	0.0000	103.2	103	60-135
Styrene	50.00	0.0000	55.05	110	65-135
1,1,2,2-Tetrachloroetha	50.00	0.0000	42.46	85	65-130
Tetrachloroethene	50.00	0.0000	50.20	100	45-150
Toluene	50.00	0.0000	46.59	93	75-120
1,2,3-Trichlorobenzene	50.00	0.0000	36.93	74	55-140
1,2,4-Trichlorobenzene	50.00	0.0000	35.23	70	65-135
1,1,1-Trichloroethane	50.00	0.0000	55.74	111	65-130
1,1,2-Trichloroethane	50.00	0.0000	46.32	93	75-125
Trichloroethene	50.00	0.0000	51.01	102	70-125
Trichlorotrifluoroethan	50.00	0.0000	46.37	93	60-130
Trichlorofluoromethane	50.00	0.0000	60.11	120	60-145
Vinyl chloride	50.00	0.0000	51.42	103	50-145
Xylene(total)	150.0	0.0000	157.6	105	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	85.93	86	1	30	40-140
Benzene	50.00	49.32	99	3	30	80-120
Bromochloromethane	50.00	55.24	110	2	30	65-130
Bromodichloromethane	50.00	56.21	112	2	30	75-120
Bromoform	50.00	58.05	116	0	30	70-130
<u>Bromomethane</u>	50.00	40.88	82	32*	30	30-145
2-Butanone	100.0	90.86	91	1	30	30-150
Carbon disulfide	50.00	46.42	93	4	30	35-160
Carbon tetrachloride	50.00	59.62	119	2	30	65-140
Chlorobenzene	50.00	47.81	96	0	30	80-120
Chloroethane	50.00	51.30	103	2	30	60-135
Chloroform	50.00	52.40	105	1	30	65-135
Chloromethane	50.00	53.66	107	2	30	40-125
Cyclohexane	50.00	44.82	90	6	30	60-130
Dibromochloromethane	50.00	58.44	117	2	30	60-135
1,2-Dibromo-3-chloropro	50.00	53.60	107	1	30	50-130
1,2-Dibromoethane	50.00	49.75	100	4	30	80-120
1,2-Dichlorobenzene	50.00	47.06	94	0	30	70-120
1,3-Dichlorobenzene	50.00	46.31	93	0	30	75-125
1,4-Dichlorobenzene	50.00	50.24	100	0	30	75-125
Dichlorodifluoromethane	50.00	59.17	118	4	30	30-155
1,1-Dichloroethane	50.00	52.25	104	3	30	70-135
1,2-Dichloroethane	50.00	52.95	106	3	30	70-130
1,1-Dichloroethene	50.00	57.54	115	4	30	70-130
cis-1,2-Dichloroethene	50.00	48.70	97	2	30	70-125
1,2-Dichloropropane	50.00	44.52	89	1	30	75-125
cis-1,3-Dichloropropene	50.00	52.90	106	0	30	70-130
trans-1,3-Dichloroprope	50.00	59.11	118	2	30	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Ethylbenzene	50.00	52.83	106	2	30	75-125
2-Hexanone	100.0	94.30	94	1	30	55-130
Isopropylbenzene	50.00	58.64	117	1	30	75-125
Methyl acetate	50.00	36.40	73	2	30	55-150
Methyl cyclohexane	50.00	42.82	86	3	30	60-125
Methylene chloride	50.00	51.12	102	0	30	55-140
Methyl tert-butyl ether	50.00	43.02	86	0	30	65-125
4-Methyl-2-pentanone	100.0	102.7	103	0	30	60-135
Styrene	50.00	56.43	113	2	30	65-135
1,1,2,2-Tetrachloroetha	50.00	43.28	86	2	30	65-130
Tetrachloroethene	50.00	51.82	104	3	30	45-150
Toluene	50.00	47.63	95	2	30	75-120
1,2,3-Trichlorobenzene	50.00	41.54	83	12	30	55-140
1,2,4-Trichlorobenzene	50.00	39.74	79	12	30	65-135
1,1,1-Trichloroethane	50.00	57.18	114	2	30	65-130
1,1,2-Trichloroethane	50.00	45.92	92	1	30	75-125
Trichloroethene	50.00	51.54	103	1	30	70-125
Trichlorotrifluoroethan	50.00	47.97	96	3	30	60-130
Trichlorofluoromethane	50.00	61.12	122	2	30	60-145
Vinyl chloride	50.00	54.88	110	6	30	50-145
Xylene (total)	150.0	158.4	106	0	30	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 49 outside limits

Spike Recovery: 0 out of 98 outside limits

COMMENTS: _____

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Acetone	103.7	5.039	61.73	55	20-160
Benzene ✓	51.83	0.0000	34.66	67*	75-125
Bromochloromethane ✓	51.83	0.0000	34.17	66*	70-125
Bromodichloromethane ✓	51.83	0.0000	35.69	69*	70-130
Bromoform	51.83	0.0000	31.98	62	55-135
Bromomethane	51.83	0.0000	39.15	76	30-160
2-Butanone	103.7	0.0000	59.67	58	30-160
Carbon disulfide	51.83	0.0000	38.22	74	45-160
Carbon tetrachloride	51.83	0.0000	34.94	67	65-135
Chlorobenzene ✓	51.83	0.0000	28.11	54*	75-125
Chloroethane	51.83	0.0000	38.51	74	40-155
Chloroform	51.83	0.0000	39.72	77	70-125
Chloromethane	51.83	0.0000	37.64	73	50-130
Cyclohexane	51.83	0.0000	38.20	74	65-140
Dibromochloromethane ✓	51.83	0.0000	27.47	53*	65-130
1,2-Dibromoethane ✓	51.83	0.0000	28.25	54*	70-125
1,1-Dichloroethane	51.83	0.0000	39.69	76	75-125
1,2-Dichloroethane	51.83	0.0000	36.88	71	70-125
1,1-Dichloroethene	51.83	0.0000	33.69	65	65-135
cis-1,2-Dichloroethene ✓	51.83	0.0000	32.80	63*	65-125
trans-1,2-Dichloroethene ✓	51.83	0.0000	31.34	60*	65-135
1,2-Dichloropropane	51.83	0.0000	35.85	69*	70-120
cis-1,3-Dichloropropene ✓	51.83	0.0000	32.44	62*	70-125
trans-1,3-Dichloropropene ✓	51.83	0.0000	30.03	58*	65-125
Ethylbenzene ✓	51.83	0.0000	29.79	57*	75-125
2-Hexanone	103.7	0.0000	60.15	58	45-145
Isopropylbenzene ✓	51.83	0.0000	30.46	59*	75-130
Methyl acetate	51.83	0.0000	52.58	101	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Methyl cyclohexane ✓	51.83	0.0000	30.40	59*	65-135
Methylene chloride	51.83	1.638	31.90	58	55-140
4-Methyl-2-pentanone	103.7	0.0000	84.73	82	45-145
Methyl tert-butyl ether	51.83	0.0000	32.95	64	55-150
Styrene ✓	51.83	0.0000	26.46	51*	75-125
1,1,2,2-Tetrachloroethane	51.83	0.0000	43.40	84	55-130
Tetrachloroethene ✓	51.83	0.0000	27.28	53*	65-140
Toluene	51.83	0.0000	34.02	66*	70-125
1,2,3-Trichlorobenzene ✓	51.83	0.0000	17.78	34*	60-135
1,2,4-Trichlorobenzene ✓	51.83	0.0000	16.40	32*	65-130
1,1,1-Trichloroethane	51.83	0.0000	36.02	69*	70-135
1,1,2-Trichloroethane	51.83	0.0000	32.13	62	60-125
Trichloroethene ✓	51.83	0.0000	34.98	67*	75-125
Trichlorotrifluoroethane	51.83	0.0000	39.51	76	60-140
Vinyl chloride	51.83	0.0000	38.09	73	60-125
Xylene (total) ✓	155.5	0.0000	93.00	60*	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	99.90	55.54	50	10	30	20-160
Benzene	49.95	33.70	67*	3	30	75-125
Bromochloromethane	49.95	34.61	69*	1	30	70-125
Bromodichloromethane	49.95	35.76	72	0	30	70-130
Bromoform	49.95	32.41	65	1	30	55-135
Bromomethane	49.95	38.26	76	2	30	30-160
2-Butanone	99.90	60.00	60	0	30	30-160
Carbon disulfide	49.95	37.21	74	3	30	45-160
Carbon tetrachloride	49.95	34.95	70	0	30	65-135
Chlorobenzene	49.95	29.38	59*	4	30	75-125
Chloroethane	49.95	37.71	75	2	30	40-155
Chloroform	49.95	38.00	76	4	30	70-125
Chloromethane	49.95	35.06	70	7	30	50-130
Cyclohexane	49.95	38.35	77	0	30	65-140
Dibromochloromethane	49.95	27.80	56*	1	30	65-130
1,2-Dibromoethane	49.95	29.98	60*	6	30	70-125
1,1-Dichloroethane	49.95	37.49	75	6	30	75-125
1,2-Dichloroethane	49.95	36.16	72	2	30	70-125
1,1-Dichloroethene	49.95	33.33	67	1	30	65-135
cis-1,2-Dichloroethene	49.95	33.01	66	1	30	65-125
trans-1,2-Dichloroethene	49.95	31.01	62*	1	30	65-135
1,2-Dichloropropane	49.95	35.31	71	2	30	70-120
cis-1,3-Dichloropropene	49.95	32.65	65*	1	30	70-125
trans-1,3-Dichloropropene	49.95	31.42	63*	4	30	65-125
Ethylbenzene	49.95	30.38	61*	2	30	75-125
2-Hexanone	99.90	62.57	63	4	30	45-145
Isopropylbenzene	49.95	31.39	63*	3	30	75-130
Methyl acetate	49.95	58.35	117	10	30	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Methyl cyclohexane ✓	49.95	31.33	63*	3	30	65-135
Methylene chloride	49.95	31.20	59	2	30	55-140
4-Methyl-2-pentanone	99.90	85.38	85	1	30	45-145
Methyl tert-butyl ether	49.95	33.91	68	3	30	55-150
Styrene ✓	49.95	27.51	55*	4	30	75-125
1,1,2,2-Tetrachloroethane	49.95	43.86	88	1	30	55-130
Tetrachloroethene ✓	49.95	27.59	55*	1	30	65-140
Toluene	49.95	35.04	70	3	30	70-125
1,2,3-Trichlorobenzene ✓	49.95	21.24	42*	18	30	60-135
1,2,4-Trichlorobenzene ✓	49.95	19.31	39*	16	30	65-130
1,1,1-Trichloroethane	49.95	35.21	70	2	30	70-135
1,1,2-Trichloroethane	49.95	33.89	68	5	30	60-125
Trichloroethene ✓	49.95	35.14	70*	0	30	75-125
Trichlorotrifluoroethane	49.95	38.85	78	2	30	60-140
Vinyl chloride	49.95	36.23	72	5	30	60-125
Xylene(total) ✓	149.8	95.63	64*	3	30	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 44 outside limits

Spike Recovery: 39 out of 88 outside limits

COMMENTS: _____

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID (Standard): V3CCV01 Date Analyzed: 09/12/08
 Instrument ID: VOA3 Time Analyzed: 1021
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	726946	13.27	423914	16.73	553914	18.78
UPPER LIMIT	1453892	13.77	847828	17.23	1107828	19.28
LOWER LIMIT	363473	12.77	211957	16.23	276957	18.28
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V3BLK0912LCS	746896	13.27	453481	16.73	563175	18.78
02 V3BLK0912	680492	13.27	390072	16.73	438950	18.78
03 01TB090908	657300	13.27	389938	16.74	414633	18.78
04 01RB090908	646265	13.27	382058	16.74	425494	18.78
05 01GW2301	621718	13.28	366817	16.74	380087	18.79
06 01GW2201	600445	13.27	355783	16.74	384181	18.79
07 01GW2501	603539	13.28	359888	16.74	380708	18.79
08 01GW2401	602152	13.28	360545	16.74	381811	18.79
09 01GW2701	580090	13.28	353701	16.74	384069	18.79
10 01GW2601	586824	13.27	351366	16.74	366972	18.79
11 01GW2201MS	631195	13.27	394582	16.74	500262	18.78
12 01GW2201MSD	668534	13.27	410088	16.74	520160	18.78
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID (Standard): V1CCV01 Date Analyzed: 09/15/08
 Instrument ID: VOAL Time Analyzed: 0938
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 (FLB) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #	
12 HOUR STD	582296	16.10	267281	21.96	163610	26.48	
UPPER LIMIT	1164592	16.60	534562	22.46	327220	26.98	
LOWER LIMIT	291148	15.60	133641	21.46	81805	25.98	
CLIENT SAMPLE NO.							
01	V1BLK0915LCS	536271	16.10	250956	21.94	157358	26.48
02	V1BLK0915	508999	16.10	224587	21.96	131326	26.49
03	01SS0701	507632	16.09	229464	21.94	131104	26.49
04	01SS0801	492800	16.09	221960	21.96	126733	26.49
05	01SS0901	474434	16.09	225626	21.96	125732	26.49
06	01SS1001	472136	16.11	219683	21.96	128814	26.49
07	01SS1101	460950	16.09	222161	21.96	123466	26.49
08	01SS1201	458907	16.09	212961	21.96	122949	26.49
09	01SS0701MS	445960	16.10	233010	21.96	141721	26.50
10	01SS0701MSD	474404	16.10	235786	21.96	148342	26.50
11							
12							
13							
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15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID (Standard): V3CCV01 Date Analyzed: 09/15/08
 Instrument ID: VOA3 Time Analyzed: 0953
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	701895	13.27	409311	16.73	536816	18.78
UPPER LIMIT	1403790	13.77	818622	17.23	1073632	19.28
LOWER LIMIT	350948	12.77	204656	16.23	268408	18.28
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V3BLK0915LCS	745825	13.27	432945	16.73	539386	18.78
02 V3BLK0915	635799	13.27	377214	16.73	441247	18.78
03 01TB091108	633856	13.27	378089	16.73	428175	18.78
04 01RB091108	640711	13.27	378162	16.73	390486	18.78
05 V3BLK0915LCS	654578	13.27	406167	16.73	519093	18.78
06						
07						
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19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

Semi-Volatile Section

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-011

Date Sampled	Date Received	Lab ID	Client ID
9/9/2008	9/10/2008	0809091-02	01GW2301
9/9/2008	9/10/2008	0809091-03	01GW2201
9/9/2008	9/10/2008	0809091-04	01GW2501
9/9/2008	9/10/2008	0809091-05	01GW2401
9/9/2008	9/10/2008	0809091-06	01GW2701
9/9/2008	9/10/2008	0809091-07	01GW2601
9/9/2008	9/10/2008	0809091-08	01RB090908
9/11/2008	9/12/2008	0809127-02	01RB091108
9/11/2008	9/12/2008	0809127-03	01SS0701
9/11/2008	9/12/2008	0809127-04	01SS0801
9/11/2008	9/12/2008	0809127-05	01SS0901
9/11/2008	9/12/2008	0809127-06	01SS1001
9/11/2008	9/12/2008	0809127-07	01SS1101
9/11/2008	9/12/2008	0809127-08	01SS1201

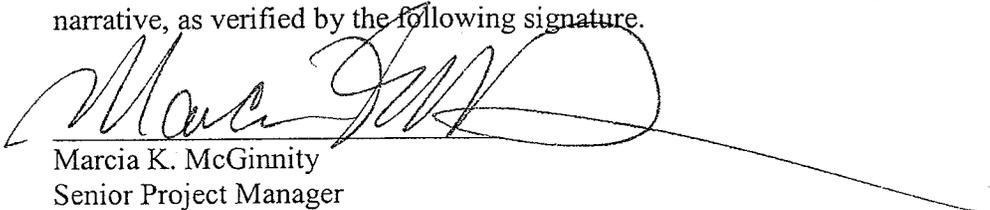
Semivolatile Samples

Method: The samples were analyzed by USEPA SW-846 Methods 3541/8270C or 3510C/8270C (automated soxhlet or separatory funnel extraction followed by capillary column GC/MS) for soils or waters upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- In the initial calibration verification, 3,3'-dichlorobenzidine exceeded 25% difference with a positive bias. It was not detected in the associated samples.
- Bis(2-ethylhexyl)phthalate and di-n-butylphthalate were detected in method blank SBLK0923BS1. Reported concentrations in the associated samples are qualified with a "B".
- In spike sample SBLK0915BW1LCS, recovery of caprolactam was below the limit of 20% at 19%. All other recoveries were within limits.
- In spike sample SBLK0923BS1LCS, recovery of caprolactam exceeded the limit of 110% at 111%. All other recoveries were within limits.
- In spike samples 01GW2201MS/MSD, 1 of 65 relative percent differences and 2 of 130 recoveries were outside the acceptance limits. See form 3.
- In spike samples 01SS0701MS/MSD, 2 of 66 relative percent differences and 1 of 132 recoveries were outside the acceptance limits. See form 3.
- Manual integrations: Quantitation signals were manually integrated in order to accurately reflect the peak areas based on the technical judgment of the analyst. A listing of the manual integrations performed and reason for the integration is attached to this case narrative. Before and after "pictures" are included with the raw data for each integration performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.

CHROMATOGRAPHIC FLAGS FOR MANUAL INTEGRATIONS

- A:** The peak was manually integrated as it was not integrated in the original chromatogram.
- B:** The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
- C:** The peak was manually integrated to correct the baseline from the original chromatogram.
- D:** The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.
- E:** The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

	Lab Name: EMPIRICAL LABS												
	Instrument ID: BNA1			Calibration Date(s): 07/24/08 07/28/08 (PPBNA3.SUB)									
	Column: FUSED SILICA ID: 0.25 (mm) 30ml.												
COMPOUND	CAL001	CAL002	CAL005	CAL010	CAL020	CAL030	CAL040	CAL050	CAL060	CAL070	CAL080	CAL090	CAL100
Acenaphthene													
Acenaphthylene													
Anthracene													
Aniline													
Acetophenone													
Benzo(a)anthracene													
Benzo(b)fluoranthene													
Benzo(k)fluoranthene													
Benzo(g,h,i)perylene													
Benzo(a)pyrene													
Benzoic acid	A		A	A	A		A	A			A		A
Benzyl alcohol													
bis(2-Chloroethoxy)methane													
bis(2-Chloroethyl)ether													
bis(2-Chloroisopropyl)ether													
Bis(2-ethylhexyl)phthalate	A												
4-Bromophenyl-phenylether													
Butylbenzylphthalate													
4-Chloroaniline													
Carbazole													
4-Chloro-3-methylphenol													
2-Chloronaphthalene													
2-Chlorophenol													
4-Chlorophenyl-phenylether													
Chrysene													
Dibenz(a,h)anthracene													
Dibenzofuran													
1,2-Dichlorobenzene													
1,3-Dichlorobenzene													
1,4-Dichlorobenzene													
3,3'-Dichlorobenzidine													
2,4-Dichlorophenol													
1,2,4,5-Tetrachlorobenzene													
Caprolactam	E		C	C									
Diethylphthalate													
2,4-Dimethylphenol													
Dimethylphthalate	A												
Di-n-butylphthalate	A												
4,6-Dinitro-2-methylphenol	A												
2,4-Dinitrophenol	A												
2,4-Dinitrotoluene													
2,6-Dinitrotoluene													
Di-n-octylphthalate	A												
Fluoranthene													
Fluorene													
Hexachlorobenzene													
Hexachlorobutadiene													
Hexachlorocyclopentadiene	E												
Hexachloroethane													
Indeno(1,2,3-cd)pyrene	C												
Isophorone													
2-Methylnaphthalene													
1-Methylnaphthalene													
3-Methylphenol	D												D
4-Methylphenol	D												D
2-Methylphenol													
Naphthalene													
2-Nitroaniline													
3-Nitroaniline													
4-Nitroaniline	A												
1,1'-Biphenyl													
1,2-Diphenylhydrazine													
Nitrobenzene													
2-Nitrophenol	A												
4-Nitrophenol													
N-Nitrosodiphenylamine													
N-Nitroso-di-n-propylamine													
N-Nitroso-di-n-dimethylamine													
Pentachlorophenol	A												
Phenanthrene													
Phenol													
Pyrene													
Pyridine	E												
1,2,4-Trichlorobenzene													
2,4,5-Trichlorophenol	A												
2,4,6-Trichlorophenol													
2-Fluorophenol													
Phenol-d6													
Nitrobenzene-d5													C
2-Fluorobiphenyl													
2,4,6-Tribromophenol													
Terphenyl-d14													

A: The peak was manually integrated as it was not integrated in the original chromatogram.
B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
C: The peak was manually integrated to correct baseline from the original chromatogram.
D: The peak was manually integrated to identify the correct peak as the incorrect peak was identified in the original chromatogram.
E: The peak was manually integrated to include entire peak as the original chromatogram only integrated part of the peak.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA(BNA1)									
Lab Name: EMPIRICAL LABS									
Instrument ID: BNA1					Calibration Date(s): 07/24/08 07/28/08 (5COMP.SUB)				
Column: FUSED SILICA ID: 0.25 (mm) 30mt.									
COMPOUND	CALB001	CALB002	CALB005	CALB010	CALB020	CALB050	CALB070	CALB080	CALB100
Benzaldehyde									
2,3,4,6-Tetrachlorophenol	A								
Atrazine	A								
Benzidine	A								
3,3'-Dichlorobenzidine									
A: The peak was manually integrated as it was not integrated in the original chromatogram.									
B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.									
C: The peak was manually integrated to correct baseline from the original chromatogram.									
D: The peak was manually integrated to identify the correct peak as the incorrect peak was identified in the original chromatogram.									
E: The peak was manually integrated to include entire peak as the original chromatogram only integrated part of the peak.									

Analysis	Benzoic Acid	2,4-dimethylphenol
SBLK0915BW1LCS	A	
SBLK0923BS1LCS	A	A
0809091-03MS	A	
0809091-03MSD	A	
0809127-03MS	A	A
0809127-03MSD	A	A
091808B1CCV	A	
092308B1CCV	A	
092408B1CCV	A	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B2 DFTPP Injection Date: 07/24/08

Instrument ID: BNA1 DFTPP Injection Time: 2241

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.8
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	42.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.0% of mass 198	1.59
441	Present, but less than mass 443	9.1
442	Greater than 40.0% of mass 198	55.6
443	17.0 - 23.0% of mass 442	11.5 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL080PPM	BNACAL080PPM	CALB080	07/24/08	2302
02	BNACAL100PPM	BNACAL100PPM	CALB100	07/24/08	2338
03	BNAICV050PPM	BNAICV050PPM	ICVEX	07/25/08	0014
04	BNAICV050PPM	BNAICV050PPM	ICVMAIN	07/25/08	0050
05	BNAICV050PPM	BNAICV050PPM	ICV02	07/25/08	0126
06	BNAICV050PPM	BNAICV050PPM	ICV03	07/25/08	0202
07	CALAP9C001PP	CALAP9C001PPM	CAP9C001	07/25/08	0238
08	CALAP9C002PP	CALAP9C002PPM	CAP9C002	07/25/08	0314
09	CALAP9C005PP	CALAP9C005PPM	CAP9C005	07/25/08	0349
10	CALAP9C010PP	CALAP9C010PPM	CAP9C010	07/25/08	0425
11	CALAP9C020PP	CALAP9C020PPM	CAP9C020	07/25/08	0501
12	CALAP9C030PP	CALAP9C030PPM	CAP9C030	07/25/08	0537
13	CALAP9C050PP	CALAP9C050PPM	CAP9C050	07/25/08	0612
14	CALAP9C070PP	CALAP9C070PPM	CAP9C070	07/25/08	0648
15	CALAP9C100PP	CALAP9C100PPM	CAP9C100	07/25/08	0724
16	CALAP9A001PP	CALAP9A001PPM	CAP9A001	07/25/08	0800
17	CALAP9A002PP	CALAP9A002PPM	CAP9A002	07/25/08	0836
18	CALAP9A005PP	CALAP9A005PPM	CAP9A005	07/25/08	0912
19	CALAP9A010PP	CALAP9A010PPM	CAP9A010	07/25/08	0948
20	BNAICV050PPM	BNAICV050PPM	ICVEX1	07/25/08	1024
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B1 DFTPP Injection Date: 07/24/08

Instrument ID: BNA1 DFTPP Injection Time: 1025

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	40.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	19.9
365	Greater than 1.0% of mass 198	1.88
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	66.4
443	17.0 - 23.0% of mass 442	12.7 (19.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL001PPM	BNACAL001PPM	CAL001	07/24/08	1046
02	BNACAL005PPM	BNACAL005PPM	CAL005	07/24/08	1158
03	BNACAL010PPM	BNACAL010PPM	CAL010	07/24/08	1234
04	BNACAL020PPM	BNACAL020PPM	CAL020	07/24/08	1310
05	BNACAL040PPM	BNACAL040PPM	CAL040	07/24/08	1422
06	BNACAL050PPM	BNACAL050PPM	CAL050	07/24/08	1458
07	BNACAL060PPM	BNACAL060PPM	CAL060	07/24/08	1534
08	BNACAL070PPM	BNACAL070PPM	CAL070	07/24/08	1610
09	BNACAL080PPM	BNACAL080PPM	CAL080	07/24/08	1646
10	BNACAL090PPM	BNACAL090PPM	CAL090	07/24/08	1721
11	BNACAL100PPM	BNACAL100PPM	CAL100	07/24/08	1757
12	BNACAL001PPM	BNACAL001PPM	CALB001	07/24/08	1833
13	BNACAL002PPM	BNACAL002PPM	CALB002	07/24/08	1909
14	BNACAL005PPM	BNACAL005PPM	CALB005	07/24/08	1945
15	BNACAL010PPM	BNACAL010PPM	CALB010	07/24/08	2021
16	BNACAL020PPM	BNACAL020PPM	CALB020	07/24/08	2057
17	BNACAL050PPM	BNACAL050PPM	CALB050	07/24/08	2133
18	BNACAL070PPM	BNACAL070PPM	CALB070	07/24/08	2209
19					
20					
21					
22					

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4,6-Trichlorophenol	AVRG		0.38204520		5.5
2-Fluorophenol	2ORDR	0.00000000	0.56691538	7.38e-002	0.996
Phenol-d6	2ORDR	0.00000000	0.52282494	4.688e-002	0.997
Nitrobenzene-d5	AVRG		0.43773029		9.9
2-Fluorobiphenyl	AVRG		1.37616048		14.6
2,4,6-Tribromophenol	AVRG		0.13495814		6.3
Terphenyl-d14	AVRG		0.86401658		5.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

COMPOUND	CURVE	COEFFICIENTS		%RSD
		A0	A1	OR R ²
Atrazine	AVRG		0.19998352	8.0
Benzaldehyde	AVRG		1.13441801	14.1
Benzidine	LINR	0.00000000	0.68404336	0.999
3,3'-Dichlorobenzidine	AVRG		0.34213412	14.7
2,3,4,6-Tetrachlorophenol	LINR	0.00000000	0.24497359	0.997

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.121	50.00	51.34		AVRG	2.7	25.0
Acenaphthylene	1.532	1.727	50.00	56.37		AVRG	12.7	25.0
Aniline	1.657	1.765	50.00	53.28		AVRG	6.6	25.0
Anthracene	1.066	1.183	50.00	55.46		AVRG	10.9	25.0
Atrazine	0.200	0.191	50.00	0.0000		AVRG	-4.5	25.0
Benzaldehyde	1.134	0.946	50.00	0.0000		AVRG	-16.6	25.0
Benzoic acid	0.239	0.252	50.00	45.95		2ORDR	-8.1	25.0
Benzo (a) anthracene	1.031	1.150	50.00	55.78		AVRG	11.6	25.0
Benzo (b) fluoranthene	1.057	1.102	50.00	52.09		AVRG	4.2	25.0
Benzo (k) fluoranthene	1.109	1.163	50.00	52.43		AVRG	4.9	25.0
Benzo (g, h, i) perylene	0.782	0.829	50.00	52.98		AVRG	6.0	25.0
Benzo (a) pyrene	0.935	1.038	50.00	55.52		AVRG	11.0	25.0
Benzyl alcohol	0.839	0.810	50.00	48.26		AVRG	-3.5	25.0
1,1'-Biphenyl	1.478	1.402	50.00	0.0000		AVRG	-5.1	25.0
bis (2-Chloroethoxy) methane	0.493	0.481	50.00	48.78		AVRG	-2.4	25.0
bis (2-Chloroethyl) ether	1.652	1.326	50.00	45.46		LINR	-9.1	25.0
bis (2-Chloroisopropyl) ether	2.260	2.091	50.00	46.27		AVRG	-7.5	25.0
Bis (2-ethylhexyl) phthalate	1.048	1.134	50.00	54.05		AVRG	8.1	25.0
4-Bromophenyl-phenylether	0.273	0.243	50.00	44.49		AVRG	-11.0	25.0
Butylbenzylphthalate	0.812	0.912	50.00	56.20		AVRG	12.4	25.0
4-Chloroaniline	0.420	0.447	50.00	53.18		AVRG	6.4	25.0
4-Chloro-3-methylphenol	0.278	0.292	50.00	52.45		AVRG	4.9	25.0
2-Chloronaphthalene	1.144	1.234	50.00	53.94		AVRG	7.9	25.0
2-Chlorophenol	1.197	1.251	50.00	57.25		2ORDR	14.5	25.0
4-Chlorophenyl-phenylether	0.561	0.561	50.00	50.04		AVRG	0.1	25.0
Chrysene	0.976	1.112	50.00	57.00		AVRG	14.0	25.0
Dibenz (a, h) anthracene	0.737	0.775	50.00	52.58		AVRG	5.2	25.0
Dibenzofuran	1.491	1.439	50.00	48.25		AVRG	-3.5	25.0
1,2-Dichlorobenzene	1.313	1.313	50.00	54.16		2ORDR	8.3	25.0
1,4-Dichlorobenzene	1.383	1.274	50.00	46.06		AVRG	-7.9	25.0
1,3-Dichlorobenzene	1.513	1.396	50.00	48.94		2ORDR	-2.1	25.0
2,4-Dichlorophenol	0.311	0.304	50.00	48.78		AVRG	-2.4	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.247	50.00	44.55		AVRG	-10.9	25.0
2,4-Dimethylphenol	0.277	0.331	50.00	59.78		AVRG	19.6	25.0
Dimethylphthalate	1.490	1.386	50.00	46.54		AVRG	-6.9	25.0
Di-n-butylphthalate	1.672	1.620	50.00	48.44		AVRG	-3.1	25.0
4,6-Dinitro-2-methylphenol	0.156	0.200	50.00	55.35		2ORDR	10.7	25.0
2,4-Dinitrophenol	0.167	0.200	50.00	51.09	0.050	2ORDR	2.2	25.0
2,4-Dinitrotoluene	0.416	0.387	50.00	46.57		AVRG	-6.8	25.0
2,6-Dinitrotoluene	0.366	0.372	50.00	50.76		AVRG	1.5	25.0
Di-n-octylphthalate	1.870	2.025	50.00	46.98		LINR	-6.0	25.0
1,2-Diphenylhydrazine	1.106	1.109	50.00	50.13		AVRG	0.3	25.0
Fluoranthene	1.086	1.166	50.00	53.69		AVRG	7.4	25.0
Fluorene	1.196	1.174	50.00	49.08		AVRG	-1.8	25.0
Hexachlorobenzene	0.264	0.271	50.00	51.38		AVRG	2.8	25.0
Hexachlorobutadiene	0.189	0.185	50.00	48.92		AVRG	-2.2	25.0
Hexachlorocyclopentadiene	0.284	0.298	50.00	52.34	0.050	AVRG	4.7	25.0
Hexachloroethane	0.632	0.578	50.00	45.72		AVRG	-8.6	25.0
Indeno(1,2,3-cd)pyrene	0.725	0.760	50.00	52.43		AVRG	4.9	25.0
Isophorone	0.835	0.779	50.00	46.69		AVRG	-6.6	25.0
1-Methylnaphthalene	0.485	0.478	50.00	49.29		AVRG	-1.4	25.0
2-Methylnaphthalene	0.514	0.512	50.00	49.76		AVRG	-0.5	25.0
Naphthalene	0.928	0.939	50.00	50.61		AVRG	1.2	25.0
4-Methylphenol	1.092	1.161	50.00	53.17		AVRG	6.3	25.0
3-Methylphenol	1.093	1.161	50.00	53.13		AVRG	6.2	25.0
2-Methylphenol	1.125	1.075	50.00	47.79		AVRG	-4.4	25.0
2-Nitroaniline	0.381	0.394	50.00	51.59		AVRG	3.2	25.0
3-Nitroaniline	0.398	0.368	50.00	46.28		AVRG	-7.4	25.0
4-Nitroaniline	0.327	0.314	50.00	44.05		2ORDR	-11.9	25.0
Nitrobenzene	0.431	0.441	50.00	51.21		AVRG	2.4	25.0
2-Nitrophenol	0.260	0.262	50.00	50.29		AVRG	0.6	25.0
4-Nitrophenol	0.224	0.232	50.00	51.60	0.050	AVRG	3.2	25.0
N-Nitroso-di-methylamine	0.665	0.562	50.00	42.23		AVRG	-15.5	25.0
N-Nitrosodiphenylamine (1)	0.689	0.636	50.00	46.12		AVRG	-7.8	25.0
N-Nitroso-di-n-propylamine	0.895	0.841	50.00	46.95	0.050	AVRG	-6.1	25.0
Pentachlorophenol	0.178	0.211	50.00	52.84		LINR	5.7	25.0
Phenanthrene	1.096	1.143	50.00	52.15		AVRG	4.3	25.0
Phenol	1.639	1.684	50.00	51.35		AVRG	2.7	25.0

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.342	50.00	55.57		AVRG	11.1	25.0
Pyridine	1.797	1.712	50.00	47.63		AVRG	-4.7	25.0
1,2,4-Trichlorobenzene	0.350	0.300	50.00	42.76		AVRG	-14.5	25.0
2,4,5-Trichlorophenol	0.397	0.419	50.00	52.74		AVRG	5.5	25.0
2,4,6-Trichlorophenol	0.382	0.390	50.00	51.00		AVRG	2.0	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0014

Lab File ID: ICVEX Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzidine	0.608	0.902	50.00	65.92		LINR	31.8	25.0 <
3,3'-Dichlorobenzidine	0.342	0.458	50.00	66.98		AVRG	34.0	25.0 <

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0202

Lab File ID: ICV03 Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzaldehyde	1.134	0.944	50.00	41.60		AVRG	-16.8	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0126

Lab File ID: ICV02 Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetophenone	1.286	1.030	50.00	40.60		2ORDR	-18.8	25.0
Atrazine	0.200	0.217	50.00	54.28		AVRG	8.6	25.0
1,1'-Biphenyl	1.478	1.424	50.00	48.19		AVRG	-3.6	25.0
Caprolactam	0.103	0.128	50.00	59.13		2ORDR	18.2	25.0
1,2,4,5-Tetrachlorobenzene	0.259	0.265	50.00	51.14		AVRG	2.3	25.0
2,3,4,6-Tetrachlorophenol	0.218	0.259	50.00	52.88		LINR	5.8	25.0

Handwritten signature/initials
8-5-08

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: DF0918B1 DFTPP Injection Date: 09/18/08

Instrument ID: BNA1 DFTPP Injection Time: 0733

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	56.8
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	45.1
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.0
275	10.0 - 30.0% of mass 198	17.8
365	Greater than 1.0% of mass 198	1.34
441	Present, but less than mass 443	7.3
442	Greater than 40.0% of mass 198	45.1
443	17.0 - 23.0% of mass 442	9.4 (20.8)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050W	09/18/08	0830
02	SBLK0915BW1L	SBLK0915BW1LCS	S1LW0915	09/18/08	0906
03	SBLK0915BW1	SBLK0915BW1	S1BW0915	09/18/08	0942
04	01GW2301	0809091-02	0909102	09/18/08	1321
05	01GW2201	0809091-03	0909103	09/18/08	1357
06	01GW2501	0809091-04	0909104	09/18/08	1434
07	01GW2401	0809091-05	0909105	09/18/08	1510
08	01GW2701	0809091-06	0909106	09/18/08	1547
09	01GW2601	0809091-07	0909107	09/18/08	1623
10	01RB090908	0809091-08	0909108	09/18/08	1700
11	01RB091108	0809127-02	0912702	09/18/08	1736
12	01GW2201MS	0809091-03MS	0909103M	09/18/08	1813
13	01GW2201MSD	0809091-03MSD	0909103S	09/18/08	1849
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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: BNA1 Calibration Date: 09/18/08 Time: 0830
 Lab File ID: CCV050W Init. Calib. Date(s): 07/24/08 08/29/08
 Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.027	50.00	47.06		AVRG	-5.9	20.0
Acenaphthylene	1.532	1.525	50.00	49.78		AVRG	-0.4	
Acetophenone	1.286	1.168	50.00	47.15		2ORDR	-5.7	
Aniline	1.657	0.539	50.00	16.26		AVRG	-67.5	
Anthracene	1.066	1.014	50.00	47.53		AVRG	-4.9	
<u>Atrazine</u>	0.200	<u>0.032</u>	50.00	8.124		AVRG	<u>-83.8</u>	
<u>Benzaldehyde</u>	1.134	0.846	50.00	37.30		AVRG	<u>-25.4</u>	
Benzidine	0.608	0.356	50.00	26.00		LINR	-48.0	
Benzoic acid	0.239	0.284	50.00	51.30		2ORDR	2.6	
Benzo(a)anthracene	1.031	1.070	50.00	51.93		AVRG	3.9	
Benzo(b)fluoranthene	1.057	1.182	50.00	55.90		AVRG	11.8	
Benzo(k)fluoranthene	1.109	1.179	50.00	53.15		AVRG	6.3	
Benzo(g,h,i)perylene	0.782	0.708	50.00	45.27		AVRG	-9.5	
Benzo(a)pyrene	0.935	0.932	50.00	49.85		AVRG	-0.3	20.0
Benzyl alcohol	0.839	0.858	50.00	51.16		AVRG	2.3	
1,1'-Biphenyl	1.478	1.275	50.00	43.13		AVRG	-13.7	
bis(2-Chloroethoxy)methane	0.493	0.447	50.00	45.27		AVRG	-9.5	
<u>bis(2-Chloroethyl) ether</u>	1.652	2.129	50.00	72.98		LINR	<u>46.0</u>	
bis(2-Chloroisopropyl) ether	2.260	1.858	50.00	41.11		AVRG	-17.8	
Bis(2-ethylhexyl)phthalate	1.048	1.169	50.00	55.75		AVRG	11.5	
4-Bromophenyl-phenylether	0.273	0.260	50.00	47.62		AVRG	-4.7	
Butylbenzylphthalate	0.812	0.990	50.00	60.98		AVRG	22.0	
Caprolactam	0.103	0.127	50.00	58.60		2ORDR	17.2	
Carbazole	1.086	0.938	50.00	43.21		AVRG	-13.6	
4-Chloroaniline	0.420	0.424	50.00	50.41		AVRG	0.8	
4-Chloro-3-methylphenol	0.278	0.283	50.00	50.92		AVRG	1.8	20.0
2-Chloronaphthalene	1.144	1.038	50.00	45.34		AVRG	-9.3	
2-Chlorophenol	1.197	1.116	50.00	50.42		2ORDR	0.8	
4-Chlorophenyl-phenylether	0.561	0.523	50.00	46.68		AVRG	-6.6	
Chrysene	0.976	0.940	50.00	48.16		AVRG	-3.7	
Dibenz(a,h)anthracene	0.737	0.670	50.00	45.47		AVRG	-9.0	
Dibenzofuran	1.491	1.465	50.00	49.13		AVRG	-1.7	
1,2-Dichlorobenzene	1.313	1.209	50.00	48.83		2ORDR	-2.3	
1,4-Dichlorobenzene	1.383	1.341	50.00	48.48		AVRG	-3.0	20.0
1,3-Dichlorobenzene	1.513	1.398	50.00	49.04		2ORDR	-1.9	
3,3'-Dichlorobenzidine	0.342	0.322	50.00	47.05		AVRG	-5.9	
2,4-Dichlorophenol	0.311	0.313	50.00	50.37		AVRG	0.7	20.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: BNA1 Calibration Date: 09/18/08 Time: 0830
 Lab File ID: CCV050W Init. Calib. Date(s): 07/24/08 08/29/08
 Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.441	50.00	51.49		AVRG	3.0	
2,4-Dimethylphenol	0.277	0.265	50.00	47.88		AVRG	-4.2	
Dimethylphthalate	1.490	1.485	50.00	49.84		AVRG	-0.3	
Di-n-butylphthalate	1.672	1.795	50.00	53.67		AVRG	7.3	
4,6-Dinitro-2-methylphenol	0.156	0.204	50.00	56.22		2ORDR	12.4	
2,4-Dinitrophenol	0.167	0.216	50.00	54.38	0.050	2ORDR	8.8	
2,4-Dinitrotoluene	0.416	0.471	50.00	56.65		AVRG	13.3	
2,6-Dinitrotoluene	0.366	0.385	50.00	52.56		AVRG	5.1	
1,2-Diphenylhydrazine	1.106	1.112	50.00	50.29		AVRG	0.6	
Di-n-octylphthalate	1.870	2.587	50.00	60.01		LINR	20.0	20.0
Fluoranthene	1.086	1.094	50.00	50.41		AVRG	0.8	20.0
Fluorene	1.196	1.107	50.00	46.28		AVRG	-7.4	
Hexachlorobenzene	0.264	0.262	50.00	49.78		AVRG	-0.4	
Hexachlorobutadiene	0.189	0.183	50.00	48.41		AVRG	-3.2	20.0
Hexachlorocyclopentadiene	0.284	0.250	50.00	43.85	0.050	AVRG	-12.3	
Hexachloroethane	0.632	0.600	50.00	47.47		AVRG	-5.0	
Indeno(1,2,3-cd)pyrene	0.725	0.692	50.00	47.69		AVRG	-4.6	
Isophorone	0.835	0.791	50.00	47.40		AVRG	-5.2	
1-Methylnaphthalene	0.485	0.505	50.00	51.98		AVRG	4.0	
2-Methylnaphthalene	0.514	0.512	50.00	49.82		AVRG	-0.3	
3-Methylphenol	1.093	0.968	50.00	44.27		AVRG	-11.4	
4-Methylphenol	1.092	0.968	50.00	44.31		AVRG	-11.4	
2-Methylphenol	1.125	1.049	50.00	46.64		AVRG	-6.7	
Naphthalene	0.928	0.898	50.00	48.39		AVRG	-3.2	
2-Nitroaniline	0.381	0.376	50.00	49.36		AVRG	-1.3	
3-Nitroaniline	0.398	0.395	50.00	49.66		AVRG	-0.7	
4-Nitroaniline	0.327	0.287	50.00	40.45		2ORDR	-19.1	
Nitrobenzene	0.431	0.408	50.00	47.39		AVRG	-5.2	
2-Nitrophenol	0.260	0.282	50.00	54.12		AVRG	8.2	20.0
4-Nitrophenol	0.224	0.235	50.00	52.30	0.050	AVRG	4.6	
N-Nitroso-di-methylamine	0.665	0.588	50.00	44.17		AVRG	-11.7	
N-Nitrosodiphenylamine (1)	0.689	0.616	50.00	44.71		AVRG	-10.6	20.0
N-Nitroso-di-n-propylamine	0.895	0.796	50.00	44.44	0.050	AVRG	-11.1	
Pentachlorophenol	0.178	0.182	50.00	45.71		LINR	-8.6	20.0
Phenanthrene	1.096	1.042	50.00	47.54		AVRG	-4.9	
Phenol	1.639	1.401	50.00	42.74		AVRG	-14.5	20.0

(1) Cannot be separated from Diphenylamine

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: DF0923B1 DFTPP Injection Date: 09/23/08

Instrument ID: BNA1 DFTPP Injection Time: 0915

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	69.6
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	46.5
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.5
365	Greater than 1.0% of mass 198	1.42
441	Present, but less than mass 443	6.9
442	Greater than 40.0% of mass 198	43.8
443	17.0 - 23.0% of mass 442	8.8 (20.0)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050S	09/23/08	0936
02	SBLK0923BS1	SBLK0923BS1	S1BS0923	09/23/08	1428
03	SBLK0923BS1L	SBLK0923BS1LCS	S1LS0923	09/23/08	1505
04	01SS0701	0809127-03	0912703	09/23/08	1542
05	01SS0801	0809127-04	0912704	09/23/08	1618
06	01SS0701MS	0809127-03MS	0912703M	09/23/08	1655
07	01SS0701MSD	0809127-03MSD	0912703S	09/23/08	1731
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: DF0924B1 DFTPP Injection Date: 09/24/08

Instrument ID: BNA1 DFTPP Injection Time: 1022

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	44.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	69.9
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	45.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	16.6
365	Greater than 1.0% of mass 198	1.48
441	Present, but less than mass 443	6.4
442	Greater than 40.0% of mass 198	42.1
443	17.0 - 23.0% of mass 442	8.1 (19.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050S	09/24/08	1043
02	01SS1001	0809127-06	0912706	09/24/08	1239
03	01SS1101	0809127-07	0912707	09/24/08	1315
04	01SS1201	0809127-08	0912708	09/24/08	1352
05	01SS0901	0809127-05	0912705R	09/24/08	1428
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FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0923BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: SBLK0923BS1
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS0923
 % Moisture: 0 decanted: (Y/N) N Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 14:28
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	UG/KG	
83-32-9	Acenaphthene	26	330	U	
208-96-8	Acenaphthylene	20	330	U	
98-86-2	Acetophenone	41	330	U	
120-12-7	Anthracene	27	330	U	
1912-24-9	Atrazine	28	330	U	
100-52-7	Benzaldehyde	55	330	U	
56-55-3	Benzo (a) anthracene	36	330	U	
205-99-2	Benzo (b) fluoranthene	32	330	U	
207-08-9	Benzo (k) fluoranthene	39	330	U	
191-24-2	Benzo (g, h, i) perylene	70	330	U	
50-32-8	Benzo (a) pyrene	23	330	U	
111-91-1	bis (2-Chloroethoxy) methane	31	330	U	
92-52-4	1,1'-Biphenyl	29	330	U	
111-44-4	bis (2-Chloroethyl) ether	41	330	U	
108-60-1	bis (2-Chloroisopropyl) ether	51	330	U	
117-81-7	Bis (2-ethylhexyl) phthalate	36	330	130 J	
101-55-3	4-Bromophenyl-phenylether	26	330	U	
85-68-7	Butylbenzylphthalate	30	330	U	
86-74-8	Carbazole	36	330	U	
106-47-8	4-Chloroaniline	48	330	U	
105-60-2	Caprolactam	67	330	U	
59-50-7	4-Chloro-3-methylphenol	28	330	U	
91-58-7	2-Chloronaphthalene	32	330	U	
95-57-8	2-Chlorophenol	41	330	U	
7005-72-3	4-Chlorophenyl-phenylether	31	330	U	
218-01-9	Chrysene	31	330	U	
53-70-3	Dibenz (a, h) anthracene	60	330	U	
132-64-9	Dibenzofuran	24	330	U	
91-94-1	3,3'-Dichlorobenzidine	31	330	U	
120-83-2	2,4-Dichlorophenol	19	330	U	
84-66-2	Diethylphthalate	34	330	U	
105-67-9	2,4-Dimethylphenol	21	330	U	
131-11-3	Dimethylphthalate	30	330	U	

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0923BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: SBLK0923BS1
 Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS0923
 % Moisture: 0 decanted: (Y/N) N Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/23/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/23/08 14:28
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	(ug/Kg) CONC	
84-74-2	Di-n-butylphthalate	30	330	49	U
534-52-1	4,6-Dinitro-2-methylphenol	22	830		U
51-28-5	2,4-Dinitrophenol	130	830		U
121-14-2	2,4-Dinitrotoluene	24	330		U
606-20-2	2,6-Dinitrotoluene	38	330		U
117-84-0	Di-n-octylphthalate	27	330		U
206-44-0	Fluoranthene	54	330		U
86-73-7	Fluorene	26	330		U
118-74-1	Hexachlorobenzene	35	330		U
87-68-3	Hexachlorobutadiene	33	330		U
77-47-4	Hexachlorocyclopentadiene	61	330		U
67-72-1	Hexachloroethane	39	330		U
193-39-5	Indeno (1,2,3-cd) pyrene	46	330		U
78-59-1	Isophorone	28	330		U
91-57-6	2-Methylnaphthalene	35	330		U
95-48-7	2-Methylphenol	39	330		U
106-44-5	4-Methylphenol	26	330		U
91-20-3	Naphthalene	32	330		U
88-74-4	2-Nitroaniline	32	330		U
99-09-2	3-Nitroaniline	47	830		U
100-01-6	4-Nitroaniline	100	830		U
98-95-3	Nitrobenzene	34	330		U
88-75-5	2-Nitrophenol	22	330		U
100-02-7	4-Nitrophenol	81	830		U
86-30-6	N-Nitrosodiphenylamine (1)	32	330		U
621-64-7	N-Nitroso-di-n-propylamine	55	330		U
87-86-5	Pentachlorophenol	34	830		U
85-01-8	Phenanthrene	23	330		U
108-95-2	Phenol	36	330		U
129-00-0	Pyrene	40	330		U
95-94-3	1,2,4,5-Tetrachlorobenzene	100	330		U
95-95-4	2,4,5-Trichlorophenol	27	830		U
88-06-2	2,4,6-Trichlorophenol	35	330		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK0915BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID: S1BW0915 Lab Sample ID: SBLK0915BW1

Instrument ID: BNA1 Date Extracted: 09/15/08

Matrix: (soil/water) WATER Date Analyzed: 09/18/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 0942

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK0915BW1L	SBLK0915BW1LCS	S1LW0915	09/18/08
02	01GW2301	0809091-02	0909102	09/18/08
03	01GW2201	0809091-03	0909103	09/18/08
04	01GW2501	0809091-04	0909104	09/18/08
05	01GW2401	0809091-05	0909105	09/18/08
06	01GW2701	0809091-06	0909106	09/18/08
07	01GW2601	0809091-07	0909107	09/18/08
08	01RB090908	0809091-08	0909108	09/18/08
09	01RB091108	0809127-02	0912702	09/18/08
10	01GW2201MS	0809091-03MS	0909103M	09/18/08
11	01GW2201MSD	0809091-03MSD	0909103S	09/18/08
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COMMENTS:

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0915BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: SBLK0915BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0915

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 09:42

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.63	10		U
208-96-8	Acenaphthylene	0.47	10		U
98-86-2	Acetophenone	0.75	10		U
1912-24-9	Atrazine	0.69	10		U
120-12-7	Anthracene	0.77	10		U
100-52-7	Benzaldehyde	0.57	10		U
56-55-3	Benzo (a) anthracene	0.91	10		U
205-99-2	Benzo (b) fluoranthene	0.71	10		U
207-08-9	Benzo (k) fluoranthene	0.50	10		U
191-24-2	Benzo (g, h, i) perylene	1.5	10		U
50-32-8	Benzo (a) pyrene	0.60	10		U
92-52-4	1, 1' -Biphenyl	0.39	10		U
111-91-1	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.3	5.0		U
101-55-3	4-Bromophenyl-phenylether	0.57	10		U
85-68-7	Butylbenzylphthalate	0.82	10		U
105-60-2	Caprolactam	0.36	10		U
106-47-8	4-Chloroaniline	0.95	10		U
59-50-7	4-Chloro-3-methylphenol	0.58	10		U
91-58-7	2-Chloronaphthalene	0.58	10		U
95-57-8	2-Chlorophenol	0.59	10		U
7005-72-3	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9	Chrysene	1.0	10		U
53-70-3	Dibenz (a, h) anthracene	1.7	10		U
132-64-9	Dibenzofuran	0.65	10		U
91-94-1	3, 3' -Dichlorobenzidine	0.89	10		U
120-83-2	2, 4-Dichlorophenol	0.44	10		U
84-66-2	Diethylphthalate	1.0	10		U
105-67-9	2, 4-Dimethylphenol	0.71	10		U
131-11-3	Dimethylphthalate	0.74	10		U
84-74-2	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0915BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: SBLK0915BW1
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0915
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/18/08 09:42
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or RL	ug/Kg) CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol__	0.74	25		U
51-28-5-----	2,4-Dinitrophenol_____	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene_____	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene_____	0.66	10		U
117-84-0-----	Di-n-octylphthalate_____	0.33	10		U
206-44-0-----	Fluoranthene_____	0.70	10		U
86-73-7-----	Fluorene_____	0.55	10		U
118-74-1-----	Hexachlorobenzene_____	0.47	10		U
87-68-3-----	Hexachlorobutadiene_____	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene__	0.89	10		U
67-72-1-----	Hexachloroethane_____	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene_____	1.4	10		U
78-59-1-----	Isophorone_____	0.55	10		U
91-57-6-----	2-Methylnaphthalene_____	0.68	10		U
91-20-3-----	Naphthalene_____	0.45	10		U
95-48-7-----	2-Methylphenol_____	0.83	10		U
106-44-5-----	4-Methylphenol_____	0.77	10		U
88-74-4-----	2-Nitroaniline_____	1.2	25		U
99-09-2-----	3-Nitroaniline_____	1.0	25		U
100-01-6-----	4-Nitroaniline_____	2.0	25		U
98-95-3-----	Nitrobenzene_____	0.62	10		U
88-75-5-----	2-Nitrophenol_____	0.74	10		U
100-02-7-----	4-Nitrophenol_____	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine_(1)___	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine_____	0.90	10		U
87-86-5-----	Pentachlorophenol_____	1.0	25		U
85-01-8-----	Phenanthrene_____	0.77	10		U
108-95-2-----	Phenol_____	0.46	10		U
129-00-0-----	Pyrene_____	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene__	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol_____	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol_____	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 2
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK0923BS1	43	50	51	48	68	88			0
02	SBLK0923BS1L	62	69	66	68	81	88			0
03	01SS0701	43	50	62	51	75	93			0
04	01SS0801	43	48	48	45	79	101			0
05	01SS0701MS	53	62	57	57	80	100			0
06	01SS0701MSD	40	46	48	46	69	88			0
07	01SS1001	50	59	61	56	87	90			0
08	01SS1101	42	51	48	46	83	91			0
09	01SS1201	63	77	78	71	93	87			0
10	01SS0901	52	58	71	63	88	88			0
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	EL QC LIMITS	SPIKE CONC (UG/KG)
S1 (2FP) = 2-Fluorophenol	(25-110)	6.7
S2 (PHL) = Phenol-d6	(30-110)	6.7
S3 (NBZ) = Nitrobenzene-d5	(30-110)	3.3
S4 (FBP) = 2-Fluorobiphenyl	(35-110)	3.3
S5 (TBP) = 2,4,6-Tribromophenol	(30-115)	6.7
S6 (TPH) = Terphenyl-d14	(40-120)	3.3

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate results reported from a diluted analysis

FORM 2
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK0915BW1L	32	22	70	70	86	85			0
02	SBLK0915BW1	35	24	70	81	100	96			0
03	01GW2301	23	16	63	65	79	78			0
04	01GW2201	20	15	58	68	73	85			0
05	01GW2501	26	17	71	68	81	85			0
06	01GW2401	26	18	68	71	82	78			0
07	01GW2701	27	19	70	71	82	94			0
08	01GW2601	26	18	74	73	77	96			0
09	01RB090908	30	21	71	68	81	93			0
10	01RB091108	25	17	69	70	80	85			0
11	01GW2201MS	24	17	63	64	79	88			0
12	01GW2201MSD	26	18	63	64	79	84			0
13										
14										
15										
16										
17										
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28										
29										
30										

	EL QC LIMITS	SPIKE CONC (UG/L)
S1 (2FP) = 2-Fluorophenol	(15-110)	100
S2 (PHL) = Phenol-d6	(15-110)	100
S3 (NBZ) = Nitrobenzene-d5	(30-110)	50
S4 (FBP) = 2-Fluorobiphenyl	(35-110)	50
S5 (TBP) = 2,4,6-Tribromophenol	(45-125)	100
S6 (TPH) = Terphenyl-d14	(55-125)	50

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: SBLK0915BW1

extracted
9/15/08

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00	0.0000	41.53	83	45-110
Acenaphthylene	50.00	0.0000	49.32	99	50-105
Acetophenone	50.00	0.0000	33.70	67	50-110
Atrazine	50.00	0.0000	44.76	90	70-115
Anthracene	50.00	0.0000	45.93	92	55-110
Benzaldehyde	50.00	0.0000	58.93	118	10-180
Benzo (a) anthracene	50.00	0.0000	47.62	95	55-110
Benzo (b) fluoranthene	50.00	0.0000	47.49	95	45-120
Benzo (k) fluoranthene	50.00	0.0000	45.81	92	45-125
Benzo (g, h, i) perylene	50.00	0.0000	40.68	81	40-125
Benzo (a) pyrene	50.00	0.0000	48.13	96	55-110
1,1'-Biphenyl	50.00	0.0000	34.11	68	50-110
bis (2-Chloroethoxy) meth	50.00	0.0000	41.73	83	45-105
bis (2-Chloroethyl) ether	50.00	0.0000	36.06	72	35-110
bis (2-Chloroisopropyl) e	50.00	0.0000	35.29	70	25-130
Bis (2-ethylhexyl) phthal	50.00	0.0000	50.96	102	40-125
4-Bromophenyl-phenyleth	50.00	0.0000	32.30	65	50-115
Butylbenzylphthalate	50.00	0.0000	53.71	107	45-115
Caprolactam	50.00	0.0000	9.356	19*	20-110
4-Chloroaniline	50.00	0.0000	35.74	71	15-110
4-Chloro-3-methylphenol	50.00	0.0000	42.79	86	45-110
2-Chloronaphthalene	50.00	0.0000	38.09	76	50-105
2-Chlorophenol	50.00	0.0000	37.03	74	35-105
4-Chlorophenyl-phenylet	50.00	0.0000	38.41	77	50-110
Chrysene	50.00	0.0000	47.37	95	55-110
Dibenz (a, h) anthracene	50.00	0.0000	39.79	80	40-125
Dibenzofuran	50.00	0.0000	42.89	86	55-105
3,3'-Dichlorobenzidine	50.00	0.0000	34.82	70	20-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: SBLK0915BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
2,4-Dichlorophenol	50.00	0.0000	41.85	84	50-105
Diethylphthalate	50.00	0.0000	40.51	81	40-120
2,4-Dimethylphenol	50.00	0.0000	50.24	100	30-110
Dimethylphthalate	50.00	0.0000	37.91	76	25-125
Di-n-butylphthalate	50.00	0.0000	41.70	83	55-115
4,6-Dinitro-2-methylphe	50.00	0.0000	49.37	99	40-130
2,4-Dinitrophenol	50.00	0.0000	49.47	99	15-140
2,4-Dinitrotoluene	50.00	0.0000	44.67	89	50-120
2,6-Dinitrotoluene	50.00	0.0000	43.67	87	50-115
Di-n-octylphthalate	50.00	0.0000	46.89	94	35-135
Fluoranthene	50.00	0.0000	41.17	82	55-115
Fluorene	50.00	0.0000	40.22	80	50-110
Hexachlorobenzene	50.00	0.0000	44.83	90	50-110
Hexachlorobutadiene	50.00	0.0000	39.49	79	25-105
Hexachlorocyclopentadie	50.00	0.0000	35.91	72	10-110
Hexachloroethane	50.00	0.0000	35.05	70	30- 95
Indeno (1,2,3-cd) pyrene	50.00	0.0000	39.50	79	45-125
Isophorone	50.00	0.0000	40.76	82	50-110
2-Methylnaphthalene	50.00	0.0000	44.99	90	45-105
Naphthalene	50.00	0.0000	39.95	80	40-100
2-Methylphenol	50.00	0.0000	29.87	60	40-110
4-Methylphenol	50.00	0.0000	25.58	51	30-110
2-Nitroaniline	50.00	0.0000	40.78	82	50-115
3-Nitroaniline	50.00	0.0000	36.02	72	20-125
4-Nitroaniline	50.00	0.0000	37.30	75	35-120
Nitrobenzene	50.00	0.0000	35.76	72	45-110
2-Nitrophenol	50.00	0.0000	42.64	85	40-115
4-Nitrophenol	50.00	0.0000	12.53	25	0-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: SBLK0915BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
N-Nitrosodiphenylamine	50.00	0.0000	36.89	74	50-110
N-Nitroso-di-n-prop. (1)	50.00	0.0000	34.32	69	35-130
Pentachlorophenol	50.00	0.0000	43.91	88	40-115
Phenanthrene	50.00	0.0000	41.59	83	50-115
Phenol	50.00	0.0000	13.93	28	0-115
Pyrene	50.00	0.0000	51.53	103	50-130
1,2,4,5-Tetrachlorobenz	50.00	0.0000	39.53	79	50-125
2,4,5-Trichlorophenol	50.00	0.0000	40.99	82	50-110
2,4,6-Trichlorophenol	50.00	0.0000	38.01	76	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 65 outside limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: SBLK0923BS1 Level: (low/med) LOW

Extracted
09/23/08

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	3333	0.0000	2774	83	45-110
Acenaphthylene	3333	0.0000	3234	97	45-105
Acetophenone	3333	0.0000	1755	53	35-110
Anthracene	3333	0.0000	2707	81	55-105
Atrazine	3333	0.0000	2718	82	55-105
Benzaldehyde	3333	0.0000	1937	58	10-160
Benzo (a) anthracene	3333	0.0000	2963	89	50-110
Benzo (b) fluoranthene	3333	0.0000	2900	87	45-115
Benzo (k) fluoranthene	3333	0.0000	2571	77	45-125
Benzo (g, h, i) perylene	3333	0.0000	2343	70	40-125
Benzo (a) pyrene	3333	0.0000	2902	87	50-110
bis (2-Chloroethoxy) meth	3333	0.0000	2666	80	45-110
1,1'-Biphenyl	3333	0.0000	2186	66	45-110
bis (2-Chloroethyl) ether	3333	0.0000	2440	73	40-105
bis (2-Chloroisopropyl) e	3333	0.0000	2497	75	20-115
Bis (2-ethylhexyl) phthal	3333	132.9	3565	103	45-125
4-Bromophenyl-phenyleth	3333	0.0000	2070	62	45-115
Butylbenzylphthalate	3333	0.0000	3438	103	50-125
Carbazole	3333	0.0000	2530	76	45-115
4-Chloroaniline	3333	0.0000	2729	82	10- 95
Caprolactam	3333	0.0000	3698	111*	50-110
4-Chloro-3-methylphenol	3333	0.0000	2861	86	45-115
2-Chloronaphthalene	3333	0.0000	2418	72	45-105
2-Chlorophenol	3333	0.0000	2747	82	45-105
4-Chlorophenyl-phenylet	3333	0.0000	2368	71	45-110
Chrysene	3333	0.0000	2895	87	55-110
Dibenz (a, h) anthracene	3333	0.0000	2453	74	40-125
Dibenzofuran	3333	0.0000	2735	82	50-105

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: SBLK0923BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
3,3'-Dichlorobenzidine	3333	0.0000	2664	80	19-130
2,4-Dichlorophenol	3333	0.0000	2495	75	45-110
Diethylphthalate	3333	0.0000	2993	90	50-115
2,4-Dimethylphenol	3333	0.0000	3041	91	30-105
Dimethylphthalate	3333	0.0000	2571	77	50-110
Di-n-butylphthalate	3333	48.78	2946	87	55-110
4,6-Dinitro-2-methylphe	3333	0.0000	2808	84	30-135
2,4-Dinitrophenol	3333	0.0000	2959	89	15-130
2,4-Dinitrotoluene	3333	0.0000	2991	90	50-115
2,6-Dinitrotoluene	3333	0.0000	2864	86	50-110
Di-n-octylphthalate	3333	0.0000	3168	95	40-130
Fluoranthene	3333	0.0000	2564	77	55-115
Fluorene	3333	0.0000	2785	84	50-110
Hexachlorobenzene	3333	0.0000	2565	77	45-120
Hexachlorobutadiene	3333	0.0000	2202	66	30-110
Hexachlorocyclopentadie	3333	0.0000	2155	65	10-110
Hexachloroethane	3333	0.0000	2104	63	35-110
Indeno(1,2,3-cd)pyrene	3333	0.0000	2278	68	40-120
Isophorone	3333	0.0000	2439	73	45-110
2-Methylnaphthalene	3333	0.0000	2806	84	40-110
2-Methylphenol	3333	0.0000	2265	68	40-105
4-Methylphenol	3333	0.0000	2385	72	40-105
Naphthalene	3333	0.0000	2581	77	40-105
2-Nitroaniline	3333	0.0000	3039	91	45-120
3-Nitroaniline	3333	0.0000	2739	82	25-110
4-Nitroaniline	3333	0.0000	2652	80	35-115
Nitrobenzene	3333	0.0000	2303	69	40-115
2-Nitrophenol	3333	0.0000	2565	77	40-110

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: SBLK0923BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
4-Nitrophenol	3333	0.0000	3010	90	15-140
N-Nitrosodiphenylamine	3333	0.0000	2307	69	50-115
N-Nitroso-di-n-prop. (1)	3333	0.0000	2387	72	40-115
Pentachlorophenol	3333	0.0000	2593	78	25-120
Phenanthrene	3333	0.0000	2651	80	50-110
Phenol	3333	0.0000	2369	71	40-100
Pyrene	3333	0.0000	2950	88	45-125
1,2,4,5-Tetrachlorobenz	3333	0.0000	2683	80	50-150
2,4,5-Trichlorophenol	3333	0.0000	2513	75	50-110
2,4,6-Trichlorophenol	3333	0.0000	2618	78	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 66 outside limits

COMMENTS: _____

FORM 3
 WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC. LIMITS REC.
Acenaphthene	46.30	0.0000	33.73	73	45-110
Acenaphthylene	46.30	0.0000	39.32	85	50-105
Acetophenone	46.30	0.0000	28.23	61	50-110
Atrazine	46.30	0.0000	36.24	78	70-115
Anthracene	46.30	0.0000	36.54	79	55-110
Benzaldehyde	46.30	0.0000	44.17	95	10-180
Benzo (a) anthracene	46.30	0.0000	37.61	81	55-110
Benzo (b) fluoranthene	46.30	0.0000	37.89	82	45-120
Benzo (k) fluoranthene	46.30	0.0000	38.46	83	45-125
Benzo (g, h, i) perylene	46.30	0.0000	34.00	73	40-125
Benzo (a) pyrene	46.30	0.0000	38.56	83	55-110
1,1'-Biphenyl	46.30	0.0000	30.39	66	50-110
bis (2-Chloroethoxy) meth	46.30	0.0000	34.43	74	45-105
bis (2-Chloroethyl) ether	46.30	0.0000	28.77	62	35-110
bis (2-Chloroisopropyl) e	46.30	0.0000	28.33	61	25-130
Bis (2-ethylhexyl) phthal	46.30	1.673	42.78	89	40-125
4-Bromophenyl-phenyleth	46.30	0.0000	26.80	58	50-115
Butylbenzylphthalate	46.30	0.0000	46.04	99	45-115
Caprolactam	46.30	0.0000	6.266	14*	20-110
4-Chloroaniline	46.30	0.0000	30.22	65	15-110
4-Chloro-3-methylphenol	46.30	0.0000	37.15	80	45-110
2-Chloronaphthalene	46.30	0.0000	32.54	70	50-105
2-Chlorophenol	46.30	0.0000	27.88	60	35-105
4-Chlorophenyl-phenylet	46.30	0.0000	30.93	67	50-110
Chrysene	46.30	0.0000	38.32	83	55-110
Dibenz (a, h) anthracene	46.30	0.0000	33.90	73	40-125
Dibenzofuran	46.30	0.0000	33.45	72	55-105
3,3'-Dichlorobenzidine	46.30	0.0000	20.13	43	20-110

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC. LIMITS REC.
2,4-Dichlorophenol	46.30	0.0000	34.81	75	50-105
Diethylphthalate	46.30	0.0000	32.56	70	40-120
2,4-Dimethylphenol	46.30	0.0000	40.58	88	30-110
Dimethylphthalate	46.30	0.0000	32.31	70	25-125
Di-n-butylphthalate	46.30	0.0000	35.10	76	55-115
4,6-Dinitro-2-methylphe	46.30	0.0000	38.26	83	40-130
2,4-Dinitrophenol	46.30	0.0000	38.85	84	15-140
2,4-Dinitrotoluene	46.30	0.0000	36.34	78	50-120
2,6-Dinitrotoluene	46.30	0.0000	35.20	76	50-115
Di-n-octylphthalate	46.30	0.0000	40.06	86	35-135
Fluoranthene	46.30	0.0000	35.18	76	55-115
Fluorene	46.30	0.0000	32.35	70	50-110
Hexachlorobenzene	46.30	0.0000	37.58	81	50-110
Hexachlorobutadiene	46.30	0.0000	32.32	70	25-105
Hexachlorocyclopentadie	46.30	0.0000	30.64	66	10-110
Hexachloroethane	46.30	0.0000	26.69	58	30- 95
Indeno (1,2,3-cd) pyrene	46.30	0.0000	35.73	77	45-125
Isophorone	46.30	0.0000	32.23	70	50-110
2-Methylnaphthalene	46.30	0.0000	37.53	81	45-105
Naphthalene	46.30	0.0000	34.05	74	40-100
2-Methylphenol	46.30	0.0000	23.05	50	40-110
4-Methylphenol	46.30	0.0000	19.78	43	30-110
2-Nitroaniline	46.30	0.0000	34.73	75	50-115
3-Nitroaniline	46.30	0.0000	28.51	62	20-125
4-Nitroaniline	46.30	0.0000	28.98	62	35-120
Nitrobenzene	46.30	0.0000	28.98	62	45-110
2-Nitrophenol	46.30	0.0000	34.54	75	40-115
4-Nitrophenol	46.30	0.0000	8.311	18	0-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
 WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC. LIMITS REC.
N-Nitrosodiphenylamine	46.30	0.0000	30.73	66	50-110
N-Nitroso-di-n-prop. (1)	46.30	0.0000	28.69	62	35-130
Pentachlorophenol	46.30	0.0000	37.38	81	40-115
Phenanthrene	46.30	0.0000	33.91	73	50-115
Phenol	46.30	0.0000	9.784	21	0-115
Pyrene	46.30	0.0000	46.80	101	50-130
1,2,4,5-Tetrachlorobenz	46.30	0.0000	33.60	72	50-125
2,4,5-Trichlorophenol	46.30	0.0000	34.45	74	50-110
2,4,6-Trichlorophenol	46.30	0.0000	32.76	71	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	46.30	35.11	76	4	30	45-110
Acenaphthylene	46.30	40.76	88	4	30	50-105
Acetophenone	46.30	29.65	64	5	30	50-110
Atrazine	46.30	37.10	80	2	30	70-115
Anthracene	46.30	37.67	81	3	30	55-110
Benzaldehyde	46.30	48.24	104	9	30	10-180
Benzo(a)anthracene	46.30	39.00	84	4	30	55-110
Benzo(b)fluoranthene	46.30	44.34	96	16	30	45-120
Benzo(k)fluoranthene	46.30	42.06	91	9	30	45-125
Benzo(g,h,i)perylene	46.30	38.99	84	14	30	40-125
Benzo(a)pyrene	46.30	41.05	89	6	30	55-110
1,1'-Biphenyl	46.30	31.09	67	2	30	50-110
bis(2-Chloroethoxy)meth	46.30	34.47	74	0	30	45-105
bis(2-Chloroethyl) ether	46.30	31.69	68	10	30	35-110
bis(2-Chloroisopropyl) e	46.30	31.66	68	11	30	25-130
Bis(2-ethylhexyl)phthal	46.30	44.80	93	5	30	40-125
4-Bromophenyl-phenyleth	46.30	28.24	61	5	30	50-115
Butylbenzylphthalate	46.30	46.54	100	1	30	45-115
Caprolactam	46.30	6.870	15*	9	30	20-110
4-Chloroaniline	46.30	27.30	59	10	30	15-110
4-Chloro-3-methylphenol	46.30	36.82	80	1	30	45-110
2-Chloronaphthalene	46.30	33.88	73	4	30	50-105
2-Chlorophenol	46.30	32.08	69	14	30	35-105
4-Chlorophenyl-phenylet	46.30	36.89	80	18	30	50-110
Chrysene	46.30	39.21	85	2	30	55-110
Dibenz(a,h)anthracene	46.30	40.25	87	17	30	40-125
Dibenzofuran	46.30	36.94	80	10	30	55-105
3,3'-Dichlorobenzidine	46.30	23.39	50	15	30	20-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-Dichlorophenol	46.30	33.83	73	3	30	50-105
Diethylphthalate	46.30	37.44	81	14	30	40-120
2,4-Dimethylphenol	46.30	41.67	90	3	30	30-110
Dimethylphthalate	46.30	34.28	74	6	30	25-125
Di-n-butylphthalate	46.30	35.30	76	0	30	55-115
4,6-Dinitro-2-methylphe	46.30	41.60	90	8	30	40-130
2,4-Dinitrophenol	46.30	40.52	88	4	30	15-140
2,4-Dinitrotoluene	46.30	39.95	86	9	30	50-120
2,6-Dinitrotoluene	46.30	36.78	79	4	30	50-115
Di-n-octylphthalate	46.30	42.94	93	7	30	35-135
Fluoranthene	46.30	38.99	84	10	30	55-115
Fluorene	46.30	38.21	82	17	30	50-110
Hexachlorobenzene	46.30	36.57	79	3	30	50-110
Hexachlorobutadiene	46.30	31.96	69	1	30	25-105
Hexachlorocyclopentadie	46.30	34.07	74	11	30	10-110
Hexachloroethane	46.30	29.38	63	10	30	30- 95
Indeno (1,2,3-cd) pyrene	46.30	40.32	87	12	30	45-125
Isophorone	46.30	34.42	74	6	30	50-110
2-Methylnaphthalene	46.30	39.65	86	5	30	45-105
Naphthalene	46.30	32.70	71	4	30	40-100
2-Methylphenol	46.30	25.54	55	10	30	40-110
4-Methylphenol	46.30	20.53	44	4	30	30-110
2-Nitroaniline	46.30	36.17	78	4	30	50-115
3-Nitroaniline	46.30	29.00	63	2	30	20-125
4-Nitroaniline	46.30	30.86	67	6	30	35-120
Nitrobenzene	46.30	29.83	64	3	30	45-110
2-Nitrophenol	46.30	34.27	74	1	30	40-115
4-Nitrophenol	46.30	11.72	25	34*	30	0-125

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS:

FORM 3
 WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
N-Nitrosodiphenylamine	46.30	32.54	70	6	30	50-110
N-Nitroso-di-n-prop. (1)	46.30	30.42	66	6	30	35-130
Pentachlorophenol	46.30	39.51	85	6	30	40-115
Phenanthrene	46.30	35.27	76	4	30	50-115
Phenol	46.30	10.33	22	5	30	0-115
Pyrene	46.30	45.47	98	3	30	50-130
1,2,4,5-Tetrachlorobenz	46.30	33.93	73	1	30	50-125
2,4,5-Trichlorophenol	46.30	36.69	79	6	30	50-110
2,4,6-Trichlorophenol	46.30	34.56	75	5	30	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 1 out of 65 outside limits
 Spike Recovery: 2 out of 130 outside limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03
 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
Acenaphthene	3663	0.0000	2488	68	45-110
Acenaphthylene	3663	0.0000	3042	83	45-105
Acetophenone	3663	0.0000	1626	44	35-110
Anthracene	3663	0.0000	3113	85	55-105
Atrazine	3663	0.0000	2819	77	55-105
Benzaldehyde	3663	0.0000	1994	54	10-160
Benzo (a) anthracene	3663	0.0000	3440	94	50-110
Benzo (b) fluoranthene	3663	0.0000	3127	85	45-115
Benzo (k) fluoranthene	3663	0.0000	3177	87	45-125
Benzo (g, h, i) perylene	3663	0.0000	2333	64	40-125
Benzo (a) pyrene	3663	0.0000	3369	92	50-110
bis (2-Chloroethoxy) meth 1,1'-Biphenyl	3663	0.0000	2555	70	45-110
bis (2-Chloroethyl) ether	3663	0.0000	2160	59	45-110
bis (2-Chloroisopropyl) e	3663	0.0000	2230	61	40-105
Bis (2-ethylhexyl) phthal	3663	199.5	2504	68	20-115
4-Bromophenyl-phenyleth	3663	0.0000	4346	113	45-125
Butylbenzylphthalate	3663	0.0000	2196	60	45-115
Carbazole	3663	0.0000	3942	108	50-125
4-Chloroaniline	3663	0.0000	2675	73	45-115
Caprolactam	3663	0.0000	2527	69	10- 95
4-Chloro-3-methylphenol	3663	0.0000	3072	84	50-110
2-Chloronaphthalene	3663	0.0000	2875	78	45-115
2-Chlorophenol	3663	0.0000	2430	66	45-105
4-Chlorophenyl-phenylet	3663	0.0000	2481	68	45-105
Chrysene	3663	0.0000	2496	68	45-110
Dibenz (a, h) anthracene	3663	0.0000	3432	94	55-110
Dibenzofuran	3663	0.0000	2572	70	40-125
			2540	69	50-105

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
3,3'-Dichlorobenzidine	3663	0.0000	3294	90	19-130
2,4-Dichlorophenol	3663	0.0000	2238	61	45-110
Diethylphthalate	3663	0.0000	2861	78	50-115
2,4-Dimethylphenol	3663	0.0000	3031	83	30-105
Dimethylphthalate	3663	0.0000	2435	66	50-110
Di-n-butylphthalate	3663	190.2	3115	80	55-110
4,6-Dinitro-2-methylphe	3663	0.0000	3400	93	30-135
2,4-Dinitrophenol	3663	0.0000	3185	87	15-130
2,4-Dinitrotoluene	3663	0.0000	3083	84	50-115
2,6-Dinitrotoluene	3663	0.0000	2615	71	50-110
Di-n-octylphthalate	3663	0.0000	3812	104	40-130
Fluoranthene	3663	0.0000	3079	84	55-115
Fluorene	3663	0.0000	2808	77	50-110
Hexachlorobenzene	3663	0.0000	3004	82	45-120
Hexachlorobutadiene	3663	0.0000	1898	52	30-110
Hexachlorocyclopentadie	3663	0.0000	2052	56	10-110
Hexachloroethane	3663	0.0000	2033	56	35-110
Indeno(1,2,3-cd)pyrene	3663	0.0000	2413	66	40-120
Isophorone	3663	0.0000	2446	67	45-110
2-Methylnaphthalene	3663	0.0000	2597	71	40-110
2-Methylphenol	3663	0.0000	2287	62	40-105
4-Methylphenol	3663	0.0000	2298	63	40-105
Naphthalene	3663	0.0000	2315	63	40-105
2-Nitroaniline	3663	0.0000	2830	77	45-120
3-Nitroaniline	3663	0.0000	2992	82	25-110
4-Nitroaniline	3663	0.0000	3052	83	35-115
Nitrobenzene	3663	0.0000	2126	58	40-115
2-Nitrophenol	3663	0.0000	2381	65	40-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS:

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC. LIMITS REC.
4-Nitrophenol	3663	0.0000	3357	92	15-140
N-Nitrosodiphenylamine	3663	0.0000	2716	74	50-115
N-Nitroso-di-n-prop. (1)	3663	0.0000	2252	61	40-115
Pentachlorophenol	3663	0.0000	3160	86	25-120
Phenanthrene	3663	0.0000	2999	82	50-110
Phenol	3663	0.0000	2291	62	40-100
Pyrene	3663	0.0000	3572	98	45-125
1,2,4,5-Tetrachlorobenz	3663	0.0000	2462	67	50-150
2,4,5-Trichlorophenol	3663	0.0000	2547	70	50-110
2,4,6-Trichlorophenol	3663	0.0000	2395	65	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	3663	2042	56	20	30	45-110
Acenaphthylene	3663	2302	63	28	30	45-105
Acetophenone	3663	1187	32*	31*	30	35-110
Anthracene	3663	2867	78	8	30	55-105
Atrazine	3663	2861	78	1	30	55-105
Benzaldehyde	3663	1412	38	34*	30	10-160
Benzo (a) anthracene	3663	3241	88	6	30	50-110
Benzo (b) fluoranthene	3663	3375	92	8	30	45-115
Benzo (k) fluoranthene	3663	3290	90	3	30	45-125
Benzo (g, h, i) perylene	3663	2531	69	8	30	40-125
Benzo (a) pyrene	3663	3539	97	5	30	50-110
bis (2-Chloroethoxy) meth	3663	1929	53	28	30	45-110
1,1'-Biphenyl	3663	1830	50	16	30	45-110
bis (2-Chloroethyl) ether	3663	1780	48	22	30	40-105
bis (2-Chloroisopropyl) e	3663	1992	54	23	30	20-115
Bis (2-ethylhexyl) phthal	3663	3994	104	8	30	45-125
4-Bromophenyl-phenyleth	3663	1814	50	19	30	45-115
Butylbenzylphthalate	3663	4023	110	2	30	50-125
Carbazole	3663	2797	76	4	30	45-115
4-Chloroaniline	3663	2088	57	19	30	10- 95
Caprolactam	3663	2850	78	7	30	50-110
4-Chloro-3-methylphenol	3663	2271	62	23	30	45-115
2-Chloronaphthalene	3663	1912	52	24	30	45-105
2-Chlorophenol	3663	2018	55	20	30	45-105
4-Chlorophenyl-phenylet	3663	1946	53	25	30	45-110
Chrysene	3663	3068	84	11	30	55-110
Dibenz (a, h) anthracene	3663	2625	72	2	30	40-125
Dibenzofuran	3663	2023	55	23	30	50-105

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
3,3'-Dichlorobenzidine	3663	3042	83	8	30	19-130
2,4-Dichlorophenol	3663	1934	53	14	30	45-110
Diethylphthalate	3663	2642	72	8	30	50-115
2,4-Dimethylphenol	3663	2504	68	19	30	30-105
Dimethylphthalate	3663	2024	55	18	30	50-110
Di-n-butylphthalate	3663	3010	77	3	30	55-110
4,6-Dinitro-2-methylphe	3663	2986	82	13	30	30-135
2,4-Dinitrophenol	3663	2723	74	16	30	15-130
2,4-Dinitrotoluene	3663	2749	75	11	30	50-115
2,6-Dinitrotoluene	3663	2192	60	18	30	50-110
Di-n-octylphthalate	3663	3983	109	4	30	40-130
Fluoranthene	3663	2870	78	7	30	55-115
Fluorene	3663	2150	59	26	30	50-110
Hexachlorobenzene	3663	2613	71	14	30	45-120
Hexachlorobutadiene	3663	1536	42	21	30	30-110
Hexachlorocyclopentadie	3663	1651	45	22	30	10-110
Hexachloroethane	3663	1531	42	28	30	35-110
Indeno(1,2,3-cd)pyrene	3663	2628	72	8	30	40-120
Isophorone	3663	1958	53	22	30	45-110
2-Methylnaphthalene	3663	2189	60	17	30	40-110
2-Methylphenol	3663	1766	48	26	30	40-105
4-Methylphenol	3663	1755	48	27	30	40-105
Naphthalene	3663	2022	55	14	30	40-105
2-Nitroaniline	3663	2462	67	14	30	45-120
3-Nitroaniline	3663	2656	72	12	30	25-110
4-Nitroaniline	3663	3162	86	4	30	35-115
Nitrobenzene	3663	1790	49	17	30	40-115
2-Nitrophenol	3663	1912	52	22	30	40-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
4-Nitrophenol	3663	3285	90	2	30	15-140
N-Nitrosodiphenylamine	3663	2218	60	20	30	50-115
N-Nitroso-di-n-prop. (1)	3663	1707	47	28	30	40-115
Pentachlorophenol	3663	2864	78	10	30	25-120
Phenanthrene	3663	2674	73	11	30	50-110
Phenol	3663	1712	47	29	30	40-100
Pyrene	3663	3330	91	7	30	45-125
1,2,4,5-Tetrachlorobenz	3663	2177	59	12	30	50-150
2,4,5-Trichlorophenol	3663	2085	57	20	30	50-110
2,4,6-Trichlorophenol	3663	1980	54	19	30	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 2 out of 66 outside limits
Spike Recovery: 1 out of 132 outside limits

COMMENTS: _____

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID (Standard): CCV050W Date Analyzed: 09/18/08

Instrument ID: BNA1 Time Analyzed: 0830

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1229930	5.12	3682699	6.36	1976047	9.30
UPPER LIMIT	2459860	5.62	7365398	6.86	3952094	9.80
LOWER LIMIT	614965	4.62	1841350	5.86	988024	8.80
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0915BW1L	1307421	5.12	3875357	6.37	2234008	9.30
02 SBLK0915BW1	1195551	5.12	3824663	6.36	2010949	9.29
03 01GW2301	1414201	5.12	4315171	6.36	2388017	9.30
04 01GW2201	1444168	5.12	4238735	6.36	2221467	9.30
05 01GW2501	1426656	5.12	4198604	6.36	2396456	9.30
06 01GW2401	1541926	5.12	4419910	6.36	2602837	9.30
07 01GW2701	1493225	5.12	4388442	6.36	2527897	9.30
08 01GW2601	1540215	5.12	4223127	6.36	2390445	9.30
09 01RB090908	1883371	5.13	5704457	6.37	3275879	9.31
10 01RB091108	1475196	5.12	4338676	6.37	2365299	9.30
11 01GW2201MS	1574810	5.12	4596576	6.37	2682340	9.31
12 01GW2201MSD	1434480	5.12	4371667	6.37	2399075	9.31
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID (Standard): CCV050W Date Analyzed: 09/18/08

Instrument ID: BNA1 Time Analyzed: 0830

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	2658837	12.94	2217028	20.49	1600383	24.64
UPPER LIMIT	5317674	13.44	4434056	20.99	3200766	25.14
LOWER LIMIT	1329419	12.44	1108514	19.99	800192	24.14
CLIENT SAMPLE NO.						
01 SBLK0915BW1L	3041069	12.94	2288024	20.49	1757320	24.64
02 SBLK0915BW1	2683618	12.93	2233648	20.47	1781774	24.63
03 01GW2301	3202590	12.95	2685447	20.48	1772801	24.63
04 01GW2201	3195355	12.94	2608089	20.48	1964301	24.63
05 01GW2501	3226780	12.94	2733968	20.49	2007229	24.63
06 01GW2401	3510247	12.95	3017406	20.49	2271568	24.64
07 01GW2701	3338814	12.95	2374372	20.49	1568660	24.64
08 01GW2601	3475068	12.95	2613558	20.48	1806445	24.64
09 01RB090908	4555706	12.95	3393271	20.49	2489812	24.64
10 01RB091108	3282651	12.95	2746713	20.48	1980833	24.64
11 01GW2201MS	3643082	12.96	2599751	20.51	1894219	24.64
12 01GW2201MSD	3422093	12.96	2561627	20.51	1963569	24.65
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID (Standard): CCV050S Date Analyzed: 09/23/08

Instrument ID: BNA1 Time Analyzed: 0936

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	1106229	5.05	3540961	6.28	1877275	9.18
UPPER LIMIT	2212458	5.55	7081922	6.78	3754550	9.68
LOWER LIMIT	553115	4.55	1770481	5.78	938638	8.68
CLIENT SAMPLE NO.						
01 SBLK0923BS1	1260980	5.05	3623990	6.28	2121354	9.18
02 SBLK0923BS1L	1233516	5.06	3648367	6.28	1861201	9.18
03 01SS0701	1776054	5.06	4785915	6.28	2874292	9.19
04 01SS0801	1216305	5.06	3794776	6.28	2134722	9.18
05 01SS0701MS	1189993	5.06	3734661	6.29	1953056	9.18
06 01SS0701MSD	1160949	5.05	3500135	6.28	1902343	9.18
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Lab File ID (Standard): CCV050S Date Analyzed: 09/23/08
 Instrument ID: BNA1 Time Analyzed: 0936

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	2477919	12.81	2101216	20.34	1756897	24.49
UPPER LIMIT	4955838	13.31	4202432	20.84	3513794	24.99
LOWER LIMIT	1238960	12.31	1050608	19.84	878449	23.99
CLIENT SAMPLE NO.						
01 SBLK0923BS1	2658806	12.81	2028355	20.32	1368596	24.48
02 SBLK0923BS1L	2756562	12.81	2115503	20.35	1714542	24.49
03 01SS0701	3826418	12.81	2980386	20.33	1656694	24.49
04 01SS0801	2703925	12.81	1722416	20.33	1254566	24.48
05 01SS0701MS	2680628	12.82	2007803	20.35	1712027	24.49
06 01SS0701MSD	2651829	12.81	2109805	20.35	1595827	24.50
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID (Standard): CCV050S Date Analyzed: 09/24/08

Instrument ID: BNA1 Time Analyzed: 1043

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	1159472	5.03	3346838	6.25	1897417	9.14
UPPER LIMIT	2318944	5.53	6693676	6.75	3794834	9.64
LOWER LIMIT	579736	4.53	1673419	5.75	948709	8.64
CLIENT SAMPLE NO.						
01 01SS1001	1331263	5.03	3801035	6.25	2220840	9.14
02 01SS1101	1269347	5.03	3925383	6.25	2063332	9.14
03 01SS1201	1301813	5.03	3959876	6.25	2148523	9.14
04 01SS0901	1587812	5.04	4419326	6.25	2620864	9.14
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
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AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011

Lab File ID (Standard): CCV050S Date Analyzed: 09/24/08

Instrument ID: BNA1 Time Analyzed: 1043

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2507914	12.76	2053701	20.30	1927244	24.44
UPPER LIMIT	5015828	13.26	4107402	20.80	3854488	24.94
LOWER LIMIT	1253957	12.26	1026851	19.80	963622	23.94
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 01SS1001	2648986	12.76	2269987	20.28	1666628	24.43
02 01SS1101	2821630	12.76	2449849	20.28	1818075	24.44
03 01SS1201	2792491	12.77	2393769	20.29	1189592	24.43
04 01SS0901	3450013	12.77	2950587	20.29	1777704	24.44
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

Pesticides/PCB Section

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-011

Date Sampled	Date Received	Lab ID	Client ID
9/9/2008	9/10/2008	0809091-02	01GW2301
9/9/2008	9/10/2008	0809091-03	01GW2201
9/9/2008	9/10/2008	0809091-04	01GW2501
9/9/2008	9/10/2008	0809091-05	01GW2401
9/9/2008	9/10/2008	0809091-06	01GW2701
9/9/2008	9/10/2008	0809091-07	01GW2601
9/9/2008	9/10/2008	0809091-08	01RB090908
9/11/2008	9/12/2008	0809127-02	01RB091108
9/11/2008	9/12/2008	0809127-03	01SS0701
9/11/2008	9/12/2008	0809127-04	01SS0801
9/11/2008	9/12/2008	0809127-05	01SS0901
9/11/2008	9/12/2008	0809127-06	01SS1001
9/11/2008	9/12/2008	0809127-07	01SS1101
9/11/2008	9/12/2008	0809127-08	01SS1201

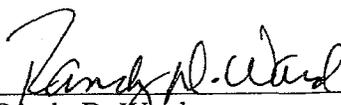
Pesticides/PCBs

Method: The samples were analyzed by USEPA SW-846 Methods 3541/8081A/8082 (sonication extraction followed by capillary column GC/ECD) for soils or by USEPA SW-846 Methods 3510C/8081A/8082 (separatory funnel extraction followed by capillary column GC/ECD) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101 and 01SS1201 were extracted 19 days after date sampled due to samples not being logged in upon receipt. Client was contacted and requested extraction and analysis out of USEPA holding time.
- Analyses of the samples were completed using full calibration for 1016/1260. As no other aroclor patterns were identified, no other aroclor calibration checks were performed.
- PCB-1260 exceeded the 20%D limit with a positive bias in several continuing calibration verifications (CCVs); however, no positive results for 1260 were detected in the samples associated to the CCVs with exceedences.
- In spike samples 01SS0701MS/MSD, alpha-BHC exceeded the limit of 125% at (119%)/126%. All other recoveries and relative percent differences were within limits.
- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.



Randy D. Ward
Quality Assurance Officer

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		1660 2500 #7	09/02/08	1715		
02		1660 1000 #7	09/02/08	1734		
03		1660 750 #70	09/02/08	1752		
04		1660 500 #70	09/02/08	1811		
05		1660 100 #70	09/02/08	1829		
06		1660 50 #701	09/02/08	1848		
07		1660 25 #701	09/02/08	1907		
08		1660 ICV #70	09/02/08	1925		
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QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1016	✕ 331.520	✕ 328.960	AVRG	314.750324	5.0
(2)	139.080	✕ 138.560	AVRG	121.464429	13.3
(3)	206.840	209.040	AVRG	177.865190	14.2
(4)	184.040	173.760	AVRG	168.628105	7.2
(5)	157.700	156.120	AVRG	140.035410	11.3
PCB-1260	✕ 801.460	785.640	AVRG	740.246010	6.6
(2)	394.500	388.280	AVRG	371.971038	4.0
(3)	394.240	420.880	AVRG	390.447952	4.6
(4)	419.580	✕ 425.320	AVRG	365.232495	12.7
(5)	✕ 192.240	181.040	AVRG	175.292514	6.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF200: 002F0201 RF100: 003F0301 RF50: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X 289.530	X 304.446	X 310.499	X 308.318	X 329.980
(2)	X 100.046	110.173	110.468	115.384	X 136.540
(3)	146.044	160.131	X 162.537	165.754	194.710
(4)	150.902	162.787	161.801	164.146	182.960
(5)	118.721	128.850	130.063	133.854	154.940
PCB-1260	663.940	X 740.973	714.971	X 704.398	770.340
(2)	360.194	372.681	365.631	353.442	369.070
(3)	380.368	407.299	380.739	377.810	371.800
(4)	308.501	335.758	335.611	339.168	X 392.690
(5)	X 161.922	X 178.522	X 168.228	X 165.726	179.370

J.H. 9.4.08
BM Sep 08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT6: 007F0701 RT7: 008F0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	5.890	5.890	5.890	5.860	5.920
(2)	5.040	5.040	5.040	5.009	5.069
(3)	5.380	5.380	5.380	5.349	5.409
(4)	6.070	6.070	6.070	6.040	6.100
(5)	6.170	6.170	6.170	6.139	6.199
PCB-1260	9.160	9.160	9.154	9.120	9.180
(2)	8.040	8.040	8.037	8.002	8.062
(3)	8.390	8.390	8.389	8.355	8.415
(4)	8.470	8.470	8.470	8.439	8.499
(5)	10.260	10.260	10.253	10.220	10.280

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/23/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.09		S2 : 11.47	
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #
01	AB/SUR 200#7	09/23/08	1128	5.09	11.47
02	AB/SUR 100#7	09/23/08	1147	5.09	11.47
03	AB/SUR 50#71	09/23/08	1205	5.09	11.47
04	AB/SUR 25#71	09/23/08	1223	5.09	11.47
05	AB/SUR 10#71	09/23/08	1242	5.09	11.47
06	AB/SUR 5#718	09/23/08	1300	5.09	11.47
07	AB/SUR 1#735	09/23/08	1318	5.09	11.47
08	AB/ICV #7357	09/23/08	1337		
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32					

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RF5: 008F0801 RF1: 009F0901

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R^2
Aldrin	8490.200	7715.000	AVRG	8259.50143	3.2
Alpha-BHC	X10380.000	X9231.000	AVRG	9878.01643	3.5
Alpha-Chlordane	9082.400	8373.000	AVRG	8242.68786	5.2
Beta-BHC	4761.200	4380.000	AVRG	4083.23000	9.4
OK-4,4'-DDD	8388.800	4897.000	AVRG	6214.26500	17.7 OK <20%
4,4'-DDE	8310.600	6126.000	AVRG	7174.00000	9.0
4,4'-DDT	8631.000	6498.000	AVRG	6812.77929	12.3
Delta-BHC	9296.000	7587.000	AVRG	8419.42429	5.9
Dieldrin	8864.600	8299.000	AVRG	8358.30000	3.0
Endosulfan I	8357.800	7914.000	AVRG	7648.05786	5.1
Endosulfan II	10215.600	8282.000	AVRG	7904.14143	14.8
Endosulfan sulfate	9229.200	7835.000	AVRG	7137.84286	15.8 OK
Endrin	7015.000	6124.000	AVRG	6396.81071	4.5
Endrin Aldehyde	6142.400	6079.000	AVRG	5418.43500	9.7
Endrin Ketone	11391.200	9571.000	AVRG	8792.35786	15.8 OK
Gamma-BHC	9383.800	8551.000	AVRG	8843.90929	3.0
Gamma-Chlordane	8759.400	7861.000	AVRG	8145.42357	3.6
Heptachlor	9229.200	8876.000	AVRG	8590.11071	4.1
Heptachlor Epoxide	9713.400	8514.000	AVRG	8393.63929	8.0
Methoxychlor	4006.400	2563.000	AVRG	3025.46500	15.9 OK
TCMX	8129.200	8370.000	AVRG	7349.90786	9.3
DCB	8343.800	7873.000	AVRG	6456.21786	19.0 OK

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: (ZB MR-1) ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RF200: 003F0301 RF100: 004F0401 RF50: 005F0501
RF25: 006F0601 RF10: 007F0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
=====	=====	=====	=====	=====	=====
Aldrin	8271.060	8404.210	8424.640	8337.200	8174.200
Alpha-BHC	X 9766.215	X 9894.200	X 9957.080	X 9978.120	X 9939.500
Alpha-Chlordane	7838.085	7906.390	7944.200	8199.440	8355.300
Beta-BHC	3726.650	3759.180	3854.740	3889.240	4211.600
4,4'-DDD	5953.045	5765.050	5820.160	5924.400	6751.400
4,4'-DDE	7210.130	7059.430	6946.620	7168.720	7396.500
4,4'-DDT	6530.445	6367.150	6220.480	6452.280	6990.100
Delta-BHC	8368.920	8360.890	8436.680	8397.280	8489.200
Dieldrin	8132.810	8168.330	8235.840	8383.120	8424.400
Endosulfan I	7255.475	7325.970	7366.180	7628.080	7688.900
Endosulfan II	6955.380	6978.710	7092.020	7538.680	8266.600
Endosulfan Sulfate	6219.140	6217.320	6261.780	6709.560	7492.900
Endrin	6295.545	6331.970	6270.380	6356.480	6384.300
Endrin Aldehyde	4905.565	4962.500	4954.040	5348.040	5537.500
Endrin Ketone	7628.325	7624.340	7759.440	8303.200	9269.000
Gamma-BHC	φ 8656.835	φ 8752.070	φ 8833.620	φ 8787.840	φ 8942.200
Gamma-Chlordane	8028.005	8026.360	8018.600	8153.200	8171.400
Heptachlor	8200.445	8314.730	8494.780	8416.720	8598.900
Heptachlor Epoxide	7704.015	7883.960	8038.840	8273.760	8627.500
Methoxychlor	2896.415	2791.380	2780.000	2868.760	3272.300
=====	=====	=====	=====	=====	=====
TCMX	6615.125	6760.050	6887.760	7167.520	7519.700
DCB	5372.895	5353.150	5636.080	5887.600	6727.000

J.H. 9.24.08 JJ 9.30.08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RT1: 003F0301 RT2: 004F0401 RT3: 005F0501
RT4: 006F0601 RT5: 007F0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	6.890	6.890	6.890	6.890	6.890
Alpha-BHC	5.580	5.579	5.580	5.580	5.580
Alpha-Chlordane	7.790	7.787	7.790	7.790	7.790
Beta-BHC	6.190	6.192	6.190	6.190	6.190
4,4'-DDD	8.660	8.662	8.660	8.660	8.660
4,4'-DDE	7.990	7.990	7.990	7.990	7.990
4,4'-DDT	9.040	9.037	9.030	9.030	9.030
Delta-BHC	6.460	6.464	6.460	6.460	6.460
Dieldrin	8.210	8.210	8.210	8.210	8.210
Endosulfan I	7.870	7.870	7.870	7.870	7.870
Endosulfan II	8.820	8.817	8.820	8.810	8.820
Endosulfan Sulfate	9.280	9.279	9.280	9.280	9.280
Endrin	8.510	8.507	8.510	8.510	8.510
Endrin Aldehyde	8.990	8.987	8.980	8.980	8.980
Endrin Ketone	9.920	9.925	9.920	9.920	9.920
Gamma-BHC	5.930	5.934	5.930	5.930	5.930
Gamma-Chlordane	7.700	7.704	7.700	7.700	7.700
Heptachlor	6.510	6.510	6.510	6.510	6.510
Heptachlor Epoxide	7.410	7.405	7.400	7.410	7.400
Methoxychlor	9.650	9.654	9.650	9.650	9.650
TCMX	5.090	5.087	5.090	5.090	5.090
DCB	11.470	11.468	11.470	11.470	11.470

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RT6: 008F0801 RT7: 009F0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	6.890	6.890	6.890	6.860	6.920
Alpha-BHC	5.580	5.580	5.580	5.549	5.609
Alpha-Chlordane	7.790	7.790	7.790	7.757	7.817
Beta-BHC	6.190	6.190	6.190	6.162	6.222
4,4'-DDD	8.660	8.670	8.662	8.632	8.692
4,4'-DDE	7.990	7.990	7.990	7.960	8.020
4,4'-DDT	9.040	9.040	9.035	9.007	9.067
Delta-BHC	6.460	6.460	6.460	6.434	6.494
Dieldrin	8.210	8.210	8.210	8.180	8.240
Endosulfan I	7.870	7.870	7.870	7.840	7.900
Endosulfan II	8.820	8.820	8.818	8.787	8.847
Endosulfan Sulfate	9.280	9.280	9.280	9.249	9.309
Endrin	8.510	8.510	8.510	8.477	8.537
Endrin Aldehyde	8.990	8.990	8.985	8.957	9.017
Endrin Ketone	9.920	9.930	9.922	9.895	9.955
Gamma-BHC	5.930	5.930	5.931	5.904	5.964
Gamma-Chlordane	7.700	7.700	7.700	7.674	7.734
Heptachlor	6.510	6.510	6.510	6.480	6.540
Heptachlor Epoxide	7.410	7.400	7.405	7.375	7.435
Methoxychlor	9.650	9.660	9.652	9.624	9.684
=====	=====	=====	=====	=====	=====
TCMX	5.090	5.090	5.090	5.056	5.116
DCB	11.470	11.470	11.470	11.443	11.503
=====	=====	=====	=====	=====	=====

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: CH2MHILL
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/29/08 - 09/30/08
 Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.09		S2 : 11.47	
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #
=====					
01		1660 1000 #7	09/29/08		
02		AB/D 100 #73	09/29/08		
03	MW1BLK0916	MW1BLK0916	09/29/08	5.09	11.47
04	MW1BLK0916LC	MW1BLK0916LC	09/29/08	5.09	11.47
05	MW1BLK0916LC	MW1BLK0916LC	09/29/08	5.09	11.47
06		AB/SUR 100 #	09/29/08	5.09	11.47
07		1660 1000 #7	09/29/08		
08	01GW2301	0809091-02	09/29/08	5.09	11.47
09	01GW2201	0809091-03	09/29/08	5.09	11.47
10	01GW2201MS	0809091-03MS	09/30/08	5.09	11.47
11	01GW2201MSD	0809091-03MS	09/30/08	5.09	11.47
12	01GW2201MS	0809091-03MS	09/30/08	5.09	11.47
13	01GW2201MSD	0809091-03MS	09/30/08	5.09	11.47
14	01GW2501	0809091-04	09/30/08	5.09	11.47
15	01GW2401	0809091-05	09/30/08	5.08	11.47
16	01GW2701	0809091-06	09/30/08	5.09	11.47
17	01GW2601	0809091-07	09/30/08	5.09	11.47
18	01RB090908	0809091-08	09/30/08	5.09	11.47
19	01RB091108	0809127-02	09/30/08	5.09	11.47
20		AB/SUR 100 #	09/30/08	5.09	11.47
21		1660 1000 #7	09/30/08		
22					

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 09/29/08
9.30.08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1932 2035

LAB FILE ID: RF5: 010F1001 RF1: 012F1201

← SINGLE POINT →

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	φ 256.330		AVRG	256.330000	0.0
	(2) 163.510		AVRG	163.510000	0.0
	(3) 118.070		AVRG	118.070000	0.0
	(4) 108.500		AVRG	108.500000	0.0
	(5) x 108.790		AVRG	108.790000	0.0

J.H. 9.30.08
 JJ 9.30.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 18:27
 Lab File ID: 003F0301.D Init. Cal. Date(s): 22-SEP-2006 23-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 13:18
 Lab Sample ID: 1660 1000 #7391 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	MAX RRF	%D	%D
29 PCB-1016(1)	315	Φ 309	0.010	-1.8	15.0	
(2)	121	110	0.010	-9.4	15.0	
(3)	178	163	0.010	-8.4	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	169	170	0.010	0.6	15.0	
(6)	140	140	0.010	0.2	15.0	
35 PCB-1260(1)	740	X 782	0.010	5.6	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	372	405	0.010	8.9	15.0	
(4)	390	406	0.010	3.9	15.0	
(5)	365	357	0.010	-2.3	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	175	179	0.010	2.4	15.0	

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 18:45
 Lab File ID: 004F0401.D Init. Cal. Date(s): 22-SEP-2006 23-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 13:18
 Lab Sample ID: AB/D 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
\$ 36 TCMX	7350	6824	0.010	-7.2	15.0	
3 Alpha-BHC	9878	10009	0.010	1.3	15.0	
23 Gamma-BHC	8844	X 8744	0.010	-1.1	15.0	
5 Beta-BHC	4083	3671	0.010	-10.1	15.0	
15 Delta-BHC	8419	8217	0.010	-2.4	15.0	
25 Heptachlor	8590	8591	0.010	0.0	15.0	
2 Aldrin	8260	8374	0.010	1.4	15.0	
26 Heptachlor Epoxide	8394	7909	0.010	-5.8	15.0	
24 Gamma-Chlordane	8145	8119	0.010	-0.3	15.0	
4 Alpha-Chlordane	8243	8133	0.010	-1.3	15.0	
17 Endosulfan I	7648	7569	0.010	-1.0	15.0	
13 4,4'-DDE	7174	6703	0.010	-6.6	15.0	
16 Dieldrin	8358	8494	0.010	1.6	15.0	
20 Endrin	6397	6180	0.010	-3.4	15.0	
12 4,4'-DDD	6214	5626	0.010	-9.5	15.0	
18 Endosulfan II	7904	7153	0.010	-9.5	15.0	
21 Endrin Aldehyde	5418	5349	0.010	-1.3	15.0	
14 4,4'-DDT	6813	6331	0.010	-7.1	15.0	
19 Endosulfan Sulfate	7138	6279	0.010	-12.0	15.0	
27 Methoxychlor	3025	2659	0.010	-12.1	15.0	
22 Endrin Ketone	8792	7717	0.010	-12.2	15.0	
\$ 37 DCB	6456	5433	0.010	-15.8	15.0	<- Low

Page 2
 J.H. 9.30.08
 JJ 9.30.08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 23:02
 Lab File ID: 018F1801.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
\$ 36 TCMX	7350	7084	0.010	-3.6	15.0	
3 Alpha-BHC	9878	10424	0.010	5.5	15.0	
23 Gamma-BHC	8844	9132	0.010	3.3	15.0	
5 Beta-BHC	4083	3853	0.010	-5.6	15.0	
15 Delta-BHC	8419	8686	0.010	3.2	15.0	
25 Heptachlor	8590	8728	0.010	1.6	15.0	
2 Aldrin	8260	8749	0.010	5.9	15.0	
26 Heptachlor Epoxide	8394	8226	0.010	-2.0	15.0	
24 Gamma-Chlordane	8145	8448	0.010	3.7	15.0	
4 Alpha-Chlordane	8243	8501	0.010	3.1	15.0	
17 Endosulfan I	7648	7866	0.010	2.8	15.0	
13 4,4'-DDE	7174	7319	0.010	2.0	15.0	
16 Dieldrin	8358	8770	0.010	4.9	15.0	
20 Endrin	6397	6296	0.010	-1.6	15.0	
12 4,4'-DDD	6214	6081	0.010	-2.1	15.0	
18 Endosulfan II	7904	7413	0.010	-6.2	15.0	
21 Endrin Aldehyde	5418	5642	0.010	4.1	15.0	
14 4,4'-DDT	6813	6275	0.010	-7.9	15.0	
19 Endosulfan Sulfate	7138	6534	0.010	-8.5	15.0	
27 Methoxychlor	3025	2692	0.010	-11.0	15.0	
22 Endrin Ketone	8792	8153	0.010	-7.3	15.0	
\$ 37 DCB	6456	5748	0.010	-11.0	15.0	

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 23:20
 Lab File ID: 019F1901.D Init. Cal. Date(s): ~~22-SEP-2006~~ 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
29 PCB-1016(1)	315	Φ 337	0.010	7.1
(2)	121	120	0.010	-1.4
(3)	178	177	0.010	-0.2
(4)	++++	++++	0.010	++++
(5)	169	183	0.010	8.8
(6)	140	153	0.010	9.1
35 PCB-1260(1)	740	X 847	0.010	14.4
(2)	++++	++++	0.010	++++
(3)	372	445	0.010	19.5
(4)	390	441	0.010	12.9
(5)	365	382	0.010	4.6
(6)	++++	++++	0.010	++++
(7)	++++	++++	0.010	++++
(8)	175	196	0.010	11.6

Φ
 12.6% D

J.H. 9.30.08
 >> 9.30.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 30-SEP-2008 03:20
 Lab File ID: 032F3201.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	7350	7230	0.010	-1.6	15.0
3 Alpha-BHC	9878	10636	0.010	7.7	15.0
23 Gamma-BHC	8844	9276	0.010	4.9	15.0
5 Beta-BHC	4083	3865	0.010	-5.3	15.0
15 Delta-BHC	8419	8865	0.010	5.3	15.0
25 Heptachlor	8590	8760	0.010	2.0	15.0
2 Aldrin	8260	8884	0.010	7.6	15.0
26 Heptachlor Epoxide	8394	8318	0.010	-0.9	15.0
24 Gamma-Chlordane	8145	8542	0.010	4.9	15.0
4 Alpha-Chlordane	8243	8576	0.010	4.0	15.0
17 Endosulfan I	7648	7909	0.010	3.4	15.0
13 4,4'-DDE	7174	7315	0.010	2.0	15.0
16 Dieldrin	8358	8940	0.010	7.0	15.0
20 Endrin	6397	6089	0.010	-4.8	15.0
12 4,4'-DDD	6214	6213	0.010	-0.0	15.0
18 Endosulfan II	7904	7539	0.010	-4.6	15.0
21 Endrin Aldehyde	5418	5770	0.010	6.5	15.0
14 4,4'-DDT	6813	5982	0.010	-12.2	15.0
19 Endosulfan Sulfate	7138	6604	0.010	-7.5	15.0
27 Methoxychlor	3025	2558	0.010	-15.5	15.0
22 Endrin Ketone	8792	8294	0.010	-5.7	15.0
\$ 37 DCB	6456	5831	0.010	-9.7	15.0

Low

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 30-SEP-2008 03:38
 Lab File ID: 033F3301.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
29 PCB-1016(1)	315	329	0.010	4.5	15.0	
(2)	121	117	0.010	-3.5	15.0	
(3)	178	171	0.010	-3.9	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	169	181	0.010	7.1	15.0	
(6)	140	149	0.010	6.7	15.0	
35 PCB-1260(1)	740	806	0.010	8.8	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	372	423	0.010	13.7	15.0	
(4)	390	426	0.010	9.1	15.0	
(5)	365	368	0.010	0.9	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	175	186	0.010	6.0	15.0	

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01		1660 2500 #7	09/02/08	1715		
02		1660 1000 #7	09/02/08	1734		
03		1660 750 #70	09/02/08	1752		
04		1660 500 #70	09/02/08	1811		
05		1660 100 #70	09/02/08	1829		
06		1660 50 #701	09/02/08	1848		
07		1660 25 #701	09/02/08	1907		
08		1660 ICV #70	09/02/08	1925		
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QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

OK

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1016	715.980	742.120	AVRG	619.733781	13.4
(2)	306.720	312.320	AVRG	249.324457	19.7
(3)	442.360	454.080	AVRG	378.622533	15.0
(4)	399.480	441.760	AVRG	346.305076	17.2
(5)	416.880	448.640	AVRG	359.359819	16.4
PCB-1260	1485.560	1299.280	AVRG	1342.38768	6.4
(2)	743.140	841.840	AVRG	732.574924	12.6
(3)	860.600	949.640	AVRG	846.650133	8.9
(4)	341.540	327.040	AVRG	305.651676	8.8
(5)	345.940	347.400	AVRG	317.249190	7.9

AVG 16.3%
20%
OK

13M
04 Sep 08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	4.620	4.624	4.620	4.620	4.630
(2)	4.000	4.002	4.000	4.000	4.000
(3)	4.410	4.411	4.410	4.410	4.410
(4)	4.770	4.774	4.770	4.770	4.770
(5)	4.860	4.857	4.860	4.860	4.860
PCB-1260	7.220	7.222	7.220	7.220	7.230
(2)	6.040	6.039	6.040	6.040	6.040
(3)	6.250	6.251	6.250	6.250	6.260
(4)	7.550	7.551	7.550	7.550	7.550
(5)	8.220	8.219	8.220	8.220	8.220

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
PCB-1016	4.630	4.630	4.625	4.594	4.654
(2)	4.000	4.000	4.000	3.972	4.032
(3)	4.410	4.410	4.410	4.381	4.441
(4)	4.780	4.780	4.773	4.744	4.804
(5)	4.860	4.860	4.860	4.827	4.887
PCB-1260	7.230	7.230	7.225	7.192	7.252
(2)	6.040	6.040	6.040	6.009	6.069
(3)	6.260	6.260	6.254	6.221	6.281
(4)	7.550	7.550	7.550	7.521	7.581
(5)	8.220	8.230	8.221	8.189	8.249

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF200: 002R0201 RF100: 003R0301 RF50: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X 524.857	X 554.719	X 568.283	X 593.218	X 638.960
(2)	191.293	X 214.012	216.268	224.518	280.140
(3)	307.264	339.302	342.297	355.294	409.760
(4)	277.021	307.693	308.109	316.772	373.300
(5)	292.256	312.585	323.701	X 333.126	388.330
PCB-1260	X 1225.114	1349.656	X 1310.865	1303.778	X 1422.460
(2)	603.027	708.471	674.371	693.246	863.930
(3)	736.422	827.270	807.393	809.496	935.730
(4)	278.488	294.026	281.761	285.026	X 331.680
(5)	X 282.044	X 316.427	X 302.565	X 296.988	329.380

J.H. 9.4.08
B.M. 1 Sep 08

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/23/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.02 S2 : 9.39			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	AB/SUR 200#7	09/23/08	1128	4.02	9.39
02	AB/SUR 100#7	09/23/08	1147	4.02	9.39
03	AB/SUR 50#71	09/23/08	1205	4.02	9.39
04	AB/SUR 25#71	09/23/08	1223	4.02	9.39
05	AB/SUR 10#71	09/23/08	1242	4.02	9.39
06	AB/SUR 5#718	09/23/08	1300	4.02	9.39
07	AB/SUR 1#735	09/23/08	1318	4.02	9.39
08	AB/ICV #7357	09/23/08	1337		
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32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1128 1318

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
Aldrin	AVRG		19711.2286	7.6
Alpha-BHC	AVRG		20477.9007	5.2
Alpha-Chlordane	AVRG		17785.7621	8.6
Beta-BHC	AVRG		8595.41357	13.4
4,4'-DDD	LINR	0.00000000	12059.7649	0.996
4,4'-DDE	LINR	0.00000000	14964.9702	1.000
<u>4,4'-DDT</u>	AVRG		14290.8300	<u>17.6</u>
Delta-BHC	AVRG		16234.2800	10.3
Dieldrin	AVRG		19710.5193	7.5
Endosulfan I	AVRG		18211.6100	7.9
<u>Endosulfan II</u>	AVRG		18082.8521	<u>15.7</u>
Endosulfan Sulfate	AVRG		14460.4079	12.8
Endrin	AVRG		15049.0064	8.8
Endrin Aldehyde	AVRG		16056.9750	13.6
<u>Endrin Ketone</u>	AVRG		20667.7786	<u>17.6</u>
Gamma-BHC	AVRG		18783.8021	6.7
Gamma-Chlordane	AVRG		16672.4707	11.1
Heptachlor	AVRG		19668.4243	10.5
Heptachlor Epoxide	AVRG		18059.9843	10.6
<u>Methoxychlor</u>	AVRG		5771.77000	<u>18.0</u>
TCMX	AVRG		14771.7886	8.9
DCB	AVRG		12835.1636	13.8

OK < 20%
↓
OK
OK
OK

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RF200: 003R0301 RF100: 004R0401 RF50: 005R0501
RF25: 006R0601 RF10: 007R0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
=====	=====	=====	=====	=====	=====
Aldrin	17453.130	18323.190	19099.040	20113.240	20615.600
Alpha-BHC	18825.125	19464.920	20071.360	20885.800	21160.700
Alpha-Chlordane	15976.515	16897.240	17672.580	18341.000	19038.200
Beta-BHC	7402.315	7585.920	7871.020	8301.640	8859.800
4,4'-DDD	12357.635	11162.510	10347.120	11229.040	13541.500
4,4'-DDE	15023.780	14779.820	14686.220	15182.560	15211.800
4,4'-DDT	13469.950	13763.420	13860.680	14249.160	15604.600
Delta-BHC	15690.570	15856.810	15984.960	16965.920	17244.500
Dieldrin	17765.005	18942.150	19706.620	20080.160	21006.500
Endosulfan I	15884.920	16942.930	17689.360	18539.360	19255.500
Endosulfan II	15175.005	16219.920	16694.460	17664.080	20147.900
Endosulfan Sulfate	12997.965	13635.530	13301.100	14352.560	15382.900
Endrin	13804.415	14594.230	15039.820	15718.480	15802.100
Endrin Aldehyde	13286.815	14467.290	14538.900	15481.120	17165.900
Endrin Ketone	17257.020	17891.410	19042.520	20939.000	22978.900
Gamma-BHC	17035.355	17642.440	18254.800	19170.720	19708.100
Gamma-Chlordane	15823.345	16285.450	17041.900	17581.000	17863.600
Heptachlor	16799.250	17750.560	18709.640	19869.320	20817.600
Heptachlor Epoxide	15571.670	16410.540	17348.040	18394.440	19283.200
Methoxychlor	6132.340	5087.910	4992.180	6003.760	6164.800
=====	=====	=====	=====	=====	=====
TCMX	13178.240	13567.680	13870.760	14742.040	15349.400
DCB	12180.505	11917.980	11340.140	13224.120	13590.800

J.H. 9.24.08
)) 9.30.08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RF5: 008R0801 RF1: 009R0901

COMPOUND	RF5	RF1
=====	=====	=====
Aldrin	21828.400	20546.000
Alpha-BHC	21902.400	21035.000
Alpha-Chlordane	20245.800	16329.000
Beta-BHC	9614.200	10533.000
4,4'-DDD	14948.600	6365.000
4,4'-DDE	14612.800	6084.000
4,4'-DDT	18731.000	10357.000
Delta-BHC	18655.200	13242.000
Dieldrin	22024.200	18449.000
Endosulfan I	19811.200	19358.000
Endosulfan II	23512.600	17166.000
Endosulfan Sulfate	18250.800	13302.000
Endrin	17161.000	13223.000
Endrin Aldehyde	18329.800	19129.000
Endrin Ketone	27654.600	18911.000
Gamma-BHC	20761.200	18914.000
Gamma-Chlordane	18945.000	13167.000
Heptachlor	22800.600	20932.000
Heptachlor Epoxide	21404.000	18008.000
Methoxychlor	7583.400	4438.000
=====	=====	=====
TCMX	16028.400	16666.000
DCB	16335.600	11257.000

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RT1: 003R0301 RT2: 004R0401 RT3: 005R0501
RT4: 006R0601 RT5: 007R0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
=====	=====	=====	=====	=====	=====
Aldrin	5.290	5.291	5.290	5.290	5.290
Alpha-BHC	4.440	4.438	4.440	4.440	4.440
Alpha-Chlordane	6.070	6.068	6.070	6.070	6.070
Beta-BHC	4.980	4.978	4.980	4.980	4.980
4,4'-DDD	6.840	6.843	6.840	6.840	6.840
4,4'-DDE	6.250	6.253	6.250	6.250	6.250
4,4'-DDT	7.120	7.121	7.120	7.120	7.120
Delta-BHC	5.180	5.185	5.180	5.180	5.180
Dieldrin	6.390	6.393	6.390	6.390	6.390
Endosulfan I	6.120	6.121	6.120	6.120	6.120
Endosulfan II	7.000	7.005	7.010	7.010	7.010
Endosulfan Sulfate	7.460	7.461	7.460	7.460	7.460
Endrin	6.680	6.685	6.680	6.680	6.680
Endrin Aldehyde	7.200	7.203	7.200	7.200	7.200
Endrin Ketone	8.050	8.048	8.050	8.050	8.050
Gamma-BHC	4.720	4.718	4.720	4.720	4.720
Gamma-Chlordane	6.010	6.008	6.010	6.010	6.010
Heptachlor	5.030	5.033	5.030	5.030	5.030
Heptachlor Epoxide	5.750	5.753	5.750	5.750	5.750
Methoxychlor	7.780	7.788	7.790	7.790	7.790
=====	=====	=====	=====	=====	=====
TCMX	4.020	4.021	4.020	4.020	4.020
DCB	9.390	9.388	9.390	9.390	9.390

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): 09/23/08 09/23/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1128 1318

LAB FILE ID: RT6: 008R0801 RT7: 009R0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	5.290	5.290	5.290	5.261	5.321
Alpha-BHC	4.440	4.440	4.440	4.408	4.468
Alpha-Chlordane	6.070	6.070	6.070	6.038	6.098
Beta-BHC	4.980	4.980	4.980	4.948	5.008
4,4'-DDD	6.840	6.860	6.843	6.813	6.873
4,4'-DDE	6.250	6.270	6.253	6.223	6.283
4,4'-DDT	7.120	7.130	7.122	7.091	7.151
Delta-BHC	5.180	5.180	5.181	5.155	5.215
Dieldrin	6.390	6.400	6.392	6.363	6.423
Endosulfan I	6.120	6.120	6.120	6.091	6.151
Endosulfan II	7.010	7.010	7.008	6.975	7.035
Endosulfan Sulfate	7.460	7.470	7.462	7.431	7.491
Endrin	6.680	6.690	6.682	6.655	6.715
Endrin Aldehyde	7.210	7.210	7.203	7.173	7.233
Endrin Ketone	8.050	8.050	8.050	8.018	8.078
Gamma-BHC	4.720	4.720	4.720	4.688	4.748
Gamma-Chlordane	6.010	6.010	6.010	5.978	6.038
Heptachlor	5.030	5.030	5.031	5.003	5.063
Heptachlor Epoxide	5.750	5.750	5.750	5.723	5.783
Methoxychlor	7.790	7.810	7.791	7.758	7.818
=====	=====	=====	=====	=====	=====
TCMX	4.020	4.020	4.020	3.992	4.052
DCB	9.390	9.390	9.390	9.362	9.422
=====	=====	=====	=====	=====	=====

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: CH2MHILL
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/29/08 - 09/30/08
 Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.02 S2 : 9.39			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====					
01		1660 1000 #7	09/29/08		
02		AB/D 100 #73	09/29/08		
03	MW1BLK0916	MW1BLK0916	09/29/08	4.02	9.39
04	MW1BLK0916LC	MW1BLK0916LC	09/29/08	4.02	9.39
05	MW1BLK0916LC	MW1BLK0916LC	09/29/08	4.02	9.39
06		AB/SUR 100 #	09/29/08	4.02	9.39
07		1660 1000 #7	09/29/08		
08	01GW2301	0809091-02	09/29/08	4.02	9.39
09	01GW2201	0809091-03	09/29/08	4.02	9.39
10	01GW2201MS	0809091-03MS	09/30/08	4.02	9.39
11	01GW2201MSD	0809091-03MS	09/30/08	4.02	9.39
12	01GW2201MS	0809091-03MS	09/30/08	4.02	9.39
13	01GW2201MSD	0809091-03MS	09/30/08	4.02	9.39
14	01GW2501	0809091-04	09/30/08	4.02	9.39
15	01GW2401	0809091-05	09/30/08	4.02	9.39
16	01GW2701	0809091-06	09/30/08	4.02	9.39
17	01GW2601	0809091-07	09/30/08	4.02	9.39
18	01RB090908	0809091-08	09/30/08	4.02	9.39
19	01RB091108	0809127-02	09/30/08	4.02	9.39
20		AB/SUR 100 #	09/30/08	4.02	9.39
21		1660 1000 #7	09/30/08		
22					

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA58989

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 09/29/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ ^{9.30.08} 2035

LAB FILE ID: RF5: 010R1001 RF1: 012R1201

~~—~~ SINGLE POINT ~~—~~*

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	φ 837.380		AVRG	837.380000	0.0
(2)	446.270		AVRG	446.270000	0.0
(3)	732.560		AVRG	732.560000	0.0
(4)	593.980		AVRG	593.980000	0.0
(5)	× 301.330		AVRG	301.330000	0.0
=====	=====	=====	=====	=====	=====

J.H. 9.30.08
 W.A. 9.30.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 18:27
 Lab File ID: 003R0301.D Init. Cal. Date(s): ~~22-SEP-2006~~ 23-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 13:18
 Lab Sample ID: 1660 1000 #7391 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
29 PCB-1016(1)	620	662	0.010	6.9	15.0	
(2)	249	242	0.010	-3.0	15.0	
(3)	379	423	0.010	11.8	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	346	364	0.010	5.1	15.0	
(6)	359	415	0.010	15.4	15.0	<-
35 PCB-1260(1)	1342	1864	0.010	38.8	15.0	<-
(2)	733	971	0.010	32.5	15.0	<-
(3)	847	1129	0.010	33.4	15.0	<-
(4)	++++	++++	0.010	++++	15.0	<-
(5)	++++	++++	0.010	++++	15.0	<-
(6)	++++	++++	0.010	++++	15.0	<-
(7)	306	381	0.010	24.5	15.0	<-
(8)	317	378	0.010	19.0	15.0	<-

7.2% D
 29.7% D (HIGH)

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 18:45
 Lab File ID: 004R0401.D Init. Cal. Date(s): 22-SEP-2006 23-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 13:18
 Lab Sample ID: AB/D 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	14772	14207	0.010	-3.8	15.0
3 Alpha-BHC	20478	21437	0.010	4.7	15.0
23 Gamma-BHC	18784	X 18946	0.010	0.9	15.0
5 Beta-BHC	8595	7805	0.010	-9.2	15.0
25 Heptachlor	19668	18688	0.010	-5.0	15.0
15 Delta-BHC	16234	16271	0.010	0.2	15.0
2 Aldrin	19711	19969	0.010	1.3	15.0
26 Heptachlor Epoxide	18060	17045	0.010	-5.6	15.0
24 Gamma-Chlordane	16672	16112	0.010	-3.4	15.0
4 Alpha-Chlordane	17786	17646	0.010	-0.8	15.0
17 Endosulfan I	18212	19080	0.010	4.8	15.0
13 4,4'-DDE	100	89.78367	0.010	10.2	15.0
16 Dieldrin	19711	21573	0.010	9.4	15.0
20 Endrin	15049	15098	0.010	0.3	15.0
12 4,4'-DDD	100	83.85877	0.010	26.1	15.0
18 Endosulfan II	18083	18036	0.010	-0.3	15.0
14 4,4'-DDT	14291	13166	0.010	-7.9	15.0
21 Endrin Aldehyde	16057	18526	0.010	15.4	15.0
19 Endosulfan Sulfate	14460	15170	0.010	4.9	15.0
27 Methoxychlor	5772	5120	0.010	-11.3	15.0
22 Endrin Ketone	20668	19494	0.010	-5.7	15.0
\$ 37 DCB	12835	12275	0.010	-4.4	15.0

Low

Low

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 23:20
 Lab File ID: 019R1901.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
29 PCB-1016(1)	620	668	0.010	7.8	15.0		
(2)	249	256	0.010	2.8	15.0		
(3)	379	444	0.010	17.2	15.0	<-	
(4)	++++	++++	0.010	++++	15.0	<-	
(5)	346	382	0.010	10.3	15.0		
(6)	359	436	0.010	21.3	15.0	<-	
35 PCB-1260(1)	1342	2031	0.010	51.3	15.0	<-	
(2)	733	1021	0.010	39.3	15.0	<-	
(3)	847	1200	0.010	41.8	15.0	<-	
(4)	++++	++++	0.010	++++	15.0	<-	
(5)	++++	++++	0.010	++++	15.0	<-	
(6)	++++	++++	0.010	++++	15.0	<-	
(7)	306	422	0.010	37.9	15.0	<-	
(8)	317	X 425	0.010	34.1	15.0	<-	

11.97%
 40.9%
 (HIGH)

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

J.H. 9.30.08
9.30.08

Instrument ID: ecd3.i Injection Date: 29-SEP-2008 23:02
Lab File ID: 018R1801.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
Analysis Type: Init. Cal. Times: 14:42 20:35
Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
\$ 36 TCMX	14772	14598	0.010	-1.2
3 Alpha-BHC	20478	21936	0.010	7.1
23 Gamma-BHC	18784	19399	0.010	3.3
5 Beta-BHC	8595	X 8205	0.010	-4.5
25 Heptachlor	19668	19147	0.010	-2.7
15 Delta-BHC	16234	17260	0.010	6.3
2 Aldrin	19711	20350	0.010	3.2
26 Heptachlor Epoxide	18060	17277	0.010	-4.3
24 Gamma-Chlordane	16672	16591	0.010	-0.5
4 Alpha-Chlordane	17786	17785	0.010	-0.0
17 Endosulfan I	18212	19333	0.010	6.2
13 4,4'-DDE	100	95.53544	0.010	4.5
16 Dieldrin	19711	21415	0.010	8.6
20 Endrin	15049	14790	0.010	-1.7
12 4,4'-DDD	100	91.74640	0.010	8.3
18 Endosulfan II	18083	17732	0.010	-1.9
14 4,4'-DDT	14291	13121	0.010	-8.2
21 Endrin Aldehyde	16057	18318	0.010	14.1
19 Endosulfan Sulfate	14460	15201	0.010	5.1
27 Methoxychlor	5772	5711	0.010	-1.0
22 Endrin Ketone	20668	20089	0.010	-2.8
\$ 37 DCB	12835	13419	0.010	4.6

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 30-SEP-2008 03:38
 Lab File ID: 033R3301.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
29 PCB-1016(1)	620	653	0.010	5.4
(2)	249	245	0.010	-1.6
(3)	379	422	0.010	11.4
(4)	++++	++++	0.010	15.0
(5)	346	361	0.010	4.3
(6)	359	415	0.010	15.4
35 PCB-1260(1)	1342	1878	0.010	39.9
(2)	733	978	0.010	33.6
(3)	847	1142	0.010	34.9
(4)	++++	++++	0.010	15.0
(5)	++++	++++	0.010	15.0
(6)	++++	++++	0.010	15.0
(7)	306	379	0.010	24.0
(8)	317	376	0.010	18.5

7.0% D
 \$
 30.2% D
 (HIGH)

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 30-SEP-2008 03:20
 Lab File ID: 032R3201.D Init. Cal. Date(s): 22-SEP-2006 29-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 20:35
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\092908.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	14772	14714	0.010	-0.4	15.0
3 Alpha-BHC	20478	21783	0.010	6.4	15.0
23 Gamma-BHC	18784	19448	0.010	3.5	15.0
5 Beta-BHC	8595	X 8022	0.010	-6.7	15.0
25 Heptachlor	19668	18816	0.010	-4.3	15.0
15 Delta-BHC	16234	17061	0.010	5.1	15.0
2 Aldrin	19711	20306	0.010	3.0	15.0
26 Heptachlor Epoxide	18060	17214	0.010	-4.7	15.0
24 Gamma-Chlordane	16672	16402	0.010	-1.6	15.0
4 Alpha-Chlordane	17786	17285	0.010	-2.8	15.0
17 Endosulfan I	18212	19068	0.010	4.7	15.0
13 4,4'-DDE	100	94.83086	0.010	5.2	15.0
16 Dieldrin	19711	21293	0.010	8.0	15.0
20 Endrin	15049	14001	0.010	-7.0	15.0
12 4,4'-DDD	100	92.64459	0.010	7.4	15.0
18 Endosulfan II	18083	17263	0.010	-4.5	15.0
14 4,4'-DDT	14291	12388	0.010	-13.3	15.0
21 Endrin Aldehyde	16057	17998	0.010	12.1	15.0
19 Endosulfan Sulfate	14460	14771	0.010	2.1	15.0
27 Methoxychlor	5772	5279	0.010	-8.5	15.0
22 Endrin Ketone	20668	19707	0.010	-4.6	15.0
\$ 37 DCB	12835	13309	0.010	3.7	15.0

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 10/07/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.30			S2 : 11.79
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	AB/SUR 200#7	10/07/08	1527	5.30	11.79
02	AB/SUR 100#7	10/07/08	1545	5.30	11.79
03	AB/SUR 50 #7	10/07/08	1604	5.31	11.79
04	AB/SUR 25 #7	10/07/08	1622	5.30	11.79
05	AB/SUR 10 #7	10/07/08	1640	5.30	11.79
06	AB/SUR 5 #71	10/07/08	1659	5.30	11.79
07	AB/SUR 1 #71	10/07/08	1717	5.30	11.79
08	AB ICV 100#7	10/07/08	1736		
09	CHLOR 5PPB #	10/07/08	1754		
10	TOX 100PPB #	10/07/08	1813		
11	1660 2500 #7	10/07/08	1831		
12	1660 1000 #7	10/07/08	1849		
13	1660 750 #73	10/07/08	1908		
14	1660 500 #73	10/07/08	1926		
15	1660 100 #73	10/07/08	1944		
16	1660 50 #739	10/07/08	2003		
17	1660 25 #739	10/07/08	2021		
18	1660 ICV #73	10/07/08	2039		
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF200: 003F0301 RF100: 004F0401 RF50: 005F0501
RF25: 006F0601 RF10: 007F0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
Aldrin	8786.365	9637.900	9451.580	9590.320	9280.200
Alpha-BHC	X9992.955	X10586.280	X10311.360	X10385.320	X9846.700
Alpha-Chlordane	8014.450	8875.040	8814.280	9115.120	9234.500
Beta-BHC	Q3888.635	Q4169.020	Q4205.780	Q4446.680	Q4764.700
4,4'-DDD	6631.275	7274.880	7294.460	7732.400	8354.200
4,4'-DDE	7888.195	8639.660	8607.620	8812.560	8928.900
4,4'-DDT	7112.210	7844.930	7878.840	8250.040	8901.900
Delta-BHC	8802.430	9489.120	9521.600	9582.840	9490.400
Dieldrin	8347.490	9195.040	9070.980	9202.360	9226.000
Endosulfan I	7485.535	8277.940	8253.000	8522.520	8543.700
Endosulfan II	7091.300	7893.340	8067.620	8718.480	9704.600
Endosulfan Sulfate	6470.450	7184.070	7271.140	7706.560	8379.300
Endrin	6263.150	6857.990	6782.520	6847.520	6751.300
Endrin Aldehyde	5540.260	6197.850	6107.600	6384.840	6591.600
Endrin Ketone	7771.645	8640.100	8748.460	9312.640	10124.100
Gamma-BHC	9131.425	9827.930	9661.660	9830.120	9676.700
Gamma-Chlordane	8271.105	9128.670	9026.760	9274.480	9407.600
Heptachlor	8805.765	9714.940	9785.760	10300.720	10667.300
Heptachlor Epoxide	8047.305	8931.360	8905.160	9323.600	9529.100
Methoxychlor	3492.675	3887.620	3957.240	4280.760	4618.000
TCMX	6817.240	7259.530	7230.960	7522.080	7804.400
DCB	5915.095	6478.890	6658.180	7333.400	8119.100

JJ
10.10.08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT1: 003F0301 RT2: 004F0401 RT3: 005F0501
RT4: 006F0601 RT5: 007F0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	7.170	7.171	7.170	7.170	7.170
Alpha-BHC	5.770	5.774	5.780	5.770	5.770
Alpha-Chlordane	8.060	8.061	8.060	8.060	8.060
Beta-BHC	6.320	6.319	6.320	6.320	6.320
4,4'-DDD	8.900	8.897	8.900	8.900	8.900
4,4'-DDE	8.260	8.256	8.260	8.260	8.260
4,4'-DDT	9.300	9.294	9.300	9.300	9.290
Delta-BHC	6.600	6.599	6.600	6.600	6.600
Dieldrin	8.460	8.464	8.470	8.460	8.460
Endosulfan I	8.130	8.131	8.130	8.130	8.130
Endosulfan II	9.020	9.019	9.020	9.020	9.020
Endosulfan Sulfate	9.480	9.476	9.480	9.480	9.480
Endrin	8.750	8.749	8.750	8.750	8.750
Endrin Aldehyde	9.180	9.181	9.180	9.180	9.180
Endrin Ketone	10.100	10.099	10.100	10.100	10.100
Gamma-BHC	6.120	6.124	6.130	6.120	6.120
Gamma-Chlordane	7.970	7.967	7.970	7.970	7.970
Heptachlor	6.780	6.777	6.780	6.780	6.780
Heptachlor Epoxide	7.660	7.662	7.670	7.660	7.660
Methoxychlor	9.890	9.894	9.900	9.900	9.890
TCMX	5.300	5.303	5.310	5.300	5.300
DCB	11.790	11.787	11.790	11.790	11.790

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT6: 008F0801 RT7: 009F0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
Aldrin	7.170	7.170	7.170	7.141	7.201
Alpha-BHC	5.770	5.770	5.772	5.744	5.804
Alpha-Chlordane	8.060	8.060	8.060	8.031	8.091
Beta-BHC	6.320	6.320	6.320	6.289	6.349
4,4'-DDD	8.900	8.900	8.900	8.867	8.927
4,4'-DDE	8.260	8.260	8.259	8.226	8.286
4,4'-DDT	9.290	9.300	9.296	9.264	9.324
Delta-BHC	6.600	6.600	6.600	6.569	6.629
Dieldrin	8.460	8.460	8.462	8.434	8.494
Endosulfan I	8.130	8.130	8.130	8.101	8.161
Endosulfan II	9.020	9.020	9.020	8.989	9.049
Endosulfan Sulfate	9.480	9.480	9.479	9.446	9.506
Endrin	8.750	8.750	8.750	8.719	8.779
Endrin Aldehyde	9.180	9.180	9.180	9.151	9.211
Endrin Ketone	10.100	10.100	10.100	10.069	10.129
Gamma-BHC	6.120	6.120	6.122	6.094	6.154
Gamma-Chlordane	7.970	7.970	7.970	7.937	7.997
Heptachlor	6.780	6.780	6.780	6.747	6.807
Heptachlor Epoxide	7.660	7.660	7.662	7.632	7.692
Methoxychlor	9.890	9.900	9.895	9.864	9.924
TCMX	5.300	5.300	5.302	5.274	5.334
DCB	11.790	11.790	11.790	11.759	11.819

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 1813

LAB FILE ID: RF5: 012F1201 RF1: 012F1201

* — SINGLE POINT — *

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	408.620		AVRG	408.620000	0.0
(2)	139.000		AVRG	139.000000	0.0
(3)	385.060		AVRG	385.060000	0.0
(4)	162.130		AVRG	162.130000	0.0
(5)	* 165.800		AVRG	165.800000	0.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1. ID: 0.32 (mm) Calibration Time(s): 1831 2021

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
PCB-1016	LINR	0.00000000	369.140650	0.998
	(2) LINR	0.00000000	123.408708	0.995
	(3) LINR	0.00000000	190.427129	0.997
	(4) LINR	0.00000000	188.562101	0.997
	(5) LINR	0.00000000	159.146312	0.995
PCB-1260	AVRG		919.157057	5.1
	(2) AVRG		559.711514	13.8
	(3) AVRG		604.286143	9.6
	(4) AVRG		428.621133	11.0
	(5) AVRG		233.072352	5.1

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF200: 013F1301 RF100: 014F1401 RF50: 015F1501
RF25: 016F1601 RF10: 017F1701

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X 362.709	384.199	X 392.968	398.036	X 457.570
(2)	1119.988	129.969	135.815	140.242	178.360
(3)	186.168	200.284	204.620	211.486	248.910
(4)	184.930	195.289	202.321	208.634	253.330
(5)	154.789	167.305	174.891	180.908	237.640
PCB-1260	874.958	X 887.443	892.704	X 885.534	950.180
(2)	485.376	503.969	509.740	513.386	591.010
(3)	549.300	560.319	568.692	563.792	635.500
(4)	379.086	391.363	400.777	400.182	457.400
(5)	221.711	225.257	225.907	229.302	257.230

J.H. 10-10-08 JJ 10-10-08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF5: 018F1801 RF1: 019F1901

COMPOUND	RF5	RF1
PCB-1016	512.100	556.680
(2)	219.980	265.480
(3)	283.720	310.320
(4)	299.260	312.440
(5)	299.020	300.040
PCB-1260	940.320	1002.960
(2)	623.620	690.880
(3)	651.720	700.680
(4)	468.300	503.240
(5)	236.420	235.680

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT1: 013F1301 RT2: 014F1401 RT3: 015F1501
RT4: 016F1601 RT5: 017F1701

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	6.640	6.643	6.640	6.640	6.640
(2)	5.720	5.714	5.710	5.720	5.710
(3)	6.090	6.089	6.090	6.090	6.090
(4)	6.830	6.826	6.830	6.830	6.830
(5)	6.950	6.944	6.940	6.950	6.940
PCB-1260	10.050	10.048	10.050	10.050	10.050
(2)	8.910	8.908	8.910	8.910	8.910
(3)	9.260	9.258	9.260	9.260	9.260
(4)	9.360	9.363	9.360	9.360	9.360
(5)	11.160	11.163	11.160	11.160	11.160

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT6: 018F1801 RT7: 019F1901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	6.640	6.640	6.640	6.613	6.673
(2)	5.720	5.710	5.715	5.684	5.744
(3)	6.090	6.090	6.090	6.059	6.119
(4)	6.830	6.830	6.829	6.796	6.856
(5)	6.950	6.950	6.946	6.914	6.974
PCB-1260	10.050	10.050	10.050	10.018	10.078
(2)	8.910	8.910	8.910	8.878	8.938
(3)	9.260	9.260	9.260	9.228	9.288
(4)	9.360	9.360	9.360	9.333	9.393
(5)	11.160	11.160	11.160	11.133	11.193

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 J.H. 10.10.08
 JJ 10.10.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 07-OCT-2008 20:58
 Lab File ID: 021F2101.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	7734	7820	0.010	1.1	15.0
3 Alpha-BHC	10093	11661	0.010	15.5	15.0
23 Gamma-BHC	9725	X 10532	0.010	8.3	15.0
5 Beta-BHC	4655	4485	0.010	-3.7	15.0
15 Delta-BHC	9547	10191	0.010	6.7	15.0
25 Heptachlor	10422	10162	0.010	-2.5	15.0
2 Aldrin	9406	10194	0.010	8.4	15.0
26 Heptachlor Epoxide	9400	9349	0.010	-0.5	15.0
24 Gamma-Chlordane	9347	9607	0.010	2.8	15.0
4 Alpha-Chlordane	9176	9366	0.010	2.1	15.0
17 Endosulfan I	8530	8752	0.010	2.6	15.0
13 4,4'-DDE	8755	8841	0.010	1.0	15.0
16 Dieldrin	9195	9716	0.010	5.7	15.0
20 Endrin	6753	6412	0.010	-5.0	15.0
12 4,4'-DDD	7916	7616	0.010	-3.8	15.0
18 Endosulfan II	9171	8224	0.010	-10.3	15.0
21 Endrin Aldehyde	6520	6979	0.010	7.0	15.0
14 4,4'-DDT	8514	8019	0.010	-5.8	15.0
19 Endosulfan Sulfate	8055	7638	0.010	-5.2	15.0
27 Methoxychlor	4343	3963	0.010	-8.8	15.0
22 Endrin Ketone	9634	9391	0.010	-2.5	15.0
\$ 37 DCB	7579	7036	0.010	-7.2	15.0

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Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

10.10.08

Instrument ID: ecd3.i Injection Date: 07-OCT-2008 21:16
 Lab File ID: 022F2201.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	MAX %D	MIN %D	MAX %D
29 PCB-1016(1)	1000	X1086	0.010	-8.6	15.0	
(2)	1000	1086	0.010	-8.6	15.0	
(3)	1000	1086	0.010	-8.6	15.0	
(4)	1000	1086	0.010	-8.6	15.0	
(5)	1000	1086	0.010	-8.6	15.0	
(6)	1000	1086	0.010	-8.6	15.0	
35 PCB-1260(1)	919	φ 911	0.010	-0.9	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	560	517	0.010	-7.6	15.0	
(4)	604	577	0.010	-4.6	15.0	
(5)	429	402	0.010	-6.3	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	233	233	0.010	0.1	15.0	

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 08-OCT-2008 01:33
 Lab File ID: 036F3601.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	7734	7940	0.010	2.7	15.0
7 Alpha-BHC	10093	X 11910	0.010	18.0	15.0
23 Gamma-BHC	9725	10747	0.010	10.5	15.0
5 Beta-BHC	4655	4593	0.010	-1.3	15.0
15 Delta-BHC	9547	10674	0.010	11.8	15.0
25 Heptachlor	10422	10170	0.010	-2.4	15.0
2 Aldrin	9406	10207	0.010	8.5	15.0
26 Heptachlor Epoxide	9400	9464	0.010	0.7	15.0
24 Gamma-Chlordane	9347	8933	0.010	-4.4	15.0
4 Alpha-Chlordane	9176	8673	0.010	-5.5	15.0
17 Endosulfan I	8530	8382	0.010	-1.7	15.0
13 4,4'-DDE	8755	8981	0.010	2.6	15.0
16 Dieldrin	9195	9749	0.010	6.0	15.0
20 Endrin	6753	7330	0.010	8.5	15.0
12 4,4'-DDD	7916	8232	0.010	4.0	15.0
18 Endosulfan II	9171	8083	0.010	-11.9	15.0
21 Endrin Aldehyde	6520	6647	0.010	1.9	15.0
14 4,4'-DDT	8514	6873	0.010	-19.3	15.0
19 Endosulfan Sulfate	8055	7871	0.010	-2.3	15.0
27 Methoxychlor	4343	3735	0.010	-14.0	15.0
22 Endrin Ketone	9634	9578	0.010	-0.6	15.0
\$ 37 DCB	7579	7002	0.010	-7.6	15.0

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Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 08-OCT-2008 01:51
 Lab File ID: 037F3701.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
29 PCB-1016(1)	1000	1075	0.010	-7.5	15.0		
(2)	1000	1075	0.010	-7.5	15.0		
(3)	1000	1075	0.010	-7.5	15.0		
(4)	1000	1075	0.010	-7.5	15.0		
(5)	1000	1075	0.010	-7.5	15.0		
(6)	1000	1075	0.010	-7.5	15.0		
35 PCB-1260(1)	919	X 912	0.010	-0.8	15.0		
(2)	++++	++++	0.010	++++	15.0	<-	
(3)	560	505	0.010	-9.9	15.0		
(4)	604	571	0.010	-5.4	15.0		
(5)	429	394	0.010	-8.0	15.0		
(6)	++++	++++	0.010	++++	15.0	<-	
(7)	++++	++++	0.010	++++	15.0	<-	
(8)	233	230	0.010	-1.5	15.0		

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/07/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
			S1 : 4.60 S2 : 10.53			
CLIENT	LAB	DATE	TIME	S1	S2	
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#
01	AB/SUR 200#7	10/07/08	1527	4.61	10.53	
02	AB/SUR 100#7	10/07/08	1545	4.61	10.53	
03	AB/SUR 50 #7	10/07/08	1604	4.61	10.53	
04	AB/SUR 25 #7	10/07/08	1622	4.61	10.53	
05	AB/SUR 10 #7	10/07/08	1640	4.61	10.53	
06	AB/SUR 5 #71	10/07/08	1659	4.61	10.53	
07	AB/SUR 1 #71	10/07/08	1717	4.60	10.53	
08	AB ICV 100#7	10/07/08	1736			
09	CHLOR 5PPB #	10/07/08	1754			
10	TOX 100PPB #	10/07/08	1813			
11	1660 2500 #7	10/07/08	1831			
12	1660 1000 #7	10/07/08	1849			
13	1660 750 #73	10/07/08	1908			
14	1660 500 #73	10/07/08	1926			
15	1660 100 #73	10/07/08	1944			
16	1660 50 #739	10/07/08	2003			
17	1660 25 #739	10/07/08	2021			
18	1660 ICV #73	10/07/08	2039			
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/07/08 - 10/08/08
 Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 4.61 S2 : 10.52						
CLIENT	LAB	DATE	TIME	S1	S2	
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#
=====	=====	=====	=====	=====	=====	=====
01		AB/SUR 100 #	10/07/08	2058	4.61	10.52
02		1660 1000 #7	10/07/08	2116		
03	PS1BLK0930	PS1BLK0930	10/07/08	2134	4.61	10.52
04	PS1BLK0930LC	PS1BLK0930LC	10/07/08	2153	4.60	10.52
05	PS1BLK0930LC	PS1BLK0930LC	10/07/08	2211	4.61	10.52
06	01SS0701	0809127-03	10/07/08	2229	4.60	10.52
07	01SS0701MS	0809127-03MS	10/07/08	2248	4.60	10.52
08	01SS0701MSD	0809127-03MS	10/07/08	2306	4.60	10.52
09	01SS0701MS	0809127-03MS	10/07/08	2324	4.60	10.52
10	01SS0701MSD	0809127-03MS	10/07/08	2343	4.60	10.52
11	01SS0801	0809127-04	10/08/08	0001	4.60	10.52
12	01SS0901	0809127-05	10/08/08	0020	4.60	10.52
13	01SS1001	0809127-06	10/08/08	0038	4.60	10.52
14	01SS1101	0809127-07	10/08/08	0056	4.61	10.52
15	01SS1201	0809127-08	10/08/08	0115	4.60	10.52
16		AB/SUR 100 #	10/08/08	0133	4.60	10.52
17		1660 1000 #7	10/08/08	0151		
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Aldrin	AVRG		13562.4757		9.2
Alpha-BHC	AVRG		16148.4193		8.0
Alpha-Chlordane	AVRG		12750.4614		11.5
<u>Beta-BHC</u>	AVRG		7069.13714		15.9 <i>OK</i>
<u>4,4'-DDD</u>	AVRG		10980.7157		17.0 <i>OK</i>
<u>4,4'-DDE</u>	AVRG		11863.0329		10.0
<u>4,4'-DDT</u>	AVRG		11125.0171		18.2 <i>OK</i>
Delta-BHC	AVRG		13304.8443		8.5
Dieldrin	AVRG		12970.5436		9.5
Endosulfan I	AVRG		11672.9014		10.5
Endosulfan II	2ORDR	0.00000000	7.746e-005	1.836e-011	1.000
<u>Endosulfan Sulfate</u>	AVRG		10926.9057		18.6 <i>OK</i>
Endrin	AVRG		9624.21429		8.1
<u>Endrin Aldehyde</u>	AVRG		9590.17357		16.3 <i>OK</i>
Endrin Ketone	2ORDR	0.00000000	6.926e-005	1.458e-011	1.000
Gamma-BHC	AVRG		14554.1764		10.0
Gamma-Chlordane	AVRG		12791.9643		10.4
Heptachlor	AVRG		13510.0500		11.8
Heptachlor Epoxide	AVRG		12669.4657		12.0
<u>Methoxychlor</u>	AVRG		5769.19286		18.6 <i>OK</i>
TCMX	AVRG		12221.9229		12.2
<u>DCB</u>	AVRG		8864.45214		19.0 <i>OK</i>

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FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF200: 003R0301 RF100: 004R0401 RF50: 005R0501
RF25: 006R0601 RF10: 007R0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
=====	=====	=====	=====	=====	=====
Aldrin	11333.410	12915.820	13166.780	13816.920	14059.200
Alpha-BHC	13918.745	15384.690	15672.280	16486.520	16697.100
Alpha-Chlordane	10365.320	11871.650	12122.340	12766.320	13192.600
Beta-BHC	5530.830	6257.930	6394.740	6892.360	7467.300
4,4'-DDD	8421.950	9823.160	10037.480	10784.320	11501.700
4,4'-DDE	9895.590	11325.020	11478.360	12090.160	12386.700
4,4'-DDT	8605.170	9827.690	10189.640	11005.920	11962.900
Delta-BHC	11399.010	12796.060	13004.520	13703.920	14144.200
Dieldrin	10786.935	12294.510	12552.600	13138.160	13468.400
Endosulfan I	9590.560	11022.930	11227.220	11736.600	11999.000
Endosulfan II	9027.145	10491.200	10952.840	11937.360	13382.400
Endosulfan Sulfate	8209.830	9443.070	9830.640	10588.200	11544.200
Endrin	8143.850	9303.390	9505.360	9928.400	9915.700
Endrin Aldehyde	7421.285	8624.410	8751.800	9402.720	9801.800
Endrin Ketone	10117.020	11705.180	12312.600	13502.040	15185.300
Gamma-BHC	12214.015	13614.340	13915.120	14718.160	15078.800
Gamma-Chlordane	10563.750	12039.000	12279.560	12847.040	13221.200
Heptachlor	10855.760	12498.050	12888.740	13693.000	14288.000
Heptachlor Epoxide	10160.810	11654.670	12118.000	12766.880	13259.100
Methoxychlor	X 4304.070	X 4963.140	X 5187.000	X 5640.840	X 6178.900
=====	=====	=====	=====	=====	=====
TCMX	10147.480	11104.160	11381.720	12158.000	12684.500
DCB	6671.265	7485.200	7783.740	8666.360	9557.000

J.H. 10-10-08
7-10-10-08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RF5: 008R0801 RF1: 009R0901

COMPOUND	RF5	RF1
=====	=====	=====
Aldrin	15220.200	14425.000
Alpha-BHC	17933.600	16946.000
Alpha-Chlordane	14559.000	14376.000
Beta-BHC	8503.800	8437.000
4,4'-DDD	14262.400	12034.000
4,4'-DDE	13833.400	12032.000
4,4'-DDT	14988.800	11295.000
Delta-BHC	14991.200	13095.000
Dieldrin	14510.200	14043.000
Endosulfan I	13138.000	12996.000
Endosulfan II	16446.200	14107.000
Endosulfan Sulfate	14109.400	12763.000
Endrin	10663.800	9909.000
Endrin Aldehyde	11060.200	12069.000
Endrin Ketone	18708.400	16412.000
Gamma-BHC	16618.800	15720.000
Gamma-Chlordane	14562.200	14031.000
Heptachlor	15717.800	14629.000
Heptachlor Epoxide	14570.800	14156.000
Methoxychlor	7457.400	6653.000
=====	=====	=====
TCMX	13619.600	14458.000
DCB	10985.600	10902.000

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT1: 003R0301 RT2: 004R0401 RT3: 005R0501
RT4: 006R0601 RT5: 007R0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	6.080	6.085	6.090	6.090	6.090
Alpha-BHC	5.060	5.057	5.060	5.060	5.060
Alpha-Chlordane	6.960	6.958	6.960	6.960	6.960
Beta-BHC	5.660	5.658	5.660	5.660	5.660
4,4'-DDD	7.790	7.788	7.790	7.790	7.790
4,4'-DDE	7.150	7.153	7.150	7.150	7.150
4,4'-DDT	8.100	8.103	8.100	8.110	8.100
Delta-BHC	5.900	5.902	5.900	5.900	5.900
Dieldrin	7.320	7.318	7.320	7.320	7.320
Endosulfan I	7.020	7.020	7.020	7.020	7.020
Endosulfan II	7.970	7.967	7.970	7.970	7.970
Endosulfan Sulfate	8.450	8.447	8.450	8.450	8.450
Endrin	7.620	7.622	7.620	7.620	7.620
Endrin Aldehyde	8.150	8.155	8.160	8.160	8.160
Endrin Ketone	9.040	9.038	9.040	9.040	9.040
Gamma-BHC	5.370	5.370	5.370	5.370	5.370
Gamma-Chlordane	6.900	6.898	6.900	6.900	6.900
Heptachlor	5.780	5.782	5.780	5.780	5.780
Heptachlor Epoxide	6.590	6.593	6.590	6.600	6.590
Methoxychlor	8.740	8.745	8.750	8.750	8.750
TCMX	4.610	4.606	4.610	4.610	4.610
DCB	10.530	10.528	10.530	10.530	10.530

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1527 1717

LAB FILE ID: RT6: 008R0801 RT7: 009R0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	6.090	6.080	6.086	6.055	6.115
Alpha-BHC	5.060	5.050	5.058	5.027	5.087
Alpha-Chlordane	6.960	6.960	6.960	6.928	6.988
Beta-BHC	5.660	5.660	5.660	5.628	5.688
4,4'-DDD	7.790	7.790	7.790	7.758	7.818
4,4'-DDE	7.150	7.160	7.152	7.123	7.183
4,4'-DDT	8.100	8.110	8.103	8.073	8.133
Delta-BHC	5.900	5.900	5.900	5.872	5.932
Dieldrin	7.320	7.320	7.320	7.288	7.348
Endosulfan I	7.020	7.020	7.020	6.990	7.050
Endosulfan II	7.970	7.970	7.970	7.937	7.997
Endosulfan Sulfate	8.450	8.450	8.450	8.417	8.477
Endrin	7.620	7.620	7.620	7.592	7.652
Endrin Aldehyde	8.160	8.160	8.158	8.125	8.185
Endrin Ketone	9.040	9.040	9.040	9.008	9.068
Gamma-BHC	5.370	5.370	5.370	5.340	5.400
Gamma-Chlordane	6.900	6.900	6.900	6.868	6.928
Heptachlor	5.780	5.780	5.780	5.752	5.812
Heptachlor Epoxide	6.590	6.590	6.592	6.563	6.623
Methoxychlor	8.750	8.750	8.748	8.715	8.775
=====	=====	=====	=====	=====	=====
TCMX	4.610	4.600	4.608	4.575	4.635
DCB	10.530	10.530	10.530	10.502	10.562

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
PCB-1016	2ORDR	0.00000000	1.742e-003	2.289e-010	1.000
	(2) 2ORDR	0.00000000	4.382e-003	2.24e-009	1.000
	(3) 2ORDR	0.00000000	2.578e-003	8.554e-010	1.000
	(4) 2ORDR	0.00000000	3.094e-003	8.579e-010	1.000
	(5) 2ORDR	0.00000000	2.865e-003	1.06e-009	1.000
PCB-1260	AVRG		1267.38122		8.6
	(2) AVRG		691.563543		14.0
	(3) AVRG		816.948029		15.0
	(4) AVRG		465.285648		6.0
	(5) AVRG		302.557562		8.9

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RF200: 013R1301 RF100: 014R1401 RF50: 015R1501
RF25: 016R1601 RF10: 017R1701

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	φ 494.127	φ 527.488	φ 552.019	φ 559.362	φ 629.500
(2)	184.793	203.366	211.577	219.824	271.440
(3)	309.101	338.582	361.781	374.708	454.870
(4)	272.146	294.022	306.611	314.242	356.930
(5)	277.884	x 308.384	321.473	x 334.456	397.940
PCB-1260	1123.867	1183.436	1214.489	1225.186	1353.290
(2)	575.669	621.196	640.268	648.042	732.050
(3)	678.575	726.717	747.820	758.964	865.080
(4)	442.945	443.973	447.865	442.296	477.300
(5)	x 272.528	281.008	x 283.233	290.284	x 332.350

J.H. 10-10-08 *JJ 10-10-08*

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT1: 013R1301 RT2: 014R1401 RT3: 015R1501
RT4: 016R1601 RT5: 017R1701

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	5.770	5.769	5.770	5.770	5.770
(2)	4.970	4.970	4.970	4.970	4.970
(3)	5.280	5.282	5.280	5.280	5.280
(4)	5.940	5.939	5.940	5.940	5.940
(5)	6.010	6.005	6.010	6.010	6.010
PCB-1260	8.810	8.807	8.810	8.810	8.810
(2)	7.470	7.470	7.470	7.470	7.470
(3)	7.730	7.729	7.730	7.730	7.730
(4)	9.220	9.217	9.220	9.220	9.220
(5)	9.880	9.882	9.880	9.880	9.890

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): 10/07/08 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1831 2021

LAB FILE ID: RT6: 018R1801 RT7: 019R1901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	5.770	5.770	5.770	5.739	5.799
(2)	4.970	4.970	4.970	4.940	5.000
(3)	5.280	5.280	5.280	5.252	5.312
(4)	5.940	5.940	5.940	5.909	5.969
(5)	6.000	6.010	6.008	5.975	6.035
PCB-1260	8.810	8.810	8.810	8.777	8.837
(2)	7.470	7.470	7.470	7.440	7.500
(3)	7.730	7.730	7.730	7.699	7.759
(4)	9.220	9.220	9.220	9.187	9.247
(5)	9.880	9.890	9.883	9.852	9.912

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA16865

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 10/07/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ ^{S.D. 10-10-08} 1813

LAB FILE ID: RF5: 012R1201 RF1: 012R1201

~~—~~ SINGLE POINT ~~—~~

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	X 552.560		AVRG	552.560000	0.0
(2)	172.790		AVRG	172.790000	0.0
(3)	274.690		AVRG	274.690000	0.0
(4)	484.360		AVRG	484.360000	0.0
(5)	261.860		AVRG	261.860000	0.0

J.H. 10-10-08
 10-10-08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 07-OCT-2008 20:58
 Lab File ID: 021R2101.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
\$ 36 TCMX	12222	12179	0.010	-0.4	15.0	
3 Alpha-BHC	16148	16552	0.010	2.5	15.0	
23 Gamma-BHC	14554	14598	0.010	0.3	15.0	
5 Beta-BHC	7069	6639	0.010	-6.1	15.0	
25 Heptachlor	13510	13065	0.010	-3.3	15.0	
15 Delta-BHC	13305	13545	0.010	1.8	15.0	
2 Aldrin	13562	13630	0.010	0.5	15.0	
26 Heptachlor Epoxide	12669	12192	0.010	-3.8	15.0	
24 Gamma-Chlordane	12792	12637	0.010	-1.2	15.0	
4 Alpha-Chlordane	12750	12556	0.010	-1.5	15.0	
17 Endosulfan I	11673	11672	0.010	-0.0	15.0	
13 4,4'-DDE	11863	11471	0.010	-3.3	15.0	
16 Dieldrin	12971	13051	0.010	0.6	15.0	
20 Endrin	9624	8503	0.010	-11.6	15.0	
12 4,4'-DDD	10981	9816	0.010	-10.6	15.0	
18 Endosulfan II	100	106	0.010	-5.5	15.0	
14 4,4'-DDT	11125	9856	0.010	-11.4	15.0	
21 Endrin Aldehyde	9590	9816	0.010	2.4	15.0	
19 Endosulfan Sulfate	10927	9883	0.010	-9.6	15.0	
27 Methoxychlor	5769	4954	0.010	-14.1	15.0	
22 Endrin Ketone	100	112	0.010	11.8	15.0	
\$ 37 DCB	8864	8059	0.010	-9.1	15.0	

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 07-OCT-2008 21:16
 Lab File ID: 022R2201.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	1012	0.010	-1.2	15.0
(2)	1000	1012	0.010	-1.2	15.0
(3)	1000	1012	0.010	-1.2	15.0
(4)	1000	1012	0.010	-1.2	15.0
(5)	1000	1012	0.010	-1.2	15.0
(6)	1000	1012	0.010	-1.2	15.0
35 PCB-1260(1)	1267	X 1229	0.010	-3.0	15.0
(2)	692	⊖ 642	0.010	-7.1	15.0
(3)	817	750	0.010	-8.2	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	++++	++++	0.010	++++	15.0 <-
(6)	++++	++++	0.010	++++	15.0 <-
(7)	465	458	0.010	-1.5	15.0
(8)	303	291	0.010	-3.8	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

J.H. 10.10.08
 10.10.08

Instrument ID: ecd3.i Injection Date: 08-OCT-2008 01:33
 Lab File ID: 036R3601.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	MAX
-----	-----	-----	-----	-----
\$ 36 TCMX	12222	12428	0.010	1.7 | 15.0
3 Alpha-BHC	16148	X 16898	0.010	4.6 | 15.0
23 Gamma-BHC	14554	Ø 14894	0.010	2.3 | 15.0
5 Beta-BHC	7069	6804	0.010	-3.7 | 15.0
25 Heptachlor	13510	13432	0.010	-0.6 | 15.0
15 Delta-BHC	13305	14194	0.010	6.7 | 15.0
2 Aldrin	13562	13698	0.010	1.0 | 15.0
26 Heptachlor Epoxide	12669	12223	0.010	-3.5 | 15.0
24 Gamma-Chlordane	12792	12570	0.010	-1.7 | 15.0
4 Alpha-Chlordane	12750	12464	0.010	-2.2 | 15.0
17 Endosulfan I	11673	11746	0.010	0.6 | 15.0
13 4,4'-DDE	11863	11900	0.010	0.3 | 15.0
16 Dieldrin	12971	12994	0.010	0.2 | 15.0
20 Endrin	9624	9791	0.010	1.7 | 15.0
12 4,4'-DDD	10981	11177	0.010	1.8 | 15.0
18 Endosulfan II	100	108	0.010	-8.1 | 15.0
14 4,4'-DDT	11125	8671	0.010	-22.1 | 15.0
21 Endrin Aldehyde	9590	9278	0.010	-3.3 | 15.0
19 Endosulfan Sulfate	10927	10213	0.010	-6.5 | 15.0
27 Methoxychlor	5769	4703	0.010	-18.5 | 15.0
22 Endrin Ketone	100	109	0.010	-9.5 | 15.0
\$ 37 DCB	8864	7741	0.010	-12.7 | 15.0

Low

Low

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 08-OCT-2008 01:51
 Lab File ID: 037R3701.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: 1660 1000 #7391H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
-----	-----	-----	-----	-----	-----	-----
29 PCB-1016(1)	1000	X 1038	0.010	-3.8	15.0	
(2)	1000	1038	0.010	-3.8	15.0	
(3)	1000	1038	0.010	-3.8	15.0	
(4)	1000	1038	0.010	-3.8	15.0	
(5)	1000	1038	0.010	-3.8	15.0	
(6)	1000	1038	0.010	-3.8	15.0	
35 PCB-1260(1)	1267	1222	0.010	-3.6	15.0	
(2)	692	650	0.010	-6.1	15.0	
(3)	817	761	0.010	-6.9	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	++++	++++	0.010	++++	15.0	<-
(6)	++++	++++	0.010	++++	15.0	<-
(7)	465	458	0.010	-1.5	15.0	
(8)	303	289	0.010	-4.5	15.0	

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MW1BLK0916	88	94	88	103			0
02	MW1BLK0916LC	82	84	84	99			0
03	MW1BLK0916LC	92	97	97	112			0
04	01GW2301	95	97	89	95			0
05	01GW2201	94	98	78	89			0
06	01GW2201MS	84	86	83	97			0
07	01GW2201MSD	82	84	80	94			0
08	01GW2201MS	94	96	90	102			0
09	01GW2201MSD	92	97	86	97			0
10	01GW2501	92	98	86	98			0
11	01GW2401	94	101	86	100			0
12	01GW2701	90	95	73	75			0
13	01GW2601	100	108	84	93			0
14	01RB090908	94	99	72	82			0
15	01RB091108	87	92	64	74			0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

		EL	SPIKE
		QC LIMITS	CONC (ug/L)
S1	= TCMX	(25-120)	0.50
S2	= DCB	(25-130)	0.50

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 2
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PS1BLK0930	100	102	107	107			0
02	PS1BLK0930LC	102	97	105	100			0
03	PS1BLK0930LC	91	93	96	95			0
04	01SS0701	104	105	99	95			0
05	01SS0701MS	97	93	91	87			0
06	01SS0701MSD	102	97	81	77			0
07	01SS0701MS	102	103	98	95			0
08	01SS0701MSD	95	96	102	98			0
09	01SS0801	98	98	98	92			0
10	01SS0901	99	99	100	88			0
11	01SS1001	104	104	95	90			0
12	01SS1101	94	94	91	87			0
13	01SS1201	101	101	104	88			0
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

		EL	SPIKE
		QC LIMITS	CONC (ug/Kg)
S1	= TCMX	(30-120)	17
S2	= DCB	(35-140)	17

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 2
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT	S1 1	S1 2	S2 1	S2 2	OTHER	OTHER	TOT
	SAMPLE NO.	%REC #	%REC #	%REC #	%REC #	(1)	(2)	OUT
01	PS1BLK0930	100	102	107	107			0
02	PS1BLK0930LC	102	97	105	100			0
03	PS1BLK0930LC	91	93	96	95			0
04	0809127-03	104	105	99	95			0
05	0809127-03MS	97	93	91	87			0
06	0809127-03MS	102	97	81	77			0
07	0809127-03MS	102	103	98	95			0
08	0809127-03MS	95	96	102	98			0
09	0809127-04	98	98	98	92			0
10	0809127-05	99	99	100	88			0
11	0809127-06	104	104	95	90			0
12	0809127-07	94	94	91	87			0
13	0809127-08	101	101	104	88			0
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

EL SPIKE
QC LIMITS CONC (ug/Kg)

S1 = TCMX (30-120) 17

S2 = DCB (35-140) 17

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate results reported from a diluted analysis

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: MW1BLK0916

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aldrin	1.000	0.0000	1.048	105	25-140
Alpha-BHC	1.000	0.0000	1.027	103	60-130
Alpha-Chlordane	1.000	0.0000	1.026	103	65-125
Beta-BHC	1.000	0.0000	0.9539	95	65-125
4,4'-DDD	1.000	0.0000	1.091	109	25-150
4,4'-DDE	1.000	0.0000	1.064	106	35-140
4,4'-DDT	1.000	0.0000	1.070	107	45-140
Delta-BHC	1.000	0.0000	1.133	113	45-135
Dieldrin	1.000	0.0000	1.066	107	60-130
Endosulfan I	1.000	0.0000	1.046	105	50-110
Endosulfan II	1.000	0.0000	0.9648	96	30-130
Endosulfan Sulfate	1.000	0.0000	1.062	106	55-135
Endrin	1.000	0.0000	1.109	111	55-135
Endrin Aldehyde	1.000	0.0000	0.9742	97	55-135
Endrin Ketone	1.000	0.0000	0.9639	96	75-125
Gamma-BHC	1.000	0.0000	1.023	102	25-135
Gamma-Chlordane	1.000	0.0000	1.057	106	60-125
Heptachlor	1.000	0.0000	1.012	101	40-130
Heptachlor Epoxide	1.000	0.0000	0.9894	99	60-130
Methoxychlor	1.000	0.0000	1.238	124	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 20 outside limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: MW1BLK0916

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
PCB-1016	5.000	0.0000	5.365	107	25-145
PCB-1260	5.000	0.0000	5.922	118	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: PS1BLK0930

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aldrin	33.33	0.0000	41.02	123	45-140
Alpha-BHC	33.33	0.0000	41.66	125	60-125
Alpha-Chlordane	33.33	0.0000	39.10	117	65-120
Beta-BHC	33.33	0.0000	37.07	111	60-125
4,4'-DDD	33.33	0.0000	38.83	116	30-135
4,4'-DDE	33.33	0.0000	40.55	122	70-125
4,4'-DDT	33.33	0.0000	38.86	116	45-140
Delta-BHC	33.33	0.0000	42.87	129	55-130
Dieldrin	33.33	0.0000	40.92	123	65-125
Endosulfan I	33.33	0.0000	39.82	119	15-135
Endosulfan II	33.33	0.0000	42.67	128	35-140
Endosulfan Sulfate	33.33	0.0000	37.52	112	60-135
Endrin	33.33	0.0000	43.10	129	60-135
Endrin Aldehyde	33.33	0.0000	34.75	104	35-145
Endrin Ketone	33.33	0.0000	44.69	134	65-135
Gamma-BHC	33.33	0.0000	40.58	122	60-125
Gamma-Chlordane	33.33	0.0000	39.56	119	65-125
Heptachlor	33.33	0.0000	37.55	113	50-140
Heptachlor Epoxide	33.33	0.0000	38.54	116	65-130
Methoxychlor	33.33	0.0000	39.38	118	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 20 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: PS1BLK0930

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
PCB-1016	166.7	0.0000	182.3	109	40-140
PCB-1260	166.7	0.0000	156.7	94	60-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM 3
 WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Aldrin	0.9804	0.0000	0.9824	98	25-140
Alpha-BHC	0.9804	0.0000	1.009	103	60-130
Alpha-Chlordane	0.9804	0.0000	1.016	104	65-125
Beta-BHC	0.9804	0.0000	0.9697	99	65-125
4,4'-DDD	0.9804	0.0000	1.142	116	25-150
4,4'-DDE	0.9804	0.0000	1.139	116	35-140
4,4'-DDT	0.9804	0.0000	1.081	110	45-140
Delta-BHC	0.9804	0.0000	1.168	119	45-135
Dieldrin	0.9804	0.0000	1.062	108	60-130
Endosulfan I	0.9804	0.0000	1.056	108	50-110
Endosulfan II	0.9804	0.0000	1.002	102	30-130
Endosulfan Sulfate	0.9804	0.0000	1.069	109	55-135
Endrin	0.9804	0.0000	1.122	114	55-135
Endrin Aldehyde	0.9804	0.0000	0.9106	93	55-135
Endrin Ketone	0.9804	0.0000	0.9494	97	75-125
Gamma-BHC	0.9804	0.0000	1.024	104	25-135
Gamma-Chlordane	0.9804	0.0000	1.051	107	60-125
Heptachlor	0.9804	0.0000	1.024	104	40-130
Heptachlor Epoxide	0.9804	0.0000	1.020	104	60-130
Methoxychlor	0.9804	0.0000	1.414	144	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	0.9259	0.9047	90	7	30	25-140
Alpha-BHC	0.9259	0.9262	100	8	30	60-130
Alpha-Chlordane	0.9259	0.9288	100	9	30	65-125
Beta-BHC	0.9259	0.8876	96	9	30	65-125
4,4'-DDD	0.9259	1.024	110	11	30	25-150
4,4'-DDE	0.9259	1.029	111	10	30	35-140
4,4'-DDT	0.9259	0.9453	102	13	30	45-140
Delta-BHC	0.9259	1.063	115	9	30	45-135
Dieldrin	0.9259	0.9768	105	8	30	60-130
Endosulfan I	0.9259	0.9669	104	9	30	50-110
Endosulfan II	0.9259	0.9130	99	9	30	30-130
Endosulfan Sulfate	0.9259	0.9714	105	10	30	55-135
Endrin	0.9259	1.018	110	10	30	55-135
Endrin Aldehyde	0.9259	0.8514	92	7	30	55-135
Endrin Ketone	0.9259	0.8720	94	8	30	75-125
Gamma-BHC	0.9259	0.9407	102	8	30	25-135
Gamma-Chlordane	0.9259	0.9576	103	9	30	60-125
Heptachlor	0.9259	0.9376	101	9	30	40-130
Heptachlor Epoxide	0.9259	0.9404	102	8	30	60-130
Methoxychlor	0.9259	1.237	134	13	30	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 20 outside limits

Spike Recovery: 0 out of 40 outside limits

COMMENTS: _____

FORM 3
 WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
PCB-1016	4.717	0.0000	5.502	117	25-145
PCB-1260	4.717	0.0000	5.186	110	30-145

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
PCB-1016	4.808	5.238	109	5	30	25-145
PCB-1260	4.808	5.335	111	3	30	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aldrin	36.63	0.0000	42.31	116	45-140
Alpha-BHC	36.63	0.0000	43.67	119	60-125
Alpha-Chlordane	36.63	0.5706	41.04	110	65-120
Beta-BHC	36.63	0.0000	38.30	104	60-125
4,4'-DDD	36.63	0.0000	37.28	102	30-135
4,4'-DDE	36.63	0.0000	41.78	114	70-125
4,4'-DDT	36.63	0.0000	39.80	109	45-140
Delta-BHC	36.63	0.0000	44.34	121	55-130
Dieldrin	36.63	0.0000	42.51	116	65-125
Endosulfan I	36.63	0.0000	40.93	112	15-135
Endosulfan II	36.63	0.0000	42.76	117	35-140
Endosulfan Sulfate	36.63	0.0000	39.30	107	60-135
Endrin	36.63	0.0000	46.42	127	60-135
Endrin Aldehyde	36.63	0.0000	38.87	106	35-145
Endrin Ketone	36.63	0.0000	45.98	126	65-135
Gamma-BHC	36.63	0.0000	42.52	116	60-125
Gamma-Chlordane	36.63	0.2192	40.74	111	65-125
Heptachlor	36.63	0.0000	39.42	108	50-140
Heptachlor Epoxide	36.63	0.0000	38.55	105	65-130
Methoxychlor	36.63	0.0000	37.88	103	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	36.63	43.56	119	3	30	45-140
Alpha-BHC	36.63	45.98	126*	5	30	60-125
Alpha-Chlordane	36.63	40.32	108	2	30	65-120
Beta-BHC	36.63	38.91	106	2	30	60-125
4,4'-DDD	36.63	36.38	99	2	30	30-135
4,4'-DDE	36.63	41.63	114	0	30	70-125
4,4'-DDT	36.63	38.35	105	4	30	45-140
Delta-BHC	36.63	44.60	122	0	30	55-130
Dieldrin	36.63	41.58	114	2	30	65-125
Endosulfan I	36.63	40.90	112	0	30	15-135
Endosulfan II	36.63	41.56	113	3	30	35-140
Endosulfan Sulfate	36.63	37.41	102	5	30	60-135
Endrin	36.63	46.03	126	1	30	60-135
Endrin Aldehyde	36.63	37.25	102	4	30	35-145
Endrin Ketone	36.63	43.25	118	6	30	65-135
Gamma-BHC	36.63	44.16	120	4	30	60-125
Gamma-Chlordane	36.63	40.94	111	0	30	65-125
Heptachlor	36.63	40.68	111	3	30	50-140
Heptachlor Epoxide	36.63	38.99	106	1	30	65-130
Methoxychlor	36.63	36.30	99	4	30	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 20 outside limits

Spike Recovery: 1 out of 40 outside limits

COMMENTS:

FORM 3
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
PCB-1016	183.2	0.0000	213.1	116	40-140
PCB-1260	183.2	0.0000	172.0	94	60-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
PCB-1016	183.2	204.3	112	4	50	40-140
PCB-1260	183.2	174.9	95	2	50	60-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MW1BLK0916

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: MW1BLK0916 Lab File ID: 012F1201

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc/Soxh) SEPF

Sulfur Cleanup (Y/N) N Date Extracted: 09/16/08

Date Analyzed (1): 09/29/08 Date Analyzed (2): 09/29/08

Time Analyzed (1): 2112 Time Analyzed (2): 2112

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	MW1BLK0916LC	MW1BLK0916LCS	09/29/08	09/29/08
02	MW1BLK0916LC	MW1BLK0916LCS	09/29/08	09/29/08
03	01GW2301	0809091-02	09/29/08	09/29/08
04	01GW2201	0809091-03	09/29/08	09/29/08
05	01GW2201MS	0809091-03MS	09/30/08	09/30/08
06	01GW2201MSD	0809091-03MSD	09/30/08	09/30/08
07	01GW2201MS	0809091-03MS	09/30/08	09/30/08
08	01GW2201MSD	0809091-03MSD	09/30/08	09/30/08
09	01GW2501	0809091-04	09/30/08	09/30/08
10	01GW2401	0809091-05	09/30/08	09/30/08
11	01GW2701	0809091-06	09/30/08	09/30/08
12	01GW2601	0809091-07	09/30/08	09/30/08
13	01RB090908	0809091-08	09/30/08	09/30/08
14	01RB091108	0809127-02	09/30/08	09/30/08
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18				
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26				

COMMENTS:

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW1BLK0916

Lab Name: EMPIRICAL LABS Contract: GULFPORT
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) WATER Lab Sample ID: MW1BLK0916
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: 012F1201
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/16/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/29/08 21:12
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0033	0.010		U
319-84-6-----	Alpha-BHC	0.0033	0.010		U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010		U
319-85-7-----	Beta-BHC	0.0033	0.010		U
72-54-8-----	4,4'-DDD	0.0050	0.020		U
72-55-9-----	4,4'-DDE	0.0050	0.020		U
50-29-3-----	4,4'-DDT	0.0050	0.020		U
319-86-8-----	Delta-BHC	0.0033	0.010		U
60-57-1-----	Dieldrin	0.0050	0.020		U
959-98-8-----	Endosulfan I	0.0033	0.010		U
33213-65-9----	Endosulfan II	0.0050	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020		U
72-20-8-----	Endrin	0.0050	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020		U
53494-70-5----	Endrin Ketone	0.0050	0.020		U
58-89-9-----	Gamma-BHC	0.0033	0.010		U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010		U
76-44-8-----	Heptachlor	0.0033	0.010		U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010		U
72-43-5-----	Methoxychlor	0.0033	0.010		U
8001-35-2-----	Toxaphene	0.33	1.0		U
12674-11-2----	PCB-1016	0.12	0.50		U
11104-28-2----	PCB-1221	0.12	0.50		U
11141-16-5----	PCB-1232	0.12	0.50		U
53469-21-9----	PCB-1242	0.12	0.50		U
12672-29-6----	PCB-1248	0.12	0.50		U
11097-69-1----	PCB-1254	0.12	0.50		U
11096-82-5----	PCB-1260	0.12	0.50		U

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PS1BLK0930

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Lab Sample ID: PS1BLK0930 Lab File ID: 023F2301
 Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SOXH
 Sulfur Cleanup (Y/N) N Date Extracted: 09/30/08
 Date Analyzed (1): 10/07/08 Date Analyzed (2): 10/07/08
 Time Analyzed (1): 2134 Time Analyzed (2): 2134
 Instrument ID (1): ECD3 Instrument ID (2): ECD3
 Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PS1BLK0930LC	PS1BLK0930LCS	10/07/08	10/07/08
02	PS1BLK0930LC	PS1BLK0930LCS	10/07/08	10/07/08
03	01SS0701	0809127-03	10/07/08	10/07/08
04	01SS0701MS	0809127-03MS	10/07/08	10/07/08
05	01SS0701MSD	0809127-03MSD	10/07/08	10/07/08
06	01SS0701MS	0809127-03MS	10/07/08	10/07/08
07	01SS0701MSD	0809127-03MSD	10/07/08	10/07/08
08	01SS0801	0809127-04	10/08/08	10/08/08
09	01SS0901	0809127-05	10/08/08	10/08/08
10	01SS1001	0809127-06	10/08/08	10/08/08
11	01SS1101	0809127-07	10/08/08	10/08/08
12	01SS1201	0809127-08	10/08/08	10/08/08
13				
14				
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16				
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COMMENTS:

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PS1BLK0930

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) SOIL Lab Sample ID: PS1BLK0930

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 023F2301

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 09/30/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 10/07/08 21:34

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

309-00-2-----Aldrin	0.11	0.33		U
319-84-6-----Alpha-BHC	0.11	0.33		U
5103-71-9-----Alpha-Chlordane	0.11	0.33		U
319-85-7-----Beta-BHC	0.11	0.33		U
72-54-8-----4,4'-DDD	0.17	0.67		U
72-55-9-----4,4'-DDE	0.17	0.67		U
50-29-3-----4,4'-DDT	0.17	0.67		U
319-86-8-----Delta-BHC	0.11	0.33		U
60-57-1-----Dieldrin	0.17	0.67		U
959-98-8-----Endosulfan I	0.11	0.33		U
33213-65-9----Endosulfan II	0.17	0.67		U
1031-07-8----Endosulfan Sulfate	0.17	0.67		U
72-20-8-----Endrin	0.17	0.67		U
7421-93-4----Endrin Aldehyde	0.17	0.67		U
53494-70-5----Endrin Ketone	0.17	0.67		U
58-89-9-----Gamma-BHC	0.11	0.33		U
5103-74-2----Gamma-Chlordane	0.11	0.33		U
76-44-8-----Heptachlor	0.11	0.33		U
1024-57-3----Heptachlor Epoxide	0.11	0.33		U
72-43-5-----Methoxychlor	0.11	0.33		U
8001-35-2----Toxaphene	11	33		U
12674-11-2----PCB-1016	4.2	17		U
11104-28-2----PCB-1221	4.2	17		U
11141-16-5----PCB-1232	4.2	17		U
53469-21-9----PCB-1242	4.2	17		U
12672-29-6----PCB-1248	4.2	17		U
11097-69-1----PCB-1254	4.2	17		U
11096-82-5----PCB-1260	4.2	17		U

7D ..
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TetraTech
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-11
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 9-23-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 9.23.08
 Lab Sample ID (PEM): _____ Time Analyzed: 11:10

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	SD
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): φ Endrin & breakdown (1): 4.6
 Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: Tetra Tech
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GulfCoA-1
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 9.23.08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 9.23.08
 Lab Sample ID (PEM): _____ Time Analyzed: 11:10

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT % breakdown (1): ∅ Endrin % breakdown (1): ∅
 Combined % breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: Tetrattech

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Support-011

GC Column: EB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 10-10-08

EPA Sample No. (PIBLK): _____

Date Analyzed: _____

Lab Sample ID (PIBLK): _____

Time Analyzed: _____

EPA Sample No. (PEM): _____

Date Analyzed: 10-7-08

Lab Sample ID (PEM): _____

Time Analyzed: 15:08

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): Ø

Endrin & breakdown (1): Ø

Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: PEXTECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-011
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 10-10-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 10-7-08
 Lab Sample ID (PEM): _____ Time Analyzed: 15:08

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): Ø Endrin & breakdown (1): Ø
 Combined & breakdown (1): NA

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW2401

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809091-05 Date(s) Analyzed: 09/30/08 09/30/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	6.19	6.16	6.22	0.004800	
	2	4.95	4.95	5.01	0.03553	152.4
OK 4,4'-DDT OK	1	9.04	9.01	9.07	0.005322	
	2	7.12	7.10	7.16	0.006772	24.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW2601

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809091-07 Date(s) Analyzed: 09/30/08 09/30/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	6.19	6.16	6.22	0.006208	
	2	4.95	4.95	5.01	0.03506	139.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01RB090908

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809091-08 Date(s) Analyzed: 09/30/08 09/30/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	6.19	6.16	6.22	0.004948	153.3
	2	4.95	4.95	5.01	0.03746	
4,4'-DDT	1	9.04	9.01	9.07	0.007733	17.4
	2	7.12	7.10	7.16	0.009212	
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01RB091108

Lab Name: EMPIRICAL LABS Contract: GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-02 Date(s) Analyzed: 09/30/08 09/30/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	6.87	6.86	6.92	0.02044	
	2	5.29	5.26	5.32	0.06992	109.5
Beta-BHC	1	6.19	6.16	6.22	0.01296	
	2	4.97	4.95	5.01	0.004532	96.4
Delta-BHC	1	6.46	6.43	6.49	0.01196	
	2	5.18	5.16	5.22	0.008412	34.8
Gamma-BHC	1	5.93	5.91	5.97	0.005905	
	2	4.71	4.69	4.75	0.004070	36.8
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-03 Date(s) Analyzed: 10/07/08 10/07/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.06	8.03	8.09	0.5706	
	2	6.95	6.93	6.99	0.3952	36.3
Gamma-Chlordane	1	7.96	7.94	8.00	0.2192	
	2	6.89	6.87	6.93	0.2062	6.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-04 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	6.30	6.29	6.35	0.2986	
	2	5.64	5.63	5.69	0.3570	17.8
Dieldrin	1	8.46	8.43	8.49	0.8824	
	2	7.31	7.29	7.35	0.9130	3.4
Endosulfan II	1	9.03	8.99	9.05	0.3066	
	2	7.94	7.94	8.00	0.3221	4.9
Heptachlor	1	6.76	6.75	6.81	0.1893	
	2	5.78	5.75	5.81	0.1821	3.9
Heptachlor Epoxide	1	7.66	7.63	7.69	1.138	
	2	6.57	6.56	6.62	0.1650	149.3
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-05 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	8.46	8.43	8.49	9.506	0.1
	2	7.31	7.29	7.35	9.498	
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-06 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-Chlordane	1	8.06	8.03	8.09	2.138	
	2	6.94	6.93	6.99	1.837	15.1
4,4'-DDD	1	8.90	8.87	8.93	* 0.5474	
	2	7.81	7.76	7.82	3.459	145.3
4,4'-DDE	1	8.25	8.23	8.29	0.8211	
	2	7.15	7.12	7.18	- 1.479	57.2
4,4'-DDT	1	9.29	9.26	9.32	* 1.967	
	2	8.10	8.07	8.13	4.660	81.3
Dieldrin	1	8.46	8.43	8.49	14.77	
	2	7.31	7.29	7.35	13.69	7.6
Endosulfan II	1	9.03	8.99	9.05	NA 0.1808	
	2	7.94	7.94	8.00	0.2385	27.5
Endrin Aldehyde	1	9.20	9.15	9.21	- 2.039	
	2	8.17	8.12	8.18	1.405	36.8
Gamma-Chlordane	1	7.96	7.94	8.00	0.5608	
	2	6.89	6.87	6.93	- 1.388	84.9

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-06 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Heptachlor Epoxide	1	7.66	7.63	7.69	1.708	
	2	6.57	6.56	6.62	0.8459	67.5
Methoxychlor	1	9.92	9.86	9.92	1.723	
	2	8.74	8.71	8.77	4.492	89.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-07 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	8.46	8.43	8.49	2.007	
	2	7.32	7.29	7.35	2.143	6.6
Endosulfan II	1	9.03	8.99	9.05	0.4106	
	2	7.94	7.94	8.00	-0.6916	51.0
Heptachlor Epoxide	1	7.66	7.63	7.69	0.7956	
	2	6.58	6.56	6.62	1.045	27.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-06 Date(s) Analyzed: 10/08/08 10/08/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
PCB-1260 COLUMN 1	1	10.05	10.02	10.08	14.72	17.43	
	2	8.90	8.88	8.94	7.742		
	3	9.26	9.23	9.29	22.95		
	4	9.36	9.33	9.39	16.62		
	5	11.16	11.13	11.19	25.10		
COLUMN 2	1	8.80	8.78	8.84	12.88	14.92	15.5
	2	7.44	7.44	7.50	9.118		
	3	7.72	7.70	7.76	20.70		
	4	9.21	9.19	9.25	15.30		
	5	9.88	9.85	9.91	16.58		
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

Herbicide Section

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-011

Date Sampled	Date Received	Lab ID	Client ID
9/9/2008	9/10/2008	0809091-02	01GW2301
9/9/2008	9/10/2008	0809091-03	01GW2201
9/9/2008	9/10/2008	0809091-04	01GW2501
9/9/2008	9/10/2008	0809091-05	01GW2401
9/9/2008	9/10/2008	0809091-06	01GW2701
9/9/2008	9/10/2008	0809091-07	01GW2601
9/9/2008	9/10/2008	0809091-08	01RB090908
9/11/2008	9/12/2008	0809127-02	01RB091108
9/11/2008	9/12/2008	0809127-03	01SS0701
9/11/2008	9/12/2008	0809127-04	01SS0801
9/11/2008	9/12/2008	0809127-05	01SS0901
9/11/2008	9/12/2008	0809127-06	01SS1001
9/11/2008	9/12/2008	0809127-07	01SS1101
9/11/2008	9/12/2008	0809127-08	01SS1201

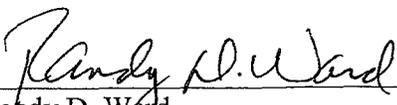
Herbicide Samples

Method: The samples were analyzed by USEPA SW-846 Methods 8151A (sonication and separatory funnel extraction then esterification and capillary column GC/ECD) for soils or by USEPA SW-846 Methods 8151A (separatory funnel extraction then esterification and capillary column GC/ECD) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Samples 01SS0701, 01SS0801, 01SS0901, 01SS1001, 01SS1101 and 01SS1201 were extracted 22 days after date sampled due to samples not being logged in upon receipt. Client was contacted and requested extraction and analysis out of USEPA holding time.
- The surrogate DCAA exceeded the upper acceptance limit of 120% in several samples on the RTX-CLP2 column due to matrix. See form 2.
- The surrogate DCAA exceeded the retention time window of ± 0.03 on the RTX-CLP2 column in samples 01SS0801, 01SS1101, and 01SS1201 due to matrix in the samples.
- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Randy D. Ward
Quality Assurance Officer

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Column: RTX-CLP ID: 0.32 (mm) Cont. Calib. Date(s): 09/28/08

Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
S1 : 14.09					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HERB/DCAA #7	09/28/08	1120	14.09	
02	HERB/DCAA #7	09/28/08	1159	14.10	
03	HERB/DCAA #7	09/28/08	1238	14.10	
04	HERB/DCAA #7	09/28/08	1317	14.10	
05	HERB/DCAA #7	09/28/08	1356	14.10	
06	HERB/DCAA #7	09/28/08	1435	14.10	
07	HERB/DCAA #7	09/28/08	1514	14.11	
08	HERB ICV #73	09/28/08	1554		
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

S1 = DCAA QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: RTX-CLP ID: 0.32 (mm) Cont. Calib. Date(s): 09/28/08
 Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 14.09						
CLIENT	LAB	DATE	TIME	S1		
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	#	RT
					#	#
01		HERB/DCAA #7	09/28/08	1634	14.09	
02	HW1BLK0915	HW1BLK0915	09/28/08	1713	14.08	
03	HW1BLK0915LC	HW1BLK0915LC	09/28/08	1753	14.08	
04	01GW2301	0809091-02	09/28/08	1832	14.09	
05	01GW2201	0809091-03	09/28/08	1912	14.10	
06	01GW2201MS	0809091-03MS	09/28/08	1950	14.09	
07	01GW2201MSD	0809091-03MS	09/28/08	2029	14.10	
08	01GW2501	0809091-04	09/28/08	2108	14.10	
09	01GW2401	0809091-05	09/28/08	2147	14.09	
10	01GW2701	0809091-06	09/28/08	2226	14.09	
11	01GW2601	0809091-07	09/28/08	2305	14.09	
12	01RB090908	0809091-08	09/28/08	2344	14.09	
13	01RB091108	0809127-02	09/29/08	0023	14.09	
14		HERB/DCAA #7	09/29/08	0102	14.10	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
(+/- 0.03 MINUTES)

S1 = DCAA

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: ~~SDGA21907~~

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1120 1514

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	3.755e-003	2.383e-008	0.998
2,4-DB	AVRG		105.087630		15.4
2,4,5-TP (Silvex)	AVRG		1006.62793		13.9
2,4,5-T	AVRG		873.229413		12.4
Belapron	AVRG		245.580163		18.8
Dicamba	AVRG		800.157862		18.4
Dichloroprop	2ORDR	0.00000000	4.986e-003	3.055e-008	0.998
Dinoseb	2ORDR	0.00000000	1.542e-003	4.72e-009	0.997
MCPA	2ORDR	0.00000000	1.08484893	1.505e-005	0.997
MCPP	2ORDR	0.00000000	1.73350210	2.52e-005	0.998
DCAA	2ORDR	0.00000000	4.008e-003	6.016e-008	0.998

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1120 1514

LAB FILE ID: RF100: 003F0201 RF50: 004F0201 RF40: 005F0201
RF25: 006F0201 RF20: 007F0201

COMPOUND	RF100	RF50	RF40	RF25	RF20
2,4-D	143.393	179.035	176.524	197.672	217.590
2,4-DB	80.582	98.808	95.048	102.462	113.129
2,4,5-TP (Silvex)	ϕ 812.935	ϕ 966.883	ϕ 905.268	ϕ 954.932	ϕ 1043.238
2,4,5-T	736.702	880.341	824.740	865.595	944.611
Dalapon	x 187.150	x 210.682	x 219.702	x 240.748	x 249.020
Dicamba	603.291	718.541	706.025	768.730	830.667
Dichloroprop	118.967	144.480	141.836	157.635	173.278
Dinoseb	407.302	496.587	475.063	516.907	573.870
MCPA	0.543	0.652	0.643	0.725	0.800
MCPP	0.380	0.450	0.439	0.482	0.524
DCAA	130.070	164.104	163.281	180.910	197.655

J.H. 9.29.08
9.29.08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1120 1514

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
2,4-D	270.705	261.773
2,4-DB	132.992	112.592
2,4,5-TP (Silvex)	1223.859	1139.280
2,4,5-T	1067.834	792.783
Dalapon	295.217	316.541
Dicamba	993.196	980.655
Dichloroprop	216.451	221.857
Dinoseb	700.776	705.404
MCPA	1.037	1.124
MCPP	0.640	0.630
DCAA	244.062	230.733

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1120 1514

LAB FILE ID: RT1: 003F0201 RT2: 004F0201 RT3: 005F0201
RT4: 006F0201 RT5: 007F0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.000	16.003	16.003	16.010	16.000
2,4-DB	18.050	18.053	18.057	18.060	18.053
2,4,5-TP (Silvex)	17.110	17.113	17.113	17.117	17.107
2,4,5-T	17.453	17.460	17.463	17.470	17.463
Dalapon	5.343	5.347	5.347	5.347	5.330
Dicamba	14.427	14.427	14.427	14.427	14.413
Dichloroprop	15.657	15.660	15.660	15.660	15.650
Dinoseb	19.113	19.117	19.113	19.117	19.107
MCPA	15.090	15.080	15.077	15.070	15.057
MCPP	14.830	14.820	14.817	14.813	14.800
DCAA	14.093	14.097	14.097	14.100	14.087

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1120 1514

LAB FILE ID: RT6: 008F0201 RT7: 009F0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	16.017	16.027	16.009	15.970	16.030
2,4-DB	18.067	18.087	18.061	18.023	18.083
2,4,5-TP (Silvex)	17.117	17.117	17.113	17.077	17.137
2,4,5-T	17.480	17.500	17.470	17.433	17.493
Dalapon	5.350	5.347	5.344	5.300	5.360
Dicamba	14.423	14.423	14.424	14.383	14.443
Dichloroprop	15.660	15.663	15.659	15.620	15.680
Dinoseb	19.113	19.113	19.113	19.077	19.137
MCPA	15.067	15.063	15.072	15.027	15.087
MCPP	14.807	14.807	14.813	14.770	14.830
DCAA	14.103	14.110	14.098	14.057	14.117

J.H. 9-29-08
>> 9-30-08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 28-SEP-2008 16:34
Lab File ID: 011F0201.D Init. Cal. Date(s): 02-APR-2008 28-SEP-2008
Analysis Type: Init. Cal. Times: 17:26 15:14
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\092808.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	X 249	0.010	1.6	15.0
\$ 12 DCAA	93.63300	88.17678	0.010	5.8	15.0
6 Dicamba	800	775	0.010	-3.1	15.0
10 MCPP	18779	18193	0.010	3.1	15.0
9 MCPA	18691	18298	0.010	2.1	15.0
7 Dichloroprop	189	179	0.010	5.0	15.0
1 2,4-D	188	176	0.010	6.5	15.0
3 2,4,5-TP (Silvex)	1007	Φ 942	0.010	-6.4	15.0
4 2,4,5-T	873	851	0.010	-2.5	15.0
2 2,4-DB	105	102	0.010	-3.0	15.0
8 Dinoseb	94.51800	86.67964	0.010	8.3	15.0

J.H. 9.29.08
27 9.30.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 29-SEP-2008 01:02
 Lab File ID: 024F0201.D Init. Cal. Date(s): 02-APR-2008 28-SEP-2008
 Analysis Type: Init. Cal. Times: 17:26 15:14
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\092808.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	X 248	0.010	1.0	15.0
12 DCAA	93.63300	89.63340	0.010	4.3	15.0
6 Dicamba	800	790	0.010	-1.3	15.0
10 MCPP	18779	18913	0.010	-0.7	15.0
9 MCPA	18691	18853	0.010	-0.9	15.0
7 Dichloroprop	189	186	0.010	1.7	15.0
1 2,4-D	188	182	0.010	3.3	15.0
3 2,4,5-TP (Silvex)	1007	987	0.010	-2.0	15.0
4 2,4,5-T	873	891	0.010	2.0	15.0
2 2,4-DB	105	106	0.010	0.4	15.0
8 Dinoseb	94.51800	93.48455	0.010	1.1	15.0

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Column: RTX-CLP2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/28/08

Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
S1 : 15.00					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	HERB/DCAA #7	09/28/08	1159	15.01	
02	HERB/DCAA #7	09/28/08	1238	15.01	
03	HERB/DCAA #7	09/28/08	1317	15.01	
04	HERB/DCAA #7	09/28/08	1356	15.01	
05	HERB/DCAA #7	09/28/08	1435	15.00	
06	HERB/DCAA #7	09/28/08	1514	15.00	
07	HERB/DCAA #7	09/28/08	1554	15.00	
08	HERB ICV #73	09/28/08	1634		
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

S1 = DCAA

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: RTX-CLP2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/28/08
 Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
S1 : 15.00					
CLIENT	LAB	DATE	TIME	S1	
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	#

01		HERB/DCAA #7	09/28/08	1713	15.00
02	HW1BLK0915	HW1BLK0915	09/28/08	1753	15.00
03	HW1BLK0915LC	HW1BLK0915LC	09/28/08	1832	15.01
04	01GW2301	0809091-02	09/28/08	1912	15.02
05	01GW2201	0809091-03	09/28/08	1950	15.02
06	01GW2201MS	0809091-03MS	09/28/08	2029	15.02
07	01GW2201MSD	0809091-03MS	09/28/08	2108	15.02
08	01GW2501	0809091-04	09/28/08	2147	15.02
09	01GW2401	0809091-05	09/28/08	2226	15.02
10	01GW2701	0809091-06	09/28/08	2305	15.02
11	01GW2601	0809091-07	09/28/08	2344	15.02
12	01RB090908	0809091-08	09/29/08	0023	15.02
13	01RB091108	0809127-02	09/29/08	0102	15.02
14		HERB/DCAA #7	09/29/08	0141	15.02
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
(+/- 0.03 MINUTES)

S1 = DCAA

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1159 1554

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		395.856791		15.8
2,4-DB	AVRG		191.689124		14.1
2,4,5-TP (Silvex)	AVRG		1715.13025		5.4
2,4,5-T	AVRG		1480.71394		6.4
Dalapon	AVRG		465.940811		14.5
Dicamba	AVRG		1259.86728		7.2
2,4,5-TP	AVRG		346.847907		14.1
Dinoseb	AVRG		1198.30059		9.4
MCPA	2ORDR	0.00000000	0.29190537	4.856e-006	0.997
MCPP	2ORDR	0.00000000	0.29698731	1.e-005	0.997
DCAA	AVRG		314.860832		15.8

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1159 1554

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	301.441	341.021	378.542	402.117	407.091
2,4-DB	165.986	179.807	198.929	207.593	203.655
2,4,5-TP (Silvex)	φ1682.888	φ1720.970	φ1839.728	φ1770.072	φ1696.860
2,4,5-T	1412.529	1461.123	1573.625	1548.424	1495.542
Dalapon	* 371.440	* 409.100	* 440.917	* 465.206	* 472.775
Dicamba	1108.797	1177.541	1280.528	1283.187	1258.517
Dichloroprop	260.811	295.867	328.170	348.994	352.774
Dinoseb	1013.892	1099.198	1201.232	1230.425	1215.345
MCPA	1.204	1.485	1.682	1.961	2.088
MCPP	0.891	1.132	1.290	1.526	1.639
DCAA	240.447	271.537	301.240	321.118	320.005

J.H. 9.29.08
JD 9-29-08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1159 1554

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	472.197	468.588
2,4-DB	232.626	153.227
2,4,5-TP (Silvex)	φ1751.946	φ1543.446
2,4,5-T	1561.874	1311.880
Dalapon	X 540.294	X 561.853
Dicamba	1381.843	1328.656
Dichloroprop	413.314	428.005
Dinoseb	1361.815	1266.198
MCPA	2.877	3.737
MCPP	2.338	3.128
DCAA	372.202	377.478

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1159 1554

LAB FILE ID: RT1: 003R0201 RT2: 004R0201 RT3: 005R0201
RT4: 006R0201 RT5: 007R0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.850	16.850	16.850	16.850	16.843
2,4-DB	18.840	18.840	18.840	18.840	18.833
2,4,5-TP (Silvex)	17.867	17.867	17.867	17.863	17.857
2,4,5-T	18.310	18.313	18.313	18.310	18.303
Dalapon	5.793	5.800	5.803	5.807	5.790
Dicamba	15.310	15.310	15.307	15.307	15.297
Dichloroprop	16.410	16.410	16.410	16.410	16.400
Dinoseb	19.153	19.153	19.153	19.153	19.147
MCPA	15.937	15.923	15.917	15.910	15.900
MCPP	15.557	15.547	15.540	15.533	15.523
DCAA	15.010	15.010	15.007	15.007	14.997

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA21907

Instrument ID: ECD2 Calibration Date(s): 09/28/08 09/28/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1159 1554

LAB FILE ID: RT6: 008R0201 RT7: 009R0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	16.850	16.853	16.849	16.813	16.873
2,4-DB	18.843	18.850	18.841	18.803	18.863
2,4,5-TP (Silvex)	17.860	17.860	17.863	17.827	17.887
2,4,5-T	18.313	18.313	18.311	18.273	18.333
Dalapon	5.803	5.797	5.799	5.760	5.820
Dicamba	15.300	15.300	15.304	15.267	15.327
Dichloroprop	16.407	16.403	16.407	16.370	16.430
Dinoseb	19.150	19.150	19.151	19.117	19.177
MCPA	15.900	15.900	15.912	15.870	15.930
MCPP	15.527	15.523	15.536	15.493	15.553
DCAA	15.003	15.003	15.005	14.967	15.027

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

J.H. 9.29.08
J.A. 9.30.08

Instrument ID: ecd2.i Injection Date: 28-SEP-2008 17:13
Lab File ID: 011R0201.D Init. Cal. Date(s): 02-APR-2008 28-SEP-2008
Analysis Type: Init. Cal. Times: 18:05 15:54
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\092808.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	466	X 483	0.010	3.7	15.0
12 DCAA	315	335	0.010	6.4	15.0
6 Dicamba	1260	1312	0.010	4.1	15.0
10 MCPP	18779	19803	0.010	-5.5	15.0
9 MCPA	18691	19831	0.010	-6.1	15.0
7 Dichloroprop	347	366	0.010	5.5	15.0
1 2,4-D	396	421	0.010	6.4	15.0
3 2,4,5-TP (Silvex)	1715	φ 1777	0.010	3.6	15.0
4 2,4,5-T	1481	1556	0.010	5.1	15.0
2 2,4-DB	192	212	0.010	10.8	15.0
8 Dinoseb	1198	1260	0.010	5.2	15.0

Page 2
J.H. 9.29.08
27 9.30.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 29-SEP-2008 01:41
Lab File ID: 024R0201.D Init. Cal. Date(s): 02-APR-2008 28-SEP-2008
Analysis Type: Init. Cal. Times: 18:05 15:54
Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\092808.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	466	449	0.010	-3.5	15.0
12 DCAA	315	307	0.010	-2.6	15.0
6 Dicamba	1260	1201	0.010	-4.6	15.0
10 MCPP	18779	17439	0.010	7.1	15.0
9 MCPA	18691	17649	0.010	5.6	15.0
7 Dichloroprop	347	337	0.010	-2.9	15.0
1 2,4-D	396	390	0.010	-1.4	15.0
3 2,4,5-TP (Silvex)	1715	1639	0.010	-4.4	15.0
4 2,4,5-T	1481	1459	0.010	-1.5	15.0
2 2,4-DB	192	203	0.010	5.9	15.0
8 Dinoseb	1198	X 1168	0.010	-2.5	15.0

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: (RTX-CLP) ID: 0.32 (mm) Calibration Time(s): 2026 0020

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	3.726e-003	1.881e-008	0.998
2,4-DB	AVRG		114.021120		14.5
2,4,5-TP (Silvex)	AVRG		1133.33079		13.8
2,4,5-T	AVRG		975.652824		9.0
2,4,5-T	AVRG		245.988281		19.7
Dicamba	2ORDR	0.00000000	1.068e-003	7.161e-009	0.997
Dichloroprop	2ORDR	0.00000000	4.964e-003	2.471e-008	0.998
Dinoseb	2ORDR	0.00000000	1.455e-003	3.815e-009	0.999
MCPA	2ORDR	0.00000000	1.03834247	1.22e-005	0.995
MCPP	2ORDR	0.00000000	1.62362803	2.058e-005	0.997
DCAA	AVRG		200.701051		19.4

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RF100: 003F0201 RF50: 004F0201 RF40: 005F0201
RF25: 006F0201 RF20: 007F0201

COMPOUND	RF100	RF50	RF40	RF25	RF20
2,4-D	155.466	180.121	191.170	218.766	238.691
2,4-DB	87.598	101.315	107.197	114.204	129.101
2,4,5-TP (Silvex)	926.655	1006.396	1049.680	1118.625	1202.041
2,4,5-T	828.129	912.202	946.802	989.830	1086.670
Dalapon	193.021	207.084	212.577	241.198	252.714
Dicamba	664.604	722.708	754.126	873.714	915.227
Dichloroprop	127.142	143.293	151.158	173.734	185.882
Dinoseb	445.301	506.376	532.295	576.477	648.279
MCPA	0.590	0.661	0.696	0.820	0.892
MCPP	0.416	0.458	0.479	0.557	0.592
DCAA	146.230	166.702	175.184	207.175	219.036

Chlorine
10.13.08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
2,4-D	266.187	304.718
2,4-DB	125.548	133.184
2,4,5-TP (Silvex)	1243.636	1386.282
2,4,5-T	1048.212	1017.725
Dalapon	286.169	329.155
Dicamba	1033.592	1171.981
Dichloroprop	214.956	258.999
Dinoseb	703.866	844.725
MCPA	1.068	1.417
MCPP	0.676	0.817
DCAA	242.075	248.505

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RT1: 003F0201 RT2: 004F0201 RT3: 005F0201
RT4: 006F0201 RT5: 007F0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	15.903	15.907	15.913	15.917	15.920
2,4-DE	17.960	17.963	17.967	17.973	17.973
2,4,5-TP (Silvex)	17.023	17.027	17.030	17.033	17.033
2,4,5-T	17.370	17.380	17.390	17.400	17.403
Dalapon	5.220	5.217	5.227	5.227	5.223
Dicamba	14.317	14.317	14.323	14.320	14.323
Dichloroprop	15.560	15.560	15.567	15.567	15.567
Dinoseb	19.030	19.030	19.033	19.033	19.033
MCPA	14.990	14.973	14.977	14.970	14.970
MCPP	14.727	14.713	14.713	14.707	14.707
DCAA	13.980	13.983	13.990	13.993	13.997

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 2026 0020

LAB FILE ID: RT6: 008F0201 RT7: 009F0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	15.937	15.953	15.921	15.923	15.983
2,4-DB	17.993	18.013	17.977	17.983	18.043
2,4,5-TP (Silvex)	17.043	17.047	17.034	17.017	17.077
2,4,5-T	17.443	17.467	17.408	17.437	17.497
Dalapon	5.233	5.233	5.226	5.203	5.263
Dicamba	14.327	14.330	14.322	14.300	14.360
Dichloroprop	15.573	15.580	15.568	15.550	15.610
Dinoseb	19.037	19.037	19.033	19.007	19.067
MCPA	14.970	14.970	14.974	14.940	15.000
MCPP	14.707	14.707	14.712	14.677	14.737
DCAA	14.010	14.023	13.997	13.993	14.053

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10-13-08

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 07-OCT-2008 01:38
 Lab File ID: 011F0201.D Init. Cal. Date(s): ~~02-APR-2008~~ 07-OCT-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 00:20
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	249	0.010	1.1	15.0
12 DCAA	201	211	0.010	5.0	15.0
6 Dicamba	18.81500	19.66815	0.010	-4.5	15.0
10 MCPP	18779	19785	0.010	-5.4	15.0
9 MCPA	18691	19792	0.010	-5.9	15.0
7 Dichloroprop	189	195	0.010	-3.5	15.0
1 2,4-D	188	191	0.010	-1.7	15.0
3 2,4,5-TP (Silvex)	1133	1113	0.010	-1.8	15.0
4 2,4,5-T	976	985	0.010	1.0	15.0
2 2,4-DB	114	116	0.010	1.6	15.0
8 Dinoseb	94.51800	94.30360	0.010	0.2	15.0

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 CONTINUING CALIBRATION COMPOUNDS

10-13-08

Instrument ID: ecd2.i Injection Date: 07-OCT-2008 08:47
 Lab File ID: 022F0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 00:20
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151F.m

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COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	247	0.010	0.4	15.0
12 DCAA	201	196	0.010	-2.4	15.0
6 Dicamba	18.81500	18.22909	0.010	3.1	15.0
10 MCPP	18779	18521	0.010	1.4	15.0
9 MCPA	18691	18674	0.010	0.1	15.0
7 Dichloroprop	189	191	0.010	-1.3	15.0
1 2,4-D	188	181	0.010	3.5	15.0
3 2,4,5-TP (Silvex)	1133	1106	0.010	-2.4	15.0
4 2,4,5-T	976	962	0.010	-1.4	15.0
2 2,4-DB	114	117	0.010	2.4	15.0
8 Dinoseb	94.51800	95.86987	0.010	-1.4	15.0

FORM 8
HERB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Column: RTX-CLP2 ID: 0.32 (mm) Cont. Calib. Date(s): 10/07/08
 Instrument ID: ECD2

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION							
S1 : 14.84							
CLIENT	LAB	DATE	TIME	S1			
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	#	RT	#
=====							
01				14.84			
02	HERB/DCAA #7	10/07/08	0217	14.85			
03	HS1BLK1003	10/07/08	0257	14.85			
04	HS1BLK1003LC	10/07/08	0335	14.85			
05	01SS0701	10/07/08	0414	14.85			
06	01SS0701MS	10/07/08	0453	14.85			
07	01SS0701MSD	10/07/08	0532	14.85			
08	01SS0801	10/07/08	0611	14.88*			
09	01SS0901	10/07/08	0650	14.87			
10	01SS1001	10/07/08	0729	14.86			
11	01SS1101	10/07/08	0808	14.88*			
12	01SS1201	10/07/08	0847	14.88*			
13	HERB/DCAA #7	10/07/08	1013	14.86			
14							
15							
16							
17							
18							
19							
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21							
22							
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29							
30							
31							
32							

S1 = DCAA

QC LIMITS
(+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
<u>2,4-D</u>	AVRG		395.995192		<u>18.2</u>
2,4-DB	AVRG		212.150594		14.3
2,4,5-TP (Silvex)	AVRG		1851.94837		8.4
2,4,5-T	AVRG		1609.49308		10.3
Dalapon	AVRG		477.032808		13.4
Dicamba	AVRG		1297.33737		8.4
trichloroprop	AVRG		368.149794		18.2
Dinoseb	AVRG		1267.77945		13.8
MCPA	2ORDR	0.00000000	0.12879385	5.544e-006	0.994
MCPP	2ORDR	0.00000000	9.757e-002	9.799e-006	0.997
DCAA	AVRG		324.021879		16.9

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	278.773	385.979	362.961	390.275	383.354
2,4-DB	154.672	224.881	203.803	215.032	203.723
2,4,5-TP (Silvex)	1624.703	2109.575	1895.590	1886.383	1746.673
2,4,5-T	1311.628	1823.075	1628.933	1624.678	1525.822
Dalapon	391.686	437.341	437.939	477.632	474.064
Dicamba	1102.334	1334.694	1254.538	1312.782	1250.651
Dichloroprop	256.366	345.850	331.976	369.847	378.203
Dinoseb	941.658	1337.777	1217.731	1258.458	1221.006
MCPA	1.259	1.829	1.862	2.252	2.364
MCPP	0.987	1.420	1.485	1.859	1.972
DCAA	237.245	309.130	296.637	324.356	316.608

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FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	φ 477.650	φ 492.974
2,4-DB	252.099	230.844
2,4,5-TP (Silvex)	1935.514	1765.201
2,4,5-T	1756.831	1595.484
Dalapon	✓ 545.345	✓ 575.222
Dicamba	1421.176	1405.187
Dichloroprop	449.332	445.474
Dinoseb	1477.708	1420.119
MCPA	3.461	4.656
MCPP	2.951	4.123
DCAA	384.185	399.991

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RT1: 003R0201 RT2: 004R0201 RT3: 005R0201
RT4: 006R0201 RT5: 007R0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.710	16.710	16.707	16.707	16.707
2,4-DB	18.710	18.710	18.707	18.707	18.707
2,4,5-TP (Silvex)	17.730	17.730	17.727	17.727	17.727
2,4,5-T	18.173	18.173	18.170	18.170	18.170
Dalapon	5.637	5.647	5.640	5.640	5.640
Dicamba	15.153	15.153	15.153	15.150	15.150
Dichloroprop	16.270	16.270	16.267	16.267	16.267
Dinoseb	19.030	19.030	19.027	19.027	19.027
MCPA	15.790	15.780	15.773	15.767	15.767
MCPP	15.410	15.400	15.393	15.387	15.387
DCAA	14.850	14.853	14.850	14.847	14.850

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA85213

Instrument ID: ECD2 Calibration Date(s): 10/06/08 10/07/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 2105 0059

LAB FILE ID: RT6: 008R0201 RT7: 009R0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW FROM TO	
2,4-D	16.707	16.713	16.709	16.683	16.743
2,4-DB	18.707	18.710	18.708	18.680	18.740
2,4,5-TP (Silvex)	17.723	17.730	17.728	17.700	17.760
2,4,5-T	18.167	18.173	18.171	18.143	18.203
Dalapon	5.643	5.650	5.642	5.620	5.680
Dicamba	15.147	15.153	15.151	15.123	15.183
Dichloroprop	16.263	16.270	16.268	16.240	16.300
Dinoseb	19.023	19.027	19.027	18.997	19.057
MCPA	15.760	15.763	15.771	15.733	15.793
MCPP	15.380	15.387	15.392	15.357	15.417
DCAA	14.847	14.853	14.850	14.823	14.883

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CONTINUING CALIBRATION COMPOUNDS

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10-13-08

Instrument ID: ecd2.i Injection Date: 07-OCT-2008 02:17
 Lab File ID: 011R0201.D Init. Cal. Date(s): ~~02-APR-2008~~ 07-OCT-2008
 Analysis Type: WATER Init. Cal. Times: 18:05 00:59
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	477	491	0.010	2.8	15.0
12 DCAA	324	338	0.010	4.3	15.0
6 Dicamba	1297	1340	0.010	3.3	15.0
10 MCPP	18779	17870	0.010	4.8	15.0
9 MCPA	18691	17432	0.010	6.7	15.0
7 Dichloroprop	368	385	0.010	4.7	15.0
1 2,4-D	396	415	0.010	4.9	15.0
3 2,4,5-TP (Silvex)	1852	1933	0.010	4.4	15.0
4 2,4,5-T	1609	1703	0.010	5.8	15.0
2 2,4-DB	212	217	0.010	2.5	15.0
8 Dinoseb	1268	1345	0.010	6.1	15.0

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CONTINUING CALIBRATION COMPOUNDS

10.13.08

Instrument ID: ecd2.i Injection Date: 07-OCT-2008 10:13
 Lab File ID: 022R0101.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: WATER Init. Cal. Times: 18:05 00:59
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151R.m

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COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	477	499	0.010	4.5	15.0
\$ 12 DCAA	324	349	0.010	7.7	15.0
6 Dicamba	1297	1393	0.010	7.4	15.0
10 MCPP	18779	17084	0.010	9.0	15.0
9 MCPA	18691	16516	0.010	11.6	15.0
7 Dichloroprop	368	403	0.010	9.4	15.0
1 2,4-D	396	429	0.010	8.3	15.0
3 2,4,5-TP (Silvex)	1852	2010	0.010	8.5	15.0
4 2,4,5-T	1609	1765	0.010	9.7	15.0
2 2,4-DB	212	219	0.010	3.2	15.0
8 Dinoseb	1268	1414	0.010	11.5	15.0

FORM 3
WATER HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: HW1BLK0915

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2,4-D	1.000	0.0000	0.6006	60	35-115
2,4,5-TP (Silvex)	1.000	0.0000	0.5334	53	50-115
2,4,5-T	1.000	0.0000	0.8142	81	35-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
SOIL HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: HS1BLK1003

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
2,4-D	33.33	0.0000	28.57	86	35-145
2,4,5-TP (Silvex)	33.33	0.0000	25.01	75	45-125
2,4,5-T	33.33	0.0000	26.81	80	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

COMMENTS: _____

FORM 3
WATER HERB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix Spike - Client Sample No.: 01GW2201 Lab Sample ID: 0809091-03

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
2,4-D	0.9259	0.0000	0.7302	79	35-115
2,4,5-TP (Silvex)	0.9259	0.0000	0.9113	98	50-115
2,4,5-T	0.9259	0.0000	0.8525	92	35-110

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-D	0.9259	0.6751	73	8	30	35-115
2,4,5-TP (Silvex)	0.9259	0.8556	92	6	30	50-115
2,4,5-T	0.9259	0.7644	82	11	30	35-110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits
 Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM 3
SOIL HERB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix Spike - Client Sample No.: 01SS0701 Lab Sample ID: 0809127-03

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
2,4-D	36.63	0.0000	32.66	89	35-145
2,4,5-TP (Silvex)	36.63	0.0000	29.31	80	45-125
2,4,5-T	36.63	0.0000	29.04	79	45-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
2,4-D	36.63	35.25	96	8	30	35-145
2,4,5-TP (Silvex)	36.63	33.69	92	14	30	45-125
2,4,5-T	36.63	32.37	88	11	30	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HW1BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Lab Sample ID: HW1BLK0915 Lab File ID: 012F0201
 Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc/Soxh) SEPF
 Sulfur Cleanup (Y/N) N Date Extracted: 09/15/08
 Date Analyzed (1): 09/28/08 Date Analyzed (2): 09/28/08
 Time Analyzed (1): 1713 Time Analyzed (2): 1753
 Instrument ID (1): ECD2 Instrument ID (2): ECD2
 Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HW1BLK0915LC	HW1BLK0915LCS	09/28/08	09/28/08
02	01GW2301	0809091-02	09/28/08	09/28/08
03	01GW2201	0809091-03	09/28/08	09/28/08
04	01GW2201MS	0809091-03MS	09/28/08	09/28/08
05	01GW2201MSD	0809091-03MSD	09/28/08	09/28/08
06	01GW2501	0809091-04	09/28/08	09/28/08
07	01GW2401	0809091-05	09/28/08	09/28/08
08	01GW2701	0809091-06	09/28/08	09/28/08
09	01GW2601	0809091-07	09/28/08	09/28/08
10	01RB090908	0809091-08	09/28/08	09/29/08
11	01RB091108	0809127-02	09/29/08	09/29/08
12				
13				
14				
15				
16				
17				
18				
19				
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24				
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26				

COMMENTS: _____

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW1BLK0915

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-011

Matrix: (soil/water) WATER Lab Sample ID: HW1BLK0915

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 012F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/15/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/28/08 17:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

94-75-7-----2,4-D		0.25	0.50		U
93-72-1-----2,4,5-TP (Silvex)		0.025	0.050		U
93-76-5-----2,4,5-T		0.025	0.050		U

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HS1BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: HS1BLK1003 Lab File ID: 012F0201

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SONC

Sulfur Cleanup (Y/N) N Date Extracted: 10/03/08

Date Analyzed (1): 10/07/08 Date Analyzed (2): 10/07/08

Time Analyzed (1): 0217 Time Analyzed (2): 0257

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HS1BLK1003LC	HS1BLK1003LCS	10/07/08	10/07/08
02	01SS0701	0809127-03	10/07/08	10/07/08
03	01SS0701MS	0809127-03MS	10/07/08	10/07/08
04	01SS0701MSD	0809127-03MSD	10/07/08	10/07/08
05	01SS0801	0809127-04	10/07/08	10/07/08
06	01SS0901	0809127-05	10/07/08	10/07/08
07	01SS1001	0809127-06	10/07/08	10/07/08
08	01SS1101	0809127-07	10/07/08	10/07/08
09	01SS1201	0809127-08	10/07/08	10/07/08
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HS1BLK1003

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011
 Matrix: (soil/water) SOIL Lab Sample ID: HS1BLK1003
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 012F0201
 % Moisture: 0 decanted: (Y/N) N Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 10/03/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 10/07/08 02:17
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		
		MDL	RL	CONC
94-75-7-----	2,4-D	8.3	17	U
93-72-1-----	2,4,5-TP (Silvex)	0.83	1.7	U
93-76-5-----	2,4,5-T	0.83	1.7	U

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-04 Date(s) Analyzed: 10/07/08 10/07/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32 (mm) Column(2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	17.42	17.34	17.40	6.050	
	2	18.16	18.14	18.20	4.668	25.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-06 Date(s) Analyzed: 10/07/08 10/07/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	17.42	17.34	17.40	10.18	
	2	18.18	18.14	18.20	1.222	157.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-011

Lab Sample ID: 0809127-08 Date(s) Analyzed: 10/07/08 10/07/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	17.42	17.34	17.40	3.986	23.9
	2	18.17	18.14	18.20	5.066	
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

CLIENT Gulfport NCBC CTO 0065		JOB NUMBER 0700	
SUBJECT SDG - Gulfport - 011			
BASED ON		DRAWING NUMBER	
BY J. Kalinyak	CHECKED BY	APPROVED BY	DATE 11/11/08

VOC tetrachloroethene Sample 01GW2301

$$\frac{16333 \times 30}{366817 \times 0.527} \approx 2.53 \mu\text{g/l} \quad \checkmark \text{ aqueous}$$

SVOC diethyl phthalate Sample 01RB091108

$$\frac{3573304 \times 40}{2365299 \times 1.399} \approx 43.19 \quad \frac{43.19 \times 10000}{1060} \approx 40.7 \mu\text{g/l}$$

PEST alpha-chlordane Sample 01SS1001

$$\frac{54553}{9176} \times \frac{5}{15 \times 0.927} \approx 2.1 \mu\text{g/kg}$$

HERB 2,4,5-T Sample - 01SS0801

$$\frac{16505}{976} \times \frac{10}{30 \times 0.932} \approx 6.0 \mu\text{g/kg}$$

Data File: \\ELABNSH04\DD\chem\voa3.i\091208V3.b\0909102.D
 Report Date: 15-Sep-2008 08:39

Empirical Laboratories, LLC

Data file : \\ELABNSH04\DD\chem\voa3.i\091208V3.b\0909102.D
 Lab Smp Id: 0809091-02 Client Smp ID: 01GW2301
 Inj Date : 12-SEP-2008 17:55 MS Autotune Date: 14-AUG-2008 10:03
 Operator : DL Inst ID: voa3.i
 Smp Info : 0809091-02;;;;; vial1
 Misc Info : tet.v09091;0;;;;;gm-all.sub;#5546
 Comment :
 Method : \\ELABNSH04\DD\chem\voa3.i\091208V3.b\VWATER3.m
 Meth Date : 15-Sep-2008 08:37 dlynch Quant Type: ISTD
 Cal Date : 08-SEP-2008 17:10 Cal File: V3STD09.D
 Als bottle: 14
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: gm-all.sub
 Target Version: 4.04
 Processing Host: TARGET09_VM

Concentration Formula: Amt * DF * 5*Uf/Vo

DL 9/15/08
 9-15-08
 (8)

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	unit correction factor
Vo	5.000	Volume of sample purged (mL)

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/L)	FINAL (ug/L)
* 60 Fluorobenzene	96		13.280	13.268	(1.000)	621718	30.0000	
45-cis-1,2-Dichloroethene	96		10.707	10.676	(0.806)	2939	0.70736	0.7074(aQ)
M 29 1,2-Dichloroethene (total)	96					2939	0.80466	0.8047(a)
\$ 50 Dibromofluoromethane	111		11.297	11.291	(0.851)	193650	33.9184	33.92
\$ 53 1,2-Dichloroethane-d4	102		12.088	12.081	(0.910)	34146	31.8451	31.84
65 Trichloroethene	95		13.852	13.840	(1.043)	6814	1.31699	1.317
\$ 78 Toluene-d8	98		15.403	15.397	(0.920)	716217	30.0401	30.04
* 86 Tetrachloroethene	166		16.182	16.176	(0.967)	16333	2.53651	2.536
* 89 Chlorobenzene-d5	82		16.735	16.729	(1.000)	366817	30.0000	(Q)
\$ 101 Bromofluorobenzene	95		17.727	17.715	(1.059)	347926	29.1886	29.19
* 114 1,4-Dichlorobenzene-d4	152		18.786	18.779	(1.000)	380087	30.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-011
 Instrument ID: VOA3 Calibration Date: 09/12/08 Time: 1021
 Lab File ID: V3CCV01 Init. Calib. Date(s): 08/15/08 08/15/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1630 2100
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloropropane	0.204	0.184	50.00	45.25		AVRG	-9.5	20.0
1,3-Dichloropropane	0.630	0.620	50.00	49.23		AVRG	-1.5	
2,2-Dichloropropane	0.309	0.363	50.00	58.66		AVRG	17.3	
1,1-Dichloropropene	0.282	0.300	50.00	53.15		AVRG	6.3	
cis-1,3-Dichloropropene	0.347	0.372	50.00	53.62		AVRG	7.2	
trans-1,3-Dichloropropene	0.540	0.626	50.00	57.89		AVRG	15.8	
Ethylbenzene	2.093	2.225	50.00	53.14		AVRG	6.3	20.0
Ethyl methacrylate	0.530	0.470	50.00	38.89		LINR	-22.2	
Hexachlorobutadiene	0.294	0.263	50.00	46.58		LINR	-6.8	
2-Hexanone	0.187	0.209	100.0	99.78		LINR	-0.2	
Iodomethane	0.286	0.301	50.00	41.82		LINR	-16.4	
Isopropylbenzene	1.848	2.064	50.00	55.85		AVRG	11.7	
p-Isopropyltoluene	1.230	1.224	50.00	49.77		AVRG	-0.4	
Methyl acetate	0.122	0.097	50.00	38.51		LINR	-23.0	
Methyl cyclohexane	0.352	0.285	50.00	40.46		AVRG	-19.1	
Methylene chloride	0.243	0.194	50.00	49.35		LINR	-1.3	
Methyl methacrylate	0.180	0.145	50.00	40.38		AVRG	-19.2	
MTBE	0.586	0.542	50.00	41.34		LINR	-17.3	
4-Methyl-2-pentanone	0.141	0.144	100.0	90.60		LINR	-9.4	
Naphthalene	0.734	0.654	50.00	38.37		LINR	-23.3	
n-Propylbenzene	2.050	2.002	50.00	48.83		AVRG	-2.3	
Styrene	1.289	1.472	50.00	57.08		AVRG	14.2	
1,1,1,2-Tetrachloroethane	0.473	0.525	50.00	55.50		AVRG	11.0	
1,1,2,2-Tetrachloroethane	0.425	0.345	50.00	40.54	0.300	AVRG	-18.9	
Tetrachloroethene	0.527	0.568	50.00	53.92		AVRG	7.8	
Tetrahydrofuran	0.044	0.030	50.00	34.23		AVRG	-31.5	
Toluene	1.041	0.988	50.00	47.43		AVRG	-5.1	20.0
1,2,3-Trichlorobenzene	0.419	0.423	50.00	43.28		LINR	-13.4	
1,2,4-Trichlorobenzene	0.520	0.494	50.00	43.61		LINR	-12.8	
1,1,1-Trichloroethane	0.393	0.441	50.00	56.12		AVRG	12.2	
1,1,2-Trichloroethane	0.286	0.287	50.00	50.08		AVRG	0.2	
Trichloroethene	0.250	0.254	50.00	50.93		AVRG	1.8	
Trichlorofluoromethane	0.430	0.490	50.00	56.96		AVRG	13.9	
Trichlorotrifluoroethane	0.215	0.176	50.00	41.05		AVRG	-17.9	
1,2,3-Trichloropropane	0.178	0.180	50.00	50.45		AVRG	0.9	
1,2,4-Trimethylbenzene	1.420	1.538	50.00	54.14		AVRG	8.3	
1,3,5-Trimethylbenzene	1.504	1.558	50.00	51.80		AVRG	3.6	

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\bna1.i\091808B1.b\0912702.D
 Lab Smp Id: 0809127-02 Client Smp ID: 01RB091108
 Inj Date : 18-SEP-2008 17:36 MS Autotune Date: 24-JUL-2008 08:11
 Operator : ADM Inst ID: bna1.i
 Smp Info : 0809127-02;1;1060;1000;1;UG/L;15-SEP-2008
 Misc Info : tet.b09127;0;;;091508BW1;ppbna.sub;4520
 Comment :
 Method : \\ELABNSH05\TARGET\chem\bna1.i\091808B1.b\IXBN1.m
 Meth Date : 19-Sep-2008 11:07 tmonteiro Quant Type: ISTD
 Cal Date : 29-AUG-2008 14:59 Cal File: DROCAL13.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ppbna.sub
 Target Version: 4.04
 Processing Host: TARGET02_VM

Concentration Formula: Amt * DF * Uf * Vt* Vi/(Amt * Vi)

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	/1000.000	Volume of final extract (uL)
Vi	0.500	Volume injected (uL)
Amt	, 1060.000	Volume of initial extraction

M 9/19/08
 B7D 9/19/08

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN (ng/ul)	FINAL (UG/L)
* 1 1,4-Dichlorobenzene-d4	152			5.123	5.122	(1.000)	1475196	40.0000	
\$ 2 2-Fluorophenol	112			4.155	4.155	(0.811)	1436190	24.8750	23.47
\$ 3 Phenol-d6	99			4.845	4.859	(0.946)	1119596	16.9521	15.99
* 32 Naphthalene-d8	136			6.368	6.363	(1.000)	4338676	40.0000	
\$ 33 Nitrobenzene-d5	82			5.595	5.603	(0.879)	1649766	34.7471	32.78
* 66 Acenaphthene-d10	164			9.304	9.296	(1.000)	2365299	40.0000	
\$ 71 2-Fluorobiphenyl	172			7.975	7.978	(0.857)	2834370	34.8306	32.86
73 Dimethylphthalate	163			8.778	8.792	(0.943)	385926	4.38120	4.133(a)
* 83 Diethylphthalate	149			10.421	10.431	(1.120)	3573304	43.1904	40.74
* 99 Phenanthrene-d10	188			12.952	12.941	(1.000)	3282651	40.0000	
\$ 104 2,4,6-Tribromophenol	330			11.163	11.165	(0.862)	885168	79.9212	75.40
* 129 Chrysene-d12	240			20.484	20.493	(1.000)	2746713	40.0000	
\$ 132 Terphenyl-d14	244			17.608	17.601	(0.860)	2513334	42.3611	39.96
* 151 Perylene-d12	264			24.637	24.636	(1.000)	1980833	40.0000	

J.H. 10-10-08
 JJ
 10-10-08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\033F3301.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\033R3301.D
 Inj Date : 08-OCT-2008 00:38
 Sample Info: 0809127-06
 Misc Info : gulfport-011;15;5;8I30005;ug/Kg;;tcl.sub;30-Sep-2008
 Cal Date : 10-OCT-2008 13:07
 Operator : JJ
 Inst ID : ecd3.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82R.m
 Sub List #1 : tcl.sub
 Sub List #2 : tcl.sub
 Col #1 Phase : ZB MR-1
 Col #2 Phase : ZB MR-2

Concentration Formula: $Amt * DF * Uf * Vt * 2 / (Amt * Vi * (Solids / 100))$

Name	X Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	5.000	Final Volume
Amt	15.000	Sample Amount
Vi	2.000	Injection Volume
Solids	92.700	Percent Solids

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/Kg)	Conc#2 (ug/Kg)	Target Range	Ratio
Alpha-Chlordane	8.064	6.942	54553	65126	2.138	1.837		100.00
Beta-BHC	6.296	0.000	13378	0	1.033	0.0000	NC	100.00
4,4'-DDD	8.904	7.815	12051	105642	0.5474	3.459	(MATRIX)	100.00(a)
4,4'-DDE	8.254	7.148	19991	48806	0.8211	1.479		100.00
4,4'-DDT	9.291	8.103	46575	144182	1.967	4.660	(MATRIX)	100.00
Delta-BHC	6.571	0.000	25134	0	0.9466	0.0000	NC	100.00
Dieldrin	8.462	7.315	377629	493844	14.77	13.69		100.00
Endosulfan I	8.102	0.000	8951	0	0.3773	0.0000	NC	100.00
Endosulfan II	9.026	7.938	4611	8546	0.1808	0.2385		100.00(a)
Endosulfan Sulfate	9.461	0.000	98117	0	4.380	0.0000	> NC	100.00
Endrin	0.000	7.622	0	14127	0.0000	0.5278		
Endrin Aldehyde	9.199	8.173	36972	37485	2.039	1.405		100.00(M)
Endrin Ketone	0.000	9.045	0	27626	0.0000	0.6920	NC	
Gamma-Chlordane	7.964	6.893	14578	49361	0.5608	1.388		100.00

* FLAG PEST. RESULTS DUE TO PCB-1200 INTERFERENCE *

Page 2
J.H. 10-10-08
 >> 10-10-08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 08-OCT-2008 01:33
 Lab File ID: 036F3601.D Init. Cal. Date(s): 22-SEP-2006 07-OCT-2008
 Analysis Type: Init. Cal. Times: 14:42 20:21
 Lab Sample ID: AB/Sur 100 #7358 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\100708.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	7734	7940	0.010	2.7	15.0
3 Alpha-BHC	10093	X 11910	0.010	18.0	15.0
23 Gamma-BHC	9725	Q 10747	0.010	10.5	15.0
5 Beta-BHC	4655	4593	0.010	-1.3	15.0
15 Delta-BHC	9547	10674	0.010	11.8	15.0
25 Heptachlor	10422	10170	0.010	-2.4	15.0
2 Aldrin	9406	10207	0.010	8.5	15.0
26 Heptachlor Epoxide	9400	9464	0.010	0.7	15.0
24 Gamma-Chlordane	9347	8933	0.010	-4.4	15.0
4 Alpha-Chlordane	9176	8673	0.010	-5.5	15.0
17 Endosulfan I	8530	8382	0.010	-1.7	15.0
13 4,4'-DDE	8755	8981	0.010	2.6	15.0
16 Dieldrin	9195	9749	0.010	6.0	15.0
20 Endrin	6753	7330	0.010	8.5	15.0
12 4,4'-DDD	7916	8232	0.010	4.0	15.0
18 Endosulfan II	9171	8083	0.010	-11.9	15.0
21 Endrin Aldehyde	6520	6647	0.010	1.9	15.0
14 4,4'-DDT	8514	6873	0.010	-19.3	15.0
19 Endosulfan Sulfate	8055	7871	0.010	-2.3	15.0
27 Methoxychlor	4343	3735	0.010	-14.0	15.0
22 Endrin Ketone	9634	9578	0.010	-0.6	15.0
\$ 37 DCB	7579	7002	0.010	-7.6	15.0

10.13.08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\017F0201.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\017R0201.D
 Inj Date : 07-OCT-2008 05:32
 Sample Info: 0809127-04
 Misc Info : Gulfport-011;30.0;10;100308HS1;ug/Kg;;herbd.sub;03-Oct-2008
 Cal Date : 11-OCT-2008 10:04
 Operator : JH
 Inst ID : ecd2.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151R.m
 Sub List #1 : herbd.sub
 Sub List #2 : herbd.sub
 Col #1 Phase : RTX-CLP
 Col #2 Phase : RTX-CLP2

Concentration Formula: Amt * DF * Uf*Vt*Vi/(Amt*Vi*(Solids/100))

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	10.000	Final Volume
Amt	30.000	Sample Amount
Vi	2.000	Injection Volume
Solids	93.200	Percent Solids

✓ 10/13/08

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/Kg)	Conc#2 (ug/Kg)
DCAA	13.980	14.877	23865	104791	42.53	115.7
MCPA	14.993	0.000	12998	0	5564	0.0000 (M)
Dichloroprop	15.567	16.280	6430	10860	11.78	10.55 (M)
2,4,5-T	17.420	18.163	16505	21007	6.050	4.668
2,4-DB	17.990	18.700	54775	17705	171.8	29.85

✓ 10/13/08

QC Flag Legend

M - Compound response manually integrated.

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

10.13.08

Instrument ID: ecd2.i Injection Date: 07-OCT-2008 01:38
 Lab File ID: 011F0201.D Init. Cal. Date(s): 02-APR-2008 07-OCT-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 00:20
 Lab Sample ID: Herb/DCAA #7396H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\100608.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	246	249	0.010	1.1	15.0
12 DCAA	201	211	0.010	5.0	15.0
6 Dicamba	18.81500	19.66815	0.010	-4.5	15.0
10 MCPP	18779	19785	0.010	-5.4	15.0
9 MCPA	18691	19792	0.010	-5.9	15.0
7 Dichloroprop	189	195	0.010	-3.5	15.0
1 2,4-D	188	191	0.010	-1.7	15.0
3 2,4,5-TP (Silvex)	1133	1113	0.010	-1.8	15.0
4 2,4,5-T	976	985	0.010	1.0	15.0
2 2,4-DB	114	116	0.010	1.6	15.0
8 Dinoseb	94.51800	94.30360	0.010	0.2	15.0

010111

TO: R. FISHER – PAGE 2
DATE: NOVEMBER 5, 2008

Holding Time

The 14 day hold time for cyanide was exceeded by 1 day affecting samples 01GW1401, 01GW1301, 01GW1201, 01GW1101, 01GW1001 and 01GW1501. The positive and nondetected results reported for cyanide in the affected samples were qualified as estimated, "J" and "UJ", respectively.

Laboratory Duplicate Results

Laboratory duplicate imprecision (RPD > 20%) was noted for cyanide affecting samples 01GW0601, 01GW0901, 01GW1701, 01GW1601, 01GW1601D, 01GW1801, 01GW1901, 01GW2101 and 01GW2001. Positive results reported for cyanide in the affected samples were qualified as estimated, "J".

Matrix Spike / Matrix Spike Duplicate Sample Results

The matrix percent recovery for cyanide was < 75% quality control limit affecting samples 01GW0601, 01GW0901, 01GW1701, 01GW1601, 01GW1601D, 01GW1801, 01GW1901, 01GW2101 and 01GW2001. Positive results reported for cyanide in the affected samples were qualified as estimated, "J".

Notes

The Contract Required Detection Limit (CRDL) percent recoveries for selenium were outside the 90-110% quality control limit. However, no validation actions are required for this noncompliance.

The following contaminant was detected in the laboratory method/preparation blanks at the following maximum concentration:

<u>Analyte</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Thallium ⁽¹⁾	3.1 ug/L	15.5 ug/L

⁽¹⁾ Maximum concentration affecting samples 01GW1601D, 01GW1801, 01GW1901, 01GW2101 and 01GW2001.

An action level of 5X the maximum contaminant level has been used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. No validation actions were warranted as all sample results were nondetects.

Executive Summary

Laboratory Performance: The 14 day hold time for cyanide was exceeded by 1 day affecting samples 01GW1401, 01GW1301, 01GW1201, 01GW1101, 01GW1001 and 01GW1501.

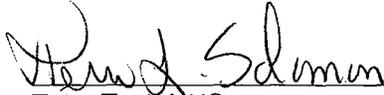
Other Factors Affecting Data Quality: Laboratory duplicate imprecision (RPD > 20%) was noted for cyanide. The matrix percent recovery for cyanide was < 75% quality control limit

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004 and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (January 2006).

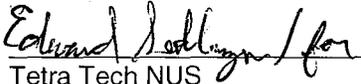
The text of this report has been formulated to address only those problem areas affecting data quality.

TO: R. FISHER – PAGE 3
DATE: NOVEMBER 5, 2008

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM."



Tetra Tech NUS
Terri L. Solomon
Environmental Scientist



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS-GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DOT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	258			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	418			
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	16400			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	8470			
LEAD	1.5	U	U	
MAGNESIUM	9990			
MANGANESE	308			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	4600	J		
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	19500			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	91.7	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	63.2	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	4880	J		
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	3130			
LEAD	1.5	U	U	
MAGNESIUM	1000	U	U	
MANGANESE	36			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6510			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	24.3			

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	77.7	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	61.2	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	4760	J		
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	3050			
LEAD	1.5	U	U	
MAGNESIUM	1000	U	U	
MANGANESE	35.1			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6270			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

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 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	172	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	42	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	8470			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	4960			
LEAD	1.5	U	U	
MAGNESIUM	1100	J		
MANGANESE	153			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	9810			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	190	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	178	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	15700			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	11500			
LEAD	1.5	U	U	
MAGNESIUM	5550			
MANGANESE	325			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	4250	J		
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	19500			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.7	J		

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	143	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	39	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	9890			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	2890			
LEAD	1.5	U	U	
MAGNESIUM	1000	U	U	
MANGANESE	30			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6770			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

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 lab_id 0808253-07
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 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINIUM	6320			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	93.9	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	4140	J		
CHROMIUM	8.1	J		
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	4700			
LEAD	1.5	U	U	
MAGNESIUM	1700	J		
MANGANESE	76.6			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1510	J		
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	7640			
THALLIUM	3.0	U	U	
VANADIUM	10.2	J		
ZINC	12.4	J		

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINIUM	192	J		
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	87.4	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	6300			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	5020			
LEAD	1.5	U	U	
MAGNESIUM	1130	J		
MANGANESE	33.9			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	2770	J		
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINIUM	201			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	30.5	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	7010			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	204			
LEAD	1.5	U	U	
MAGNESIUM	1320	J		
MANGANESE	4.4	J		
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	3150	J		
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

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 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	987			
ANTIMONY	5.0	U	U	
ARSENIC	19.1			
BARIUM	15.1	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	9710			
CHROMIUM	2.6	J		
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	38000			
LEAD	1.5	U	U	
MAGNESIUM	1520	J		
MANGANESE	246			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6720			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	73.5	J		
ANTIMONY	5.0	U	U	
ARSENIC	14.2			
BARIUM	41	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	40500			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	44000			
LEAD	1.5	U	U	
MAGNESIUM	4050	J		
MANGANESE	548			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1470	J		
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	10100			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	320			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	88.7	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	3940	J		
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	1170			
LEAD	1.5	U	U	
MAGNESIUM	1160	J		
MANGANESE	9.1	J		
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	3720	J		
THALLIUM	4.1	J		
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

nsample 01GW1601D
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 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	363			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	93.8	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	4100	J		
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	1240			
LEAD	1.5	U	U	
MAGNESIUM	1210	J		
MANGANESE	9.4	J		
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	4150	J		
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	268			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	41.5	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	10100			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	6020			
LEAD	1.5	U	U	
MAGNESIUM	1650	J		
MANGANESE	98.7			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6620			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	887			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	15.5	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	17900			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	6690			
LEAD	1.5	U	U	
MAGNESIUM	2050	J		
MANGANESE	79.3			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	4200	J		
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: M

nsample 01GW1901
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 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	202			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	15.5	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	45400			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	2160			
LEAD	1.5	J		
MAGNESIUM	1160	J		
MANGANESE	14.1	J		
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	6120			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	297			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	37.2	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	8210			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	13900			
LEAD	1.9	J		
MAGNESIUM	3100	J		
MANGANESE	130			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	7650			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

Parameter	Result	Lab Qual	Val Qual	Qual Code
ALUMINUM	204			
ANTIMONY	5.0	U	U	
ARSENIC	3.0	U	U	
BARIUM	28	J		
BERYLLIUM	1.0	U	U	
CADMIUM	1.0	U	U	
CALCIUM	23100			
CHROMIUM	2.0	U	U	
COBALT	5.0	U	U	
COPPER	5.0	U	U	
IRON	5810			
LEAD	1.6	J		
MAGNESIUM	5800			
MANGANESE	106			
MERCURY	0.08	U	U	
NICKEL	5.0	U	U	
POTASSIUM	1000	U	U	
SELENIUM	3.0	U	U	
SILVER	1.0	U	U	
SODIUM	7220			
THALLIUM	3.0	U	U	
VANADIUM	5.0	U	U	
ZINC	5.0	U	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

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nsample 01GW0701
 samp_date 8/26/2008
 lab_id NRI0528-01
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id NRI0528-02
 qc_type NM
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0023		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.005	U	U	

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0096			

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW0801
 samp_date 8/26/2008
 lab_id NRI0528-03
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id NRI0532-02
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id NRI0528-09
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.005	U	U	

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0098		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0021		J	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW1101
 samp_date 8/27/2008
 lab_id NRI0528-06
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id NRI0528-04
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id NRI0528-05
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.005	U	UJ	H

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0049		J	H

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0033		J	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW1401
 samp_date 8/27/2008
 lab_id NRI0528-08
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id NRI0528-07
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id NRI0532-04
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0125		J	H

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.005	U	UJ	H

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0052		J	DF

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id NRI0532-05
 qc_type NM
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1701
 samp_date 8/28/2008
 lab_id NRI0532-03
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id NRI0532-06
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0078		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0063		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0024		J	DF

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: MISC

nsample 01GW1901
 samp_date 8/28/2008
 lab_id NRI0532-07
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id NRI0532-09RE1
 qc_type NM
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id NRI0532-08
 qc_type NM
 Pct_Solids
 DUP_OF:

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0222		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0027		J	DF

Parameter	units	Result	Lab Qual	Val Qual	Qual Code
CYANIDE	MG/L	0.0143		J	DF

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW0601

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-02
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	258			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	418			P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	16400			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	8470			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	9990			P
7439-96-5	Manganese	308			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	4600	J		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	19500			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW0701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-02
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	91.7	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	63.2	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4880	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	3130			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	36.0			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6510			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	24.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW0701D

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-03
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.7	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	61.2	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4760	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	3050			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	35.1			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6270			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW0801

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-04
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	172	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	42.0	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	8470			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	4960			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1100	J		P
7439-96-5	Manganese	153			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	9810			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW0901

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-03
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	190	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	178	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	15700			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	11500			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	5550			P
7439-96-5	Manganese	325			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	4250	J		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	19500			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.7	J		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1001

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-10
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	143	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	39.0	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	9890			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	2890			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1000	U		P
7439-96-5	Manganese	30.0			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6770			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1101

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-07
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6320			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	93.9	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4140	J		P
7440-47-3	Chromium	8.1	J		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	4700			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1700	J		P
7439-96-5	Manganese	76.6			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1510	J		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	7640			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	10.2	J		P
7440-66-6	Zinc	12.4	J		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1201

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-05
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	192	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	87.4	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	6300			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	5020			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1130	J		P
7439-96-5	Manganese	33.9			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	2770	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1301

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab. Sample ID: 0808253-06
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	201			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	30.5	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	7010			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	204			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1320	J		P
7439-96-5	Manganese	4.4	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	3150	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1401

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-09
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	987			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	19.1			P
7440-39-3	Barium	15.1	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	9710			P
7440-47-3	Chromium	2.6	J		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	38000			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1520	J		P
7439-96-5	Manganese	246			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6720			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1501

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): GROUND WATER Lab Sample ID: 0808253-08
 Level (low/med): LOW Date Received: 08/28/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	73.5	J		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	14.2			P
7440-39-3	Barium	41.0	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	40500			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	44000			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	4050	J		P
7439-96-5	Manganese	548			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1470	J		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	10100			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1601

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-05
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	320			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	88.7	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	3940	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	1170			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1160	J		P
7439-96-5	Manganese	9.1	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	3720	J		P
7440-28-0	Thallium	4.1	J		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1601D

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-06
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	363			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	93.8	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	4100	J		P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	1240			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1210	J		P
7439-96-5	Manganese	9.4	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	4150	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-04
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	268			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	41.5	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	10100			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	6020			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	1650	J		P
7439-96-5	Manganese	98.7			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6620			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1801

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-07
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	887			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	15.5	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	17900			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	6690			P
7439-92-1	Lead	1.5	U		P
7439-95-4	Magnesium	2050	J		P
7439-96-5	Manganese	79.3			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	4200	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW1901

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-08
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	202			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	15.5	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	45400			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	2160			P
7439-92-1	Lead	1.5	J		P
7439-95-4	Magnesium	1160	J		P
7439-96-5	Manganese	14.1	J		P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	6120			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2001

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-10
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	297			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	37.2	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	8210			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	13900			P
7439-92-1	Lead	1.9	J		P
7439-95-4	Magnesium	3100	J		P
7439-96-5	Manganese	130			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	7650			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01GW2101

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Matrix (soil/water): WATER Lab Sample ID: 0808268-09
 Level (low/med): LOW Date Received: 08/29/08
 Solids: _____

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	204			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.0	U		P
7440-39-3	Barium	28.0	J		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	23100			P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	5.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	5810			P
7439-92-1	Lead	1.6	J		P
7439-95-4	Magnesium	5800			P
7439-96-5	Manganese	106			P
7439-97-6	Mercury	0.080	U		AV
7440-02-0	Nickel	5.0	U		P
7440-09-7	Potassium	1000	U		P
7782-49-2	Selenium	3.0	U		P
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	7220			P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	5.0	U		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW0601

Laboratory: <u>TestAmerica Nashville</u>	SDG:
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0532-01</u> File ID:
Sampled: <u>08/28/08 08:15</u>	Prepared: <u>09/11/08 07:20</u> Analyzed: <u>09/11/08 11:31</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u> Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091567</u> Sequence:	Calibration: Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00230	1	J	SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW0801

Laboratory: <u>IestAmerica Nashville</u>	SDG:
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0528-03</u> File ID:
Sampled: <u>08/26/08 15:10</u>	Prepared: <u>09/09/08 08:20</u> Analyzed: <u>09/09/08 11:29</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u> Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091106</u> Sequence:	Calibration: Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00500	1	U	SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW1101

Laboratory: <u>TestAmerica Nashville</u>	SDG:
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0528-06</u> File ID:
Sampled: <u>08/27/08 11:45</u>	Prepared: <u>09/11/08 07:20</u> Analyzed: <u>09/11/08 11:31</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u> Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091567</u> Sequence:	Calibration: Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00500	1	U	SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW1201

Laboratory: <u>TestAmerica Nashville</u>	SDG:
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0528-04</u> File ID:
Sampled: <u>08/27/08 09:10</u>	Prepared: <u>09/11/08 07:20</u> Analyzed: <u>09/11/08 11:31</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u> Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091567</u> Sequence:	Calibration: Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00490	1	J	SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW1401

Laboratory: <u>TestAmerica Nashville</u>	SDG:		
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>		
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0528-08</u>	File ID:	
Sampled: <u>08/27/08 14:00</u>	Prepared: <u>09/11/08 07:20</u>	Analyzed: <u>09/11/08 11:31</u>	
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u>	Initial/Final: <u>50 mL / 50 mL</u>	
Batch: <u>8091567</u>	Sequence:	Calibration:	Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.0125	1		SW846 9012B

Form 1

INORGANIC ANALYSIS DATA SHEET
SW846 9012B

01GW1501

Laboratory: TestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Matrix: Water

Laboratory ID: NRI0528-07

File ID:

Sampled: 08/27/08 15:50

Prepared: 09/11/08 07:20

Analyzed: 09/11/08 11:31

Solids: 0.00

Preparation: NO PREP

Initial/Final: 50 mL / 50 mL

Batch: 8091567

Sequence:

Calibration:

Instrument: Inst

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00500	1	U	SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
SW846 9012B

01GW1601

Laboratory: <u>IestAmerica Nashville</u>	SDG:	
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>	
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0532-04</u>	File ID:
Sampled: <u>08/28/08 11:00</u>	Prepared: <u>09/11/08 07:20</u>	Analyzed: <u>09/11/08 11:31</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u>	Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091567</u>	Sequence:	Calibration:
		Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00520	1		SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
SW846 9012B

01GW1601D

Laboratory: TestAmerica Nashville SDG:
Client: Empirical Laboratories, LLC (4017) Project: Empirical Laboratories, LLC
Matrix: Water Laboratory ID: NRI0532-05 File ID:
Sampled: 08/28/08 11:00 Prepared: 09/11/08 07:20 Analyzed: 09/11/08 11:31
Solids: 0.00 Preparation: NO PREP Initial/Final: 50 mL / 50 mL
Batch: 8091567 Sequence: Calibration: Instrument: Inst

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.00780	1		SW846 9012B

Form 1

INORGANIC ANALYSIS DATA SHEET

SW846 9012B

01GW1901

Laboratory: IestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Matrix: Water

Laboratory ID: NRI0532-07

File ID:

Sampled: 08/28/08 13:50

Prepared: 09/11/08 07:20

Analyzed: 09/11/08 11:31

Solids: 0.00

Preparation: NO PREP

Initial/Final: 50 mL / 50 mL

Batch: 8091567

Sequence:

Calibration:

Instrument: Inst

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.0222	1		SW846 9012B

Form 1
INORGANIC ANALYSIS DATA SHEET
 SW846 9012B

01GW2101

Laboratory: <u>IestAmerica Nashville</u>	SDG:
Client: <u>Empirical Laboratories, LLC (4017)</u>	Project: <u>Empirical Laboratories, LLC</u>
Matrix: <u>Water</u>	Laboratory ID: <u>NRI0532-08</u> File ID:
Sampled: <u>08/28/08 15:25</u>	Prepared: <u>09/11/08 07:20</u> Analyzed: <u>09/11/08 11:31</u>
Solids: <u>0.00</u>	Preparation: <u>NO PREP</u> Initial/Final: <u>50 mL / 50 mL</u>
Batch: <u>8091567</u> Sequence:	Calibration: Instrument: <u>Inst</u>

CAS NO.	Analyte	Concentration (mg/L)	Dilution Factor	Q	Method
57-12-5	Cyanide	0.0143	1		SW846 9012B

APPENDIX C
SUPPORT DOCUMENTATION

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 010
Work Order # 0808253, 0808268
August, 2008

Empirical Laboratories ID	Client ID
0808253-02	01GW0701
0808253-03	01GW0701D
0808253-04	01GW0801
0808253-05	01GW1201
0808253-06	01GW1301
0808253-07	01GW1101
0808253-08	01GW1501
0808253-09	01GW1401
0808253-10	01GW1001
0808268-02	01GW0601
0808268-03	01GW0901
0808268-04	01GW1701
0808268-05	01GW1601
0808268-06	01GW1601D
0808268-07	01GW1801
0808268-08	01GW1901
0808268-09	01GW2101
0808268-10	01GW2001

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Betty DeVille
Inorganic Lab Manager

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

I. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

II. METHODS

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 010
Work Order # 0808253, 0808268
August, 2008

US EPA SW846 Method 3050B was used to digest and method 6010B was used for analysis of ICAP metals. Method 7471A was used to digest and analyze mercury and method 9012A was used to distill and analyze cyanide. Note: The "U" flag indicates that the sample concentration is reported down to the laboratory MDL. The "J" flag indicates that the analyte result is between the laboratory reporting limit and the laboratory MDL. All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

III. PREPARATION

All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

IV. ANALYSIS

- A. **Calibration:** All calibration criteria were met.
- B. **Blanks:** All blank criteria were met with the following exceptions: The second CCB in the second ICAP analysis was out of the specification limits for thallium at 3.1 ug/L. All impacted samples had concentrations less than the MDL for thallium. There is no impact to the sample data.
- C. **Spikes:** All matrix spikes quality control criteria were met.
- D. **Duplicates:** All duplicate quality control criteria were met.
- E. **Samples:** All sample analysis proceeded normally.
- F. **Laboratory Control Samples:** All percent recovery quality control criteria were met.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42020

SHIP TO: 227 French Landing Drive, Suite 550 + Nashville, TN 37228 + 615-345-1115 + (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:		
Name <u>Bob Fisher</u>		Name _____		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> TCL VOC TCL SW/1 Pest/ARB HMBs TIAL metals CN </div> <div style="font-size: 4em; opacity: 0.5;">X</div> </div>				VOA Headspace <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
Company <u>T+was</u>		Company _____						Field Filtered <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
Address <u>3360 Capital Cir. NE</u>		Address _____						Correct Containers <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA		
City <u>Tallahassee</u>		City _____						Discrepancies <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
State, Zip <u>FL 32308</u>		State, Zip _____						Cust. Seals Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA		
Phone <u>850 385 5877</u>		Phone _____		Containers Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA						
Fax _____		Fax _____		Airbill #: <u>0245, 0414, 0425, 0436</u> 426						
E-mail _____		E-mail _____		CAR #: _____						
Project No./Name: <u>Gulfport Site L</u>				Sampler's (Signature): <u>[Signature]</u>						

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	TCL	40	HMBs	ARBs	Comments	No. of Bottles	Lab Use Only Containers/Pres.
0808253-01	1330 ^{8/26}	OLTB082608	QA	2	1				2	25-HP
-02	1340 ^{8/26}	OLGW070L	GW	3	5	(1)	(1)		10	35-HP, 1C-101, 1C-2H 5H
-03	1340 ^{8/26}	OLGW070LD	GW	3	5	(1)	(1)		10	
-04	1510 ^{8/26}	OLGW080L	GW	3	5	(1)	(1)			
-05	0910 ^{8/27}	OLGW120L	GW	3	5	(1)	(1)		10	
-06	1030 ^{8/27}	OLGW130L	GW	3	5	(1)	(1)		10	
-07	1140 ^{8/27}	OLGW110L	GW	3	5	(1)	(1)		10	
-08	1350 ⁸⁻²⁷	OLGW150L	GW	3	5	(1)	(1)		10	
-09	1400 ⁸⁻²⁷	OLGW140L	GW	3	5	(1)	(1)		10	
-10	1550 ⁸⁻²⁷	OLGW100L	GW	3	5	(1)	(1)		10	

Sample Kit Prep'd by: (Signature) <u>[Signature]</u>	Date/Time <u>8-28-08 1000</u>	Received By: (Signature) <u>[Signature]</u>	REMARKS: Airbill 8645 1469 4264	Details:	
Relinquished by: (Signature) <u>[Signature]</u>	Date/Time <u>8-27-08 1700</u>	Received By: (Signature) _____		Page _____ of _____	
Relinquished by: (Signature) _____	Date/Time _____	Received By: (Signature) _____		Cooler No. _____ of _____	
Received for Laboratory by: (Signature) <u>[Signature]</u>	Date/Time <u>8/28/08 08:00</u>	Temperature <u>3-20C 2-60C</u> <u>3-40C 2-10C 2-20C</u>		Date Shipped _____	
				Shipped By _____	
				Turnaround _____	

15 Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.
8/28/08

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42021

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:		
Name: <u>Bob Fisher</u>		Name: <u>Ben MSA</u>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TCL VOL</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TEL SUPP/RES/FEET</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TAL METALS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CW</div> </div>				VOA Headspace Y <input checked="" type="radio"/> N NA		
Company: <u>Tetratex NCS</u>		Company: _____						Field Filtered Y <input checked="" type="radio"/> N NA		
Address: <u>3360 Capital Dr. NE</u>		Address: _____						Correct Containers <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA		
City: <u>Tallahassee</u>		City: _____						Discrepancies Y <input checked="" type="radio"/> N NA		
State, Zip: <u>FL 32308</u>		State, Zip: _____						Cust. Seals Intact <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA		
Phone: <u>850 385 9899</u>		Phone: _____		Containers Intact <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA						
Fax: _____		Fax: _____		Airbill #: <u>2493</u>						
E-mail: _____		E-mail: _____		CAR #: _____						
Project No./Name: <u>GULFPORT S.TOL</u>		Sampler's (Signature): <u>[Signature]</u>								

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	Analysis				Comments	No. of Bottles	Lab Use Only Containers/Pres.
				H ₂ O	4% Meq/L	Meq/L	Meq/L			
0808268-01	8/28/08 0800	OLTB 082808	QA	2					2	25-HY
-02	8/28/08 0815	OLGW 060L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	5H, IC-NI, IC-SH 307#
-03	8-28/08 0900	OLGW 090L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-04	8-28/08 1030	OLGW 170L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-05	8-28/08 1100	OLGW 160L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-06	8-28/08 1120	OLGW 160LD	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-07	8-28/08 1345	OLGW 180L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-08	8/28/08 1350	OLGW 190L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-09	8-28/08 1525	OLGW 210L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	
-10	8-28/08 1525	OLGW 200L	GW	3	5	<input checked="" type="radio"/>	<input checked="" type="radio"/>		10	

Sample Kit Prep'd by: (Signature) <u>[Signature]</u>		Date/Time: <u>8-28/08 1000</u>	Received By: (Signature) <u>[Signature]</u>	REMARKS:	Details:	
Relinquished by: (Signature) <u>[Signature]</u>		Date/Time: <u>8-29/08 1730</u>	Received By: (Signature) _____		Page _____ of _____	
Relinquished by: (Signature) _____		Date/Time: _____	Received By: (Signature) _____		Cooler No. _____ of _____	
Received for Laboratory by: (Signature) <u>[Signature]</u>		Date/Time: <u>8-29-08 900</u>	Temperature: <u>5.1°C</u>		Date Shipped _____	
					Shipped By _____	
					Turnaround _____	

5 Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/2/2008	9/13/2008	5	11	16
HERB	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HG	UG/L	01GW1401	0808253-09	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW0701	0808253-02	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW0701D	0808253-03	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW0801	0808253-04	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW1001	0808253-10	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1201	0808253-05	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/5/2008	9/8/2008	8	3	11
HG	UG/L	01GW1501	0808253-08	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HG	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1301	0808253-06	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1101	0808253-07	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
M	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
M	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
CN	MG/L	01GW2101	NRI0532-08	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0701	NRI0528-01	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
CN	MG/L	01GW2001	NRI0532-09RE1	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1901	NRI0532-07	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1801	NRI0532-06	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1701	NRI0532-03	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1601D	NRI0532-05	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0601	NRI0532-01	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1601	NRI0532-04	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0901	NRI0532-02	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1401	NRI0528-08	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1301	NRI0528-05	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1201	NRI0528-04	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW0701D	NRI0528-02	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
CN	MG/L	01GW1101	NRI0528-06	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/L	01GW1001	NRI0528-09	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1501	NRI0528-07	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW0801	NRI0528-03	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
OS	%	01GW1601	0808268-05	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1601D	0808268-06	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1701	0808268-04	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1801	0808268-07	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW2101	0808268-09	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW2001	0808268-10	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW0901	0808268-03	NM	8/28/2008	9/9/2008	9/9/2008	12	0	12
OS	%	01GW1901	0808268-08	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW1001	0808253-10	NM	8/27/2008	9/8/2008	9/3/2008	12	-5	7
OS	%	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	%	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	%	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8

**NCBC GULFPORT
WATER DATA
GULFPORT-010**

FRACTION	CHEMICAL	01GW0701	UNITS	01GW0701D	RPD	D
M	ALUMINUM	91.7	UG/L	77.7	16.53	14.00
M	BARIUM	63.2	UG/L	61.2	3.22	2.00
M	CALCIUM	4880	UG/L	4760	2.49	120.00
M	IRON	3130	UG/L	3050	2.59	80.00
M	MANGANESE	36	UG/L	35.1	2.53	0.90
M	SODIUM	6510	UG/L	6270	3.76	240.00
M	ZINC	24.3	UG/L	ND	200.00	24.30

DF

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

**NCBC GULFPORT
WATER DATA
GULFPORT-010**

FRACTION	CHEMICAL	01GW0701	UNITS	01GW0701D	RPD	D
MISC	CYANIDE	ND	MG/L	0.0096	200.00	0.01

OK

Current RPD Quality Control Limit: 30 %.
Shaded cells indicate RPDs that exceed the applicable quality control limit.

**NCBC GULFPORT
WATER DATA
GULFPORT-010**

FRACTION	CHEMICAL	01GW1601	UNITS	01GW1601D	RPD	D
M	ALUMINUM	320	UG/L	363	12.59	43.00
M	BARIUM	88.7	UG/L	93.8	5.59	5.10
M	CALCIUM	3940	UG/L	4100	3.98	160.00
M	IRON	1170	UG/L	1240	5.81	70.00
M	MAGNESIUM	1160	UG/L	1210	4.22	50.00
M	MANGANESE	9.1	UG/L	9.4	3.24	0.30
M	SODIUM	3720	UG/L	4150	10.93	430.00
M	THALLIUM	4.1	UG/L	ND	200.00	4.10

OL

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

NCBC GULFPORT
WATER DATA
GULFPORT-010

FRACTION	CHEMICAL	01GW1601	UNITS	01GW1601D	RPD	D
MISC	CYANIDE	0.0052	MG/L	0.0078	40.00	0.00

OK

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010 ³¹⁰₉₂₋₁₀₈

Flow No.: ILM04.1

EPA Sample No.	Lab Sample ID.
01GW0701	0808253-02
01GW0701D	0808253-03
01GW0801	0808253-04
01GW1201	0808253-05
01GW1301	0808253-06
01GW1101	0808253-07
01GW1501	0808253-08
01GW1401	0808253-09
01GW1401S	0808253-09S
01GW1401SD	0808253-09SD
01GW1001	0808253-10
01GW0601	0808268-02
01GW0901	0808268-03
01GW1701	0808268-04
01GW1601	0808268-05
01GW1601S	0808268-05S
01GW1601SD	0808268-05SD
01GW1601D	0808268-06
01GW1601DS	0808268-06S
01GW1601DSD	0808268-06SD

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: D. Rick Davis

Date: _____ Title: Vice-President

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010 *9/25/00*

Flow No.: ILM04.1

EPA Sample No.	Lab Sample ID.
<u>01GW1801</u>	<u>0808268-07</u>
<u>01GW1901</u>	<u>0808268-08</u>
<u>01GW2101</u>	<u>0808268-09</u>
<u>01GW2001</u>	<u>0808268-10</u>
<u>01GW2001S</u>	<u>0808268-10S</u>
<u>01GW2001SD</u>	<u>0808268-10SD</u>

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: D. Rick Davis

Date: _____ Title: Vice-President

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Initial Calibration Source: Accustandard, HighPurityContinuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10179.16	101.8	10000.0	10080.38	100.8	9978.74	99.8	P
Antimony	1000.0	969.83	97.0	1000.0	1002.69	100.3	988.05	98.8	P
Arsenic	1000.0	1062.30	106.2	1000.0	1071.18	107.1	1049.21	104.9	P
Barium	1000.0	981.54	98.2	1000.0	983.70	98.4	971.55	97.2	P
Beryllium	1000.0	1074.24	107.4	1000.0	1052.78	105.3	1055.46	105.5	P
Cadmium	1000.0	1067.83	106.8	1000.0	1057.33	105.7	1061.59	106.2	P
Calcium	1000.0	1061.70	106.2	1000.0	1008.71	100.9	1008.36	100.8	P
Chromium	1000.0	1011.62	101.2	1000.0	1025.35	102.5	1025.79	102.6	P
Cobalt	1000.0	1014.24	101.4	1000.0	981.79	98.2	979.84	98.0	P
Copper	1000.0	1002.36	100.2	1000.0	998.62	99.9	985.37	98.5	P
Iron	10000.0	10268.48	102.7	10000.0	10261.97	102.6	10274.75	102.7	P
Lead	1000.0	1006.90	100.7	1000.0	1010.63	101.1	1008.94	100.9	P
Magnesium	1000.0	968.50	96.8	1000.0	979.36	97.9	977.58	97.8	P
Manganese	1000.0	1049.26	104.9	1000.0	1049.48	104.9	1048.18	104.8	P
Mercury	4.0	4.20	105.0	4.0	3.76	94.0	3.71	92.8	AV
Nickel	1000.0	1029.31	102.9	1000.0	1028.50	102.8	1031.90	103.2	P
Potassium	10000.0	10175.04	101.8	10000.0	10271.81	102.7	10205.35	102.1	P
Selenium	1000.0	1036.69	103.7	1000.0	1008.32	100.8	995.35	99.5	P
Silver	500.0	476.41	95.3	500.0	473.79	94.8	471.76	94.4	P
Sodium	11000.0	10798.05	98.2	11000.0	10528.08	95.7	10443.83	94.9	P
Thallium	1000.0	981.81	98.2	1000.0	1020.35	102.0	1000.57	100.1	P
Vanadium	1000.0	1009.44	100.9	1000.0	1009.35	100.9	1006.94	100.7	P
Zinc	1000.0	1059.23	105.9	1000.0	1041.75	104.2	1047.95	104.8	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Initial Calibration Source: Accustandard, HighPurity

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				10000.0	10095.14	101.0	10007.32	100.1	P
Antimony				1000.0	990.32	99.0	985.11	98.5	P
Arsenic				1000.0	1045.27	104.5	1033.83	103.4	P
Barium				1000.0	977.06	97.7	973.26	97.3	P
Beryllium				1000.0	1071.83	107.2	1056.24	105.6	P
Cadmium				1000.0	1039.13	103.9	1034.88	103.5	P
Calcium				1000.0	1022.22	102.2	996.81	99.7	P
Chromium				1000.0	1013.04	101.3	1006.27	100.6	P
Cobalt				1000.0	991.62	99.2	977.57	97.8	P
Copper				1000.0	995.22	99.5	988.02	98.8	P
Iron				10000.0	10160.78	101.6	10096.22	101.0	P
Lead				1000.0	1004.06	100.4	995.04	99.5	P
Magnesium				1000.0	969.96	97.0	964.14	96.4	P
Manganese				1000.0	1039.83	104.0	1031.22	103.1	P
Nickel				1000.0	1012.47	101.2	1011.14	101.1	P
Potassium				10000.0	10316.56	103.2	10275.65	102.8	P
Selenium				1000.0	1007.51	100.8	996.88	99.7	P
Silver				500.0	475.19	95.0	468.82	93.8	P
Sodium				11000.0	10751.32	97.7	10622.26	96.6	P
Thallium				1000.0	1006.54	100.7	995.97	99.6	P
Vanadium				1000.0	1001.18	100.1	994.66	99.5	P
Zinc				1000.0	1036.61	103.7	1021.13	102.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Initial Calibration Source: Accustandard, HighPurity

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum	10000.0	10513.46	105.1	10000.0	10290.63	102.9	10275.17	102.8	P
Antimony	1000.0	968.55	96.9	1000.0	979.52	98.0	973.11	97.3	P
Arsenic	1000.0	1042.05	104.2	1000.0	1015.55	101.6	1009.23	100.9	P
Barium	1000.0	1012.33	101.2	1000.0	997.41	99.7	992.03	99.2	P
Beryllium	1000.0	1050.70	105.1	1000.0	1046.20	104.6	1035.79	103.6	P
Cadmium	1000.0	1057.28	105.7	1000.0	1023.98	102.4	1020.47	102.0	P
Calcium	1000.0	1095.37	109.5	1000.0	1075.53	107.6	1042.38	104.2	P
Chromium	1000.0	1007.28	100.7	1000.0	1000.80	100.1	999.53	100.0	P
Cobalt	1000.0	1009.32	100.9	1000.0	985.97	98.6	977.26	97.7	P
Copper	1000.0	1034.62	103.5	1000.0	1012.72	101.3	1007.59	100.8	P
Iron	10000.0	10346.64	103.5	10000.0	10185.75	101.9	10142.24	101.4	P
Lead	1000.0	1013.92	101.4	1000.0	999.95	100.0	993.51	99.4	P
Magnesium	1000.0	988.65	98.9	1000.0	969.42	96.9	965.00	96.5	P
Manganese	1000.0	1048.94	104.9	1000.0	1031.87	103.2	1030.24	103.0	P
Mercury	4.0	4.05	101.2	4.0	4.03	100.8	4.09	102.2	AV
Nickel	1000.0	1027.56	102.8	1000.0	1001.96	100.2	998.00	99.8	P
Potassium	10000.0	10463.58	104.6	10000.0	10172.70	101.7	10079.70	100.8	P
Selenium	1000.0	1049.93	105.0	1000.0	1008.21	100.8	993.26	99.3	P
Silver	500.0	490.92	98.2	500.0	480.23	96.0	475.62	95.1	P
Sodium	11000.0	11310.67	102.8	11000.0	10981.70	99.8	10995.15	100.0	P
Thallium	1000.0	981.67	98.2	1000.0	1001.97	100.2	997.88	99.8	P
Vanadium	1000.0	1012.85	101.3	1000.0	994.91	99.5	991.68	99.2	P
Zinc	1000.0	1037.03	103.7	1000.0	1012.43	101.2	1010.98	101.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Initial Calibration Source: Accustandard, HighPurity

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Mercury	4.0	3.90	97.5	4.0	3.80	95.0			AV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	115.99	96.7		
Arsenic				20.0	20.72	103.6		
Barium								
Beryllium				10.0	10.45	104.5		
Cadmium				10.0	10.34	103.4		
Calcium								
Chromium				20.0	19.79	99.0		
Cobalt				100.0	95.05	95.0		
Copper				50.0	46.23	92.5		
Iron								
Lead				6.0	5.92	98.7		
Magnesium								
Manganese				30.0	30.03	100.1		
Nickel				80.0	78.44	98.0		
Potassium								
Selenium				10.0	8.54	85.4		
Silver				20.0	18.34	91.7		
Sodium								
Thallium				20.0	20.59	103.0		
Vanadium				100.0	96.40	96.4		
Zinc				40.0	40.68	101.7		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

A CRDL Standard Source: _____

CP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	116.28	96.9		
Arsenic				20.0	21.97	109.8		
Barium								
Beryllium				10.0	10.50	105.0		
Cadmium				10.0	10.31	103.1		
Calcium								
Chromium				20.0	20.04	100.2		
Cobalt				100.0	99.68	99.7		
Copper				50.0	50.89	101.8		
Iron								
Lead				6.0	6.21	103.5		
Magnesium								
Manganese				30.0	30.88	102.9		
Nickel				80.0	80.26	100.3		
Potassium								
Selenium				10.0	12.33	123.3		
Silver				20.0	19.47	97.4		
Sodium								
Thallium				20.0	21.44	107.2		
Vanadium				100.0	99.06	99.1		
Zinc				40.0	41.38	103.4		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	50.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Iron	30.0	U	30.0	U	30.0	U	30.0	U	30.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	1.500	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Mercury	0.080	U	0.080	U	0.080	U			0.080	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	1000.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	5.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank		M
			1	C	2	C	3	C	C	C	
Aluminum			50.0	U							P
Antimony			5.0	U							P
Arsenic			3.0	U							P
Barium			5.0	U							P
Beryllium			1.0	U							P
Cadmium			1.0	U							P
Calcium			1000.0	U							P
Chromium			2.0	U							P
Cobalt			5.0	U							P
Copper			5.0	U							P
Iron			30.0	U							P
Lead			1.5	U							P
Magnesium			1000.0	U							P
Manganese			3.0	U							P
Nickel			5.0	U							P
Potassium			1000.0	U							P
Selenium			3.0	U							P
Silver			1.0	U							P
Sodium			1000.0	U							P
Thallium			3.0	U							P
Vanadium			5.0	U							P
Zinc			5.0	U							P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U			50.000	U	P
Antimony	5.0	U	5.0	U	5.0	U			5.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U			3.000	U	P
Barium	5.0	U	5.0	U	5.0	U			5.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U			1.000	U	P
Cadmium	1.0	U	1.0	U	1.0	U			1.000	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U			1000.000	U	P
Chromium	2.0	U	2.0	U	2.0	U			2.000	U	P
Cobalt	5.0	U	5.0	U	5.0	U			5.000	U	P
Copper	5.0	U	5.0	U	5.0	U			5.000	U	P
Iron	30.0	U	30.0	U	30.0	U			30.000	U	P
Lead	1.5	U	1.5	U	1.5	U			1.500	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U			1000.000	U	P
Manganese	3.0	U	3.0	U	3.0	U			3.000	U	P
Mercury	0.080	U	0.080	U	0.080	U			0.080	U	AV
Nickel	5.0	U	5.0	U	5.0	U			5.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U			1000.000	U	P
Selenium	3.0	U	3.0	U	3.0	U			3.000	U	P
Silver	1.0	U	1.0	U	1.0	U			1.000	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U			1000.000	U	P
Thallium	3.0	U	3.0	U	3.1	J			3.000	U	P
Vanadium	5.0	U	5.0	U	5.0	U			5.000	U	P
Zinc	5.0	U	5.0	U	5.0	U			5.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M	
	C		1	C	2	C	3	C	C			
Mercury	0.080	U	0.080	U						0.080	U	AV

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

ab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010CP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPIConcentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	498525	495952.3	99.2			
Antimony	0	600	-1	609.0	101.5			
Arsenic	0	100	-5	104.3	104.3			
Barium	0	500	2	523.9	104.8			
Beryllium	0	500	0	501.1	100.2			
Cadmium	0	1000	0	965.0	96.5			
Calcium	500000	500000	467513	471674.5	94.3			
Chromium	0	500	2	487.9	97.6			
Cobalt	0	500	-1	453.2	90.6			
Copper	0	500	-1	527.1	105.4			
Iron	200000	200000	196352	195556.3	97.8			
Lead	0	50	2	50.2	100.4			
Magnesium	500000	500000	512801	507813.5	101.6			
Manganese	0	500	-1	499.1	99.8			
Nickel	0	1000	-1	942.7	94.3			
Potassium	0	0	62	52.0				
Selenium	0	50	-10	41.1	82.2			
Silver	0	200	0	203.1	101.6			
Sodium	0	0	165	157.2				
Thallium	0	100	-4	97.8	97.8			
Vanadium	0	500	1	489.0	97.8			
Zinc	0	1000	-14	906.4	90.6			

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

ab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

CP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	518792	516875.4	103.4			
Antimony	0	600	2	595.8	99.3			
Arsenic	0	100	-1	104.6	104.6			
Barium	0	500	2	537.2	107.4			
Beryllium	0	500	0	508.0	101.6			
Cadmium	0	1000	2	953.0	95.3			
Calcium	500000	500000	452837	455923.3	91.2			
Chromium	0	500	1	483.5	96.7			
Cobalt	0	500	0	467.3	93.5			
Copper	0	500	2	543.2	108.6			
Iron	200000	200000	198952	198902.8	99.5			
Lead	0	50	3	52.2	104.4			
Magnesium	500000	500000	511863	510027.4	102.0			
Manganese	0	500	-1	498.7	99.7			
Nickel	0	1000	-1	931.6	93.2			
Potassium	0	0	48	51.9				
Selenium	0	50	-6	45.1	90.2			
Silver	0	200	0	209.5	104.8			
Sodium	0	0	206	157.9				
Thallium	0	100	-10	89.5	89.5			
Vanadium	0	500	0	488.5	97.7			
Zinc	0	1000	-13	908.3	90.8			

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1401S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): GROUND Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	2.0362		0.0800	U	2.00	101.8		AV

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1401SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): GROUND Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	1.9839	0.0800 U	2.00	99.2		AV

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1601S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2400.8170	319.8109	2000.00	104.1		P
Antimony	75 - 125	258.5358	5.0000	250.00	103.4		P
Arsenic	75 - 125	264.6832	3.0000	250.00	105.9		P
Barium	75 - 125	2078.1540	88.6833	2000.00	99.5		P
Beryllium	75 - 125	54.6006	1.0000	50.00	109.2		P
Cadmium	75 - 125	132.3991	1.0000	125.00	105.9		P
Calcium	75 - 125	8917.2500	3940.0300	5000.00	99.5		P
Chromium	75 - 125	200.6159	2.0000	200.00	100.3		P
Cobalt	75 - 125	485.4558	5.0000	500.00	97.1		P
Copper	75 - 125	248.8248	5.0000	250.00	99.5		P
Iron	75 - 125	2163.7140	1171.0326	1000.00	99.3		P
Lead	75 - 125	255.2442	1.5000	250.00	102.1		P
Magnesium	75 - 125	5917.1400	1157.1000	5000.00	95.2		P
Manganese	75 - 125	520.0999	9.0868	500.00	102.2		P
Nickel	75 - 125	496.4128	5.0000	500.00	99.3		P
Potassium	75 - 125	5785.8500	1000.0000	5000.00	115.7		P
Selenium	75 - 125	253.4204	3.0000	250.00	101.4		P
Silver	75 - 125	242.3147	1.0000	250.00	96.9		P
Sodium	75 - 125	8321.3600	3721.8200	5000.00	92.0		P
Thallium	75 - 125	251.2222	4.0647	250.00	98.9		P
Vanadium	75 - 125	491.8077	5.0000	500.00	98.4		P
Zinc	75 - 125	507.7881	5.0000	500.00	101.6		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1601SD

ab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

atrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2435.9590	319.8109	2000.00	105.8		P
Antimony	75 - 125	259.4594	5.0000	250.00	103.8	U	P
Arsenic	75 - 125	273.8063	3.0000	250.00	109.5	U	P
Barium	75 - 125	2102.4170	88.6833	2000.00	100.7	J	P
Beryllium	75 - 125	54.7578	1.0000	50.00	109.5	U	P
Cadmium	75 - 125	135.5815	1.0000	125.00	108.5	U	P
Calcium	75 - 125	9148.1900	3940.0300	5000.00	104.2	J	P
Chromium	75 - 125	201.9595	2.0000	200.00	101.0	U	P
Cobalt	75 - 125	487.1019	5.0000	500.00	97.4	U	P
Copper	75 - 125	250.9405	5.0000	250.00	100.4	U	P
Iron	75 - 125	2220.9160	1171.0326	1000.00	105.0		P
Lead	75 - 125	262.3362	1.5000	250.00	104.9	U	P
Magnesium	75 - 125	6012.3200	1157.1000	5000.00	97.1	J	P
Manganese	75 - 125	524.3392	9.0868	500.00	103.1	J	P
Nickel	75 - 125	501.9135	5.0000	500.00	100.4	U	P
Potassium	75 - 125	5858.0000	1000.0000	5000.00	117.2	U	P
Selenium	75 - 125	261.2072	3.0000	250.00	104.5	U	P
Silver	75 - 125	243.3306	1.0000	250.00	97.3	U	P
Sodium	75 - 125	8506.0300	3721.8200	5000.00	95.7	J	P
Thallium	75 - 125	254.5062	4.0647	250.00	100.2	J	P
Vanadium	75 - 125	495.6312	5.0000	500.00	99.1	U	P
Zinc	75 - 125	512.2556	5.0000	500.00	102.5	U	P

omments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1601DS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Matrix (soil/water): WATER Level (low/med): LOWSolids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2636.6140	362.5585	2000.00	113.7		P
Antimony	75 - 125	277.4035	5.0000	250.00	111.0		P
Arsenic	75 - 125	286.3036	3.0000	250.00	114.5		P
Barium	75 - 125	2260.1750	93.8334	2000.00	108.3		P
Beryllium	75 - 125	55.5732	1.0000	50.00	111.1		P
Cadmium	75 - 125	141.7356	1.0000	125.00	113.4		P
Calcium	75 - 125	9482.4800	4104.4100	5000.00	107.6		P
Chromium	75 - 125	210.3807	2.0000	200.00	105.2		P
Cobalt	75 - 125	509.4275	5.0000	500.00	101.9		P
Copper	75 - 125	270.0164	5.0000	250.00	108.0		P
Iron	75 - 125	2338.7860	1239.6652	1000.00	109.9		P
Lead	75 - 125	280.3745	1.5000	250.00	112.1		P
Magnesium	75 - 125	6321.0500	1208.6500	5000.00	102.2		P
Manganese	75 - 125	548.5580	9.4067	500.00	107.8		P
Nickel	75 - 125	524.0613	5.0000	500.00	104.8		P
Potassium	75 - 125	6048.4600	1000.0000	5000.00	121.0		P
Selenium	75 - 125	280.5240	3.0000	250.00	112.2		P
Silver	75 - 125	258.4750	1.0000	250.00	103.4		P
Sodium	75 - 125	9295.4300	4145.5900	5000.00	103.0		P
Thallium	75 - 125	265.4108	3.0000	250.00	106.2		P
Vanadium	75 - 125	518.7544	5.0000	500.00	103.8		P
Zinc	75 - 125	529.2167	5.0000	500.00	105.8		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1601DSD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Matrix (soil/water): WATER Level (low/med): LOWSolids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2582.3990		362.5585		2000.00	111.0		P
Antimony	75 - 125	270.6609		5.0000	U	250.00	108.3		P
Arsenic	75 - 125	282.9265		3.0000	U	250.00	113.2		P
Barium	75 - 125	2207.0700		93.8334	J	2000.00	105.7		P
Beryllium	75 - 125	54.2602		1.0000	U	50.00	108.5		P
Cadmium	75 - 125	138.5321		1.0000	U	125.00	110.8		P
Calcium	75 - 125	9300.3200		4104.4100	J	5000.00	103.9		P
Chromium	75 - 125	205.8093		2.0000	U	200.00	102.9		P
Cobalt	75 - 125	497.4714		5.0000	U	500.00	99.5		P
Copper	75 - 125	263.2685		5.0000	U	250.00	105.3		P
Iron	75 - 125	2295.1110		1239.6652		1000.00	105.5		P
Lead	75 - 125	272.6555		1.5000	U	250.00	109.1		P
Magnesium	75 - 125	6177.9500		1208.6500	J	5000.00	99.4		P
Manganese	75 - 125	536.3145		9.4067	J	500.00	105.4		P
Nickel	75 - 125	511.7310		5.0000	U	500.00	102.3		P
Potassium	75 - 125	5896.1500		1000.0000	U	5000.00	117.9		P
Selenium	75 - 125	272.0546		3.0000	U	250.00	108.8		P
Silver	75 - 125	252.3806		1.0000	U	250.00	101.0		P
Sodium	75 - 125	9046.2600		4145.5900	J	5000.00	98.0		P
Thallium	75 - 125	263.5843		3.0000	U	250.00	105.4		P
Vanadium	75 - 125	506.5854		5.0000	U	500.00	101.3		P
Zinc	75 - 125	517.3832		5.0000	U	500.00	103.5		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW2001S

Lab Name: Empirical Laboratories Contract: TetraTéch NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	1.8311	0.0800 U	2.00	91.6		AV

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW2001SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER Level (low/med): LOW

Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	1.8184	0.0800 U	2.00	90.9		AV

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

01GW1601DA

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		2542.42	362.56	2000.0	109.0		P
Antimony		241.90	5.00	250.0	96.8		P
Arsenic		262.07	3.00	250.0	104.8		P
Barium		2171.34	93.83	2000.0	103.9		P
Beryllium		53.23	1.00	50.0	106.5		P
Cadmium		129.45	1.00	125.0	103.6		P
Calcium		9571.41	4104.41	5000.0	109.3		P
Chromium		201.91	2.00	200.0	101.0		P
Cobalt		488.69	5.00	500.0	97.7		P
Copper		259.16	5.00	250.0	103.7		P
Iron		2253.60	1239.67	1000.0	101.4		P
Lead		256.99	1.50	250.0	102.8		P
Magnesium		6081.07	1208.65	5000.0	97.4		P
Manganese		527.36	9.41	500.0	103.6		P
Nickel		504.35	5.00	500.0	100.9		P
Potassium		5852.94	1000.00	5000.0	117.1		P
Selenium		256.83	3.00	250.0	102.7		P
Silver		248.12	1.00	250.0	99.2		P
Sodium		8920.71	4145.59	5000.0	95.5		P
Thallium		243.65	3.00	250.0	97.5		P
Vanadium		498.12	5.00	500.0	99.6		P
Zinc		508.21	5.00	500.0	101.6		P

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01GW1401SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): GROUND Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		2.0362		1.9839		2.6		AV

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01GW1601SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Matrix (soil/water): WATER Level (low/med): LOW% Solids for Sample: 0.0 % Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		2400.8173		2435.9590		1.5		P
Antimony		258.5358		259.4594		0.4		P
Arsenic		264.6832		273.8063		3.4		P
Barium		2078.1538		2102.4170		1.2		P
Beryllium		54.6006		54.7578		0.3		P
Cadmium		132.3991		135.5815		2.4		P
Calcium		8917.2500		9148.1900		2.6		P
Chromium		200.6159		201.9595		0.7		P
Cobalt		485.4559		487.1019		0.3		P
Copper		248.8247		250.9405		0.8		P
Iron		2163.7139		2220.9160		2.6		P
Lead		255.2442		262.3362		2.7		P
Magnesium		5917.1400		6012.3200		1.6		P
Manganese		520.0999		524.3392		0.8		P
Nickel		496.4128		501.9135		1.1		P
Potassium		5785.8500		5858.0000		1.2		P
Selenium		253.4204		261.2072		3.0		P
Silver		242.3147		243.3306		0.4		P
Sodium		8321.3606		8506.0300		2.2		P
Thallium		251.2222		254.5062		1.3		P
Vanadium		491.8077		495.6312		0.8		P
Zinc		507.7882		512.2556		0.9		P

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01GW1601DSD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Matrix (soil/water): WATER Level (low/med): LOW% Solids for Sample: 0.0 % Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		2636.6138		2582.3990		2.1		P
Antimony		277.4035		270.6609		2.5		P
Arsenic		286.3036		282.9265		1.2		P
Barium		2260.1750		2207.0700		2.4		P
Beryllium		55.5732		54.2602		2.4		P
Cadmium		141.7356		138.5321		2.3		P
Calcium		9482.4806		9300.3200		1.9		P
Chromium		210.3807		205.8093		2.2		P
Cobalt		509.4275		497.4714		2.4		P
Copper		270.0164		263.2685		2.5		P
Iron		2338.7861		2295.1110		1.9		P
Lead		280.3745		272.6555		2.8		P
Magnesium		6321.0500		6177.9500		2.3		P
Manganese		548.5580		536.3145		2.3		P
Nickel		524.0613		511.7310		2.4		P
Potassium		6048.4600		5896.1500		2.6		P
Selenium		280.5240		272.0546		3.1		P
Silver		258.4750		252.3806		2.4		P
Sodium		9295.4300		9046.2600		2.7		P
Thallium		265.4108		263.5843		0.7		P
Vanadium		518.7544		506.5854		2.4		P
Zinc		529.2167		517.3832		2.3		P

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01GW2001SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		1.8310		1.8184		0.7		AV

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Solid LCS Source: _____

Aqueous LCS Source: HighPurity

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	2000.0	2092.24	104.6					
Antimony	250.0	243.20	97.3					
Arsenic	250.0	258.66	103.5					
Barium	2000.0	1999.62	100.0					
Beryllium	50.0	54.97	109.9					
Cadmium	125.0	130.20	104.2					
Calcium	5000.0	5140.74	102.8					
Chromium	200.0	200.07	100.0					
Cobalt	500.0	478.26	95.7					
Copper	250.0	249.11	99.6					
Iron	1000.0	1027.53	102.8					
Lead	250.0	249.84	99.9					
Magnesium	5000.0	4763.82	95.3					
Manganese	500.0	510.87	102.2					
Mercury	2.00	2.23	111.5					
Nickel	500.0	494.85	99.0					
Potassium	5000.0	4831.10	96.6					
Selenium	250.0	240.46	96.2					
Silver	250.0	238.74	95.5					
Sodium	5000.0	4772.00	95.4					
Thallium	250.0	239.87	95.9					
Vanadium	500.0	492.11	98.4					
Zinc	500.0	503.71	100.7					

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Solid LCS Source: _____

Aqueous LCS Source: HighPurity

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	2000.0	2247.49	112.4					
Antimony	250.0	254.75	101.9					
Arsenic	250.0	268.24	107.3					
Barium	2000.0	2142.14	107.1					
Beryllium	50.0	56.23	112.5					
Cadmium	125.0	135.37	108.3					
Calcium	5000.0	5456.88	109.1					
Chromium	200.0	208.95	104.5					
Cobalt	500.0	503.74	100.7					
Copper	250.0	266.47	106.6					
Iron	1000.0	1102.66	110.3					
Lead	250.0	267.05	106.8					
Magnesium	5000.0	5038.19	100.8					
Manganese	500.0	534.51	106.9					
Mercury	2.00	2.36	118.0					
Nickel	500.0	517.08	103.4					
Potassium	5000.0	5071.18	101.4					
Selenium	250.0	258.59	103.4					
Silver	250.0	253.93	101.6					
Sodium	5000.0	5179.88	103.6					
Thallium	250.0	250.88	100.4					
Vanadium	500.0	515.23	103.0					
Zinc	500.0	525.09	105.0					

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Solid LCS Source: _____

Aqueous LCS Source: HighPurity

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Mercury	2.00	1.97	98.5					

USEPA - CLP

9
ICP SERIAL DILUTIONS

SAMPLE NO.

01GW1601L

Lab Name: Empirical LaboratoriesContract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-010Matrix (soil/water): WATERLevel (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
		C		C			
Aluminum	319.81		368.56	J	15.2		P
Antimony	5.00	U	25.00	U			P
Arsenic	3.00	U	15.00	U			P
Barium	88.68	J	90.31	J	1.8		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	3940.03	J	39443.70		901.1		P
Chromium	2.00	U	10.00	U			P
Cobalt	5.00	U	25.00	U			P
Copper	5.00	U	25.00	U			P
Iron	1171.03		1189.25		1.6		P
Lead	1.50	U	7.50	U			P
Magnesium	1157.10	J	5000.00	U	100.0		P
Manganese	9.09	J	15.00	U	100.0		P
Nickel	5.00	U	25.00	U			P
Potassium	1000.00	U	5000.00	U			P
Selenium	3.00	U	15.00	U			P
Silver	1.00	U	5.00	U			P
Sodium	3721.82	J	5000.00	U	100.0		P
Thallium	4.06	J	15.00	U	100.0		P
Vanadium	5.00	U	25.00	U			P
Zinc	5.00	U	25.00	U			P

USEPA - CLP

9
ICP SERIAL DILUTIONS

SAMPLE NO.

01GW1601DL

Lab Name: Empirical Laboratories

Contract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-010

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
		C		C			
Aluminum	362.56		394.29	J	8.8		P
Antimony	5.00	U	25.00	U			P
Arsenic	3.00	U	15.00	U			P
Barium	93.83	J	94.56	J	0.8		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	4104.41	J	42227.70		928.8		P
Chromium	2.00	U	10.00	U			P
Cobalt	5.00	U	25.00	U			P
Copper	5.00	U	25.00	U			P
Iron	1239.67		1242.37		0.2		P
Lead	1.50	U	7.50	U			P
Magnesium	1208.65	J	5000.00	U	100.0		P
Manganese	9.41	J	15.00	U	100.0		P
Nickel	5.00	U	25.00	U			P
Potassium	1000.00	U	5000.00	U			P
Selenium	3.00	U	15.00	U			P
Silver	1.00	U	5.00	U			P
Sodium	4145.59	J	5000.00	U	100.0		P
Thallium	3.00	U	15.00	U			P
Vanadium	5.00	U	25.00	U			P
Zinc	5.00	U	25.98	J	100.0		P

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010ICP ID Number: TJA61E TRACE ICP Date: 02/04/08

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Aluminum	308.22		200.0	50.0	P
Antimony	206.84		60.0	5.0	P
Arsenic	189.04		10.0	3.0	P
Barium	493.41		200.0	5.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	226.50		5.0	1.0	P
Calcium	317.93		5000.0	1000.0	P
Chromium	267.72		10.0	2.0	P
Cobalt	228.62		50.0	5.0	P
Copper	324.75		25.0	5.0	P
Iron	271.44		100.0	30.0	P
Lead	220.35		3.0	1.5	P
Magnesium	279.08		5000.0	1000.0	P
Manganese	257.61		15.0	3.0	P
Nickel	231.60		40.0	5.0	P
Potassium	766.49		5000.0	1000.0	P
Selenium	196.02		5.0	3.0	P
Silver	328.07		10.0	1.0	P
Sodium	330.23		5000.0	1000.0	P
Thallium	190.86		10.0	3.0	P
Vanadium	292.40		50.0	5.0	P
Zinc	206.84		20.0	5.0	P

Comments: _____

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories

Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____

SAS No.: _____

SDG No.: Gulfport-010

ICP ID Number: _____

Date: 03/18/08

Flame AA ID Number: PE CVAA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.08	AV

Comments:

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	As
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Arsenic	189.04	0.0000030	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000240	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001100	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0001910	0.0000000
Lead	220.35	0.0002530	0.0000000	0.0001120	0.0000000	0.0000000
Lead	220.35	-0.0001600	0.0000000	0.0000450	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000120	0.0216570	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000130	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0003400	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	-0.0001200	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0018200	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000210	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	-0.0000700	0.0282910	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		B	Ba	Be	Cd	Co
Aluminum	308.22	0.000000	0.000000	0.000000	0.000000	-0.0139700
Antimony	206.84	0.000000	0.000000	0.000000	0.000000	0.000000
Arsenic	189.04	0.000000	0.000000	0.000000	0.000000	0.000000
Barium	493.41	0.000000	0.000000	0.000000	0.000000	0.000000
Beryllium	313.04	0.000000	0.000000	0.000000	0.000000	0.000000
Boron	249.68	0.000000	0.000000	0.000000	0.000000	0.0017660
Cadmium	226.50	0.000000	0.000000	0.000000	0.000000	-0.0000900
Calcium	317.93	0.000000	0.000000	0.000000	0.000000	0.000000
Chromium	267.72	0.000000	0.000000	0.000000	0.000000	0.000000
Cobalt	228.62	0.000000	-0.0014600	0.000000	-0.000190	0.000000
Copper	324.75	0.000000	0.000000	0.000000	0.000000	0.000000
Iron	271.44	0.000000	0.000000	0.000000	0.000000	0.0865310
Lead	220.35	0.000000	0.000000	0.000000	0.000000	0.000000
Lead	220.35	0.000000	0.000000	0.000000	0.000000	0.000000
Lead	220.35	0.000000	0.000000	0.000000	0.000000	0.000000
Magnesium	279.08	0.000000	0.000000	0.000000	0.000000	0.000000
Manganese	279.08	0.000000	0.000000	0.000000	0.000000	0.000000
Molybdenum	202.03	0.000000	0.000000	0.000000	0.000000	0.000000
Nickel	231.60	0.000000	0.000000	0.000000	0.000000	-0.0019300
Potassium	766.49	0.000000	0.000000	0.000000	0.000000	0.000000
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	-0.0000700
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	-0.0009900
Selenium	196.02	0.000000	0.000000	0.000000	0.000000	0.000000
Silver	328.22	0.000000	0.000000	0.000000	0.000000	0.000000
Sodium	331.23	0.000000	0.000000	0.000000	0.000000	0.000000
Thallium	190.86	0.000000	0.000000	0.000000	0.000000	0.0025020
Tin	189.99	0.000000	0.000000	0.000000	0.000000	0.000000
Titanium	334.94	0.000000	0.000000	0.000000	0.000000	0.000000
Vanadium	292.40	0.000000	0.000000	0.000000	0.000000	0.000000
Zinc	206.20	0.000000	0.000000	0.000000	0.000000	0.000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	K	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0071840
Antimony	206.84	0.0031350	0.0000000	0.0000000	0.0000000	-0.0027800
Arsenic	189.04	0.0001610	0.0000000	0.0000000	0.0000000	0.0003200
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001310	-0.0003400
Cobalt	228.62	-0.0000200	0.0000000	0.0000000	0.0000000	0.0000290
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0004170
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000160	-0.0000800	0.0000000	0.0000840	-0.0001300
Lead	220.35	-0.0000500	0.0000000	0.0000000	0.0000510	-0.0011800
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000140
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0000700	0.0000000	0.0000000	0.0001750	0.0000000
Selenium	196.02	-0.0001100	0.0000000	0.0000000	0.0001450	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000350	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002970	0.0000000	0.0000000	0.0004160	-0.0026800
Tin	189.99	0.0000000	0.0000000	0.0000000	-0.000110	0.0000000
Titanium	334.94	0.0000430	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0004700
Zinc	206.20	0.0003790	0.0000000	0.0000000	0.0000000	0.0003690

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Na	Ni	Pb	Si	Sn
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000400
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	-0.0000600	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0002750	0.0000000	0.0000000	-0.0000100
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0007000	-0.0008700	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.99	0.0000000	-0.0000700	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000670	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

CP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		Ti	Tl	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.0028970	0.0000000
Antimony	206.84	0.0000870	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	-0.0030300	0.0000000	0.0005980	0.0000000
Boron	249.68	-0.0002400	0.0000000	-0.0000600	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000790	0.0000000	-0.0000500	0.0000000
Cobalt	228.62	0.0020140	0.0000000	0.0000000	0.0000000
Copper	324.75	-0.0001600	0.0000000	-0.0001000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0089800	0.0000000
Lead	220.35	0.0000260	0.0000000	-0.0000500	0.0000000
Lead	220.35	-0.0008800	0.0000000	-0.0001300	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0001020	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0001000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000390	0.0000000
Sodium	331.23	-0.0000300	0.0000000	0.0000000	0.0000230
Thallium	190.86	0.0002100	0.0000000	0.0017130	0.0000000
Tin	189.99	0.0007090	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000220	0.0000000
Vanadium	292.40	0.0004080	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000770	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	15.00	50000.0	P
Antimony	15.00	10000.0	P
Arsenic	15.00	10000.0	P
Barium	15.00	5000.0	P
Beryllium	15.00	10000.0	P
Cadmium	15.00	10000.0	P
Calcium	15.00	250000.0	P
Chromium	15.00	10000.0	P
Cobalt	15.00	10000.0	P
Copper	15.00	10000.0	P
Iron	15.00	500000.0	P
Lead	15.00	10000.0	P
Magnesium	15.00	500000.0	P
Manganese	15.00	10000.0	P
Nickel	15.00	10000.0	P
Potassium	15.00	100000.0	P
Selenium	15.00	10000.0	P
Silver	15.00	2000.0	P
Sodium	15.00	250000.0	P
Thallium	15.00	10000.0	P
Vanadium	15.00	50000.0	P
Zinc	15.00	10000.0	P

Comments: _____

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW090208A	09/02/08	50.0	50.0
LCSW090208A	09/02/08	50.0	50.0
01GW0701	09/02/08	50.00	50.0
01GW0701D	09/02/08	50.00	50.0
01GW0801	09/02/08	50.00	50.0
01GW1201	09/02/08	50.00	50.0
01GW1301	09/02/08	50.00	50.0
01GW1101	09/02/08	50.00	50.0
01GW1501	09/02/08	50.00	50.0
01GW1401	09/02/08	50.00	50.0
01GW1001	09/02/08	50.00	50.0
01GW0601	09/02/08	50.0	50.0
01GW0901	09/02/08	50.0	50.0
01GW1701	09/02/08	50.0	50.0
01GW1601	09/02/08	50.0	50.0
01GW1601S	09/02/08	50.0	50.0
01GW1601SD	09/02/08	50.0	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Method: P

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
PBW090808A	09/08/08	50.0	50.0
LCSW090808A	09/08/08	50.0	50.0
01GW1601D	09/08/08	50.0	50.0
01GW1601DS	09/08/08	50.0	50.0
01GW1601DSD	09/08/08	50.0	50.0
01GW1801	09/08/08	50.0	50.0
01GW1901	09/08/08	50.0	50.0
01GW2101	09/08/08	50.0	50.0
01GW2001	09/08/08	50.0	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW082908A	08/29/08	30.0	30.0
PBW082908A	08/29/08	30.0	30.0
01GW1001	08/29/08	1.00	1.0
01GW0701	08/29/08	1.00	1.0
01GW0701D	08/29/08	1.00	1.0
01GW0801	08/29/08	1.00	1.0
01GW1201	08/29/08	1.00	1.0
01GW1301	08/29/08	1.00	1.0
01GW1101	08/29/08	1.00	1.0
01GW1501	08/29/08	1.00	1.0
01GW1401	08/29/08	1.00	1.0
01GW1401S	08/29/08	1.00	1.0
01GW1401SD	08/29/08	1.00	1.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW090308A	09/03/08	30.0	30.0
PBW090308A	09/03/08	30.0	30.0
01GW0601	09/03/08	30.0	30.0
01GW0901	09/03/08	30.0	30.0
01GW1701	09/03/08	30.0	30.0
01GW1601	09/03/08	30.0	30.0
01GW1601D	09/03/08	30.0	30.0
01GW1801	09/03/08	30.0	30.0
01GW1901	09/03/08	30.0	30.0
01GW2101	09/03/08	30.0	30.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW090508A	09/05/08	30.0	30.0
PBW090508A	09/05/08	30.0	30.0
01GW2001	09/05/08	30.0	30.0
01GW2001S	09/05/08	30.0	30.0
01GW2001SD	09/05/08	30.0	30.0

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/09/08 End Date: 09/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
S0	1.00	0826		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	0832			X	X		X	X		X	X	X	X	X		X		X			X	X	X							
S	1.00	0839		X			X						X	X							X										
S	1.00	0844							X										X		X										
ZZZZZZ	1.00	0856																													
ZZZZZZ	1.00	0901																													
ZZZZZZ	1.00	0907																													
ZZZZZZ	1.00	0912																													
ZZZZZZ	1.00	0919																													
ZZZZZZ	1.00	0928																													
ZZZZZZ	1.00	0935																													
ICV1	1.00	0947		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB1	1.00	1002		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1008																													
ZZZZZZ	1.00	1015																													
ZZZZZZ	1.00	1021																													
ZZZZZZ	1.00	1028																													
ZZZZZZ	1.00	1034																													
ZZZZZZ	1.00	1041																													
ZZZZZZ	1.00	1047																													
ZZZZZZ	1.00	1053																													
CRDL1	1.00	1102		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA-0	1.00	1108		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB-0	1.00	1124		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV1	1.00	1146		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1206		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1213																													
ZZZZZZ	1.00	1219																													
ZZZZZZ	1.00	1228																													
ZZZZZZ	1.00	1234																													
ZZZZZZ	1.00	1241																													
ZZZZZZ	1.00	1248																													
ZZZZZZ	1.00	1255																													
ZZZZZZ	1.00	1303																													
ZZZZZZ	1.00	1310																													
CCV2	1.00	1318		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	1330		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PBW090208A	1.00	1343		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/09/08 End Date: 09/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
LCSW090208A	1.00	1350		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW0701	1.00	1358		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW0701D	1.00	1405		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW0801	1.00	1411		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1201	1.00	1418		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1301	1.00	1432		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1101	1.00	1438		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1501	1.00	1444		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1401	1.00	1451		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1001	1.00	1457		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV3	1.00	1506		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB3	1.00	1527		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1533																													
ZZZZZZ	1.00	1539																													
01GW0601	1.00	1546		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW0901	1.00	1552		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1701	1.00	1559		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1601	1.00	1605		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1601S	1.00	1611		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1601SD	1.00	1618		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01GW1601L	5.00	1625		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV4	1.00	1634		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB4	1.00	1645		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/10/08 End Date: 09/10/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
S	1.00	1107			X	X		X	X		X	X	X		X		X		X				X	X	X						
S	1.00	1115		X			X						X	X							X										
S	1.00	1122							X										X		X										
ZZZZZZ	1.00	1138																													
ZZZZZZ	1.00	1143																													
ZZZZZZ	1.00	1149																													
S0	1.00	1154		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ	1.00	1200																													
ZZZZZZ	1.00	1207																													
ZZZZZZ	1.00	1213																													
ZZZZZZ	1.00	1222																													
ZZZZZZ	1.00	1228																													
ICV2	1.00	1250		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICB2	1.00	1302		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ	1.00	1308																													
ZZZZZZ	1.00	1314																													
ZZZZZZ	1.00	1321																													
ZZZZZZ	1.00	1329																													
ZZZZZZ	1.00	1336																													
ZZZZZZ	1.00	1342																													
ZZZZZZ	1.00	1348																													
ZZZZZZ	1.00	1355																													
CRDL1	1.00	1403		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSA-0	1.00	1410		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ICSAB-0	1.00	1416		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
ZZZZZZ	1.00	1425																													
CCV1	1.00	1437		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
CCB1	1.00	1448		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
PBW090808A	1.00	1455		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
LCSW090808A	1.00	1501		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1601D	1.00	1510		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1601DS	1.00	1516		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1601DSD	1.00	1522		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1601DA	1.00	1529		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1601DL	5.00	1536		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1801	1.00	1543		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW1901	1.00	1549		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
01GW2101	1.00	1555		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 09/10/08 End Date: 09/10/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V A	Z L	C N	C N			
01GW2001	1.00	1602		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ZZZZZZ	1.00	1608																													
ZZZZZZ	1.00	1615																													
ZZZZZZ	1.00	1621																													
ZZZZZZ	1.00	1627																													
ZZZZZZ	1.00	1634																													
CCV2	1.00	1642		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	1654		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-010
 Instrument ID Number: PE CVAA Method: AV
 Start Date: 09/02/08 End Date: 09/02/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	A L	N T	T V	Z N	C N		
S0	1.00	1040																									X		
S0.20	1.00	1041																									X		
S0.50	1.00	1042																									X		
S1.0	1.00	1043																									X		
S2.0	1.00	1044																									X		
S4.0	1.00	1046																									X		
S6.0	1.00	1047																									X		
ZZZZZZ	1.00	1048																											
ICV1	1.00	1052																									X		
ICB1	1.00	1054																									X		
LCSW082908A	1.00	1055																									X		
PBW082908A	1.00	1056																									X		
ZZZZZZ	1.00	1057																											
ZZZZZZ	1.00	1058																											
ZZZZZZ	1.00	1059																											
01GW1001	1.00	1100																									X		
01GW0701	1.00	1101																									X		
01GW0701D	1.00	1102																									X		
01GW0801	1.00	1103																									X		
CCV1	1.00	1104																									X		
CCB1	1.00	1105																									X		
01GW1201	1.00	1106																									X		
01GW1301	1.00	1107																									X		
01GW1101	1.00	1108																									X		
01GW1501	1.00	1109																									X		
01GW1401	1.00	1110																									X		
01GW1401S	1.00	1111																									X		
01GW1401SD	1.00	1112																									X		
ZZZZZZ	1.00	1113																											
ZZZZZZ	1.00	1114																											
ZZZZZZ	1.00	1115																											
CCV2	1.00	1116																									X		
CCB2	1.00	1117																									X		

Sample 01GW0601

Ba reported result
418 ug/L

Analysis Report

09/09/08 03:52:34 PM

page 1

Method: TESTING Sample Name: 0808268-02, TW, TETRA Operator: RGB
 Run Time: 09/09/08 15:46:18
 Comment: 200.7 / 6010B
 Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppm
Avg	.18868	257.98	1.8956	68.186	418.44	.12171	16.447
SDev	.23904	2.08	.7149	.423	.48	.00945	.063
%RSD	126.69	.80807	37.716	.62027	.11528	7.7673	.38300
#1	-.44937	260.37	2.4839	68.409	418.97	.13258	16.391
#2	.02021	256.98	1.0999	67.698	418.31	.11716	16.436
#3	-.13687	256.58	2.1031	68.451	418.04	.11539	16.515
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2000.0	500000.	10000.	50000.	5000.0	10000.	100.00
Low	-1.0000	-50.000	-3.0000	-10.000	-5.0000	-1.0000	-1.0000

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790
Units	ppb	ppb	ppb	ppb	ppb	ppm	ppm
Avg	.04214	-.09159	.53519	-.77525	8471.0	4.6026	9.9910
SDev	.03268	.15214	.17135	.27808	48.7	.0285	.0307
%RSD	77.546	166.11	32.017	35.870	.57520	.61831	.30731
#1	.02595	-.26181	.58839	-1.0466	8423.6	4.6354	9.9643
#2	.07975	.03116	.67364	-.78832	8468.5	4.5883	9.9843
#3	.02071	-.04413	.34355	-.49086	8520.9	4.5841	10.025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	10000.	10000.	500000.	100.00	500.00
Low	-1.0000	-5.0000	-2.0000	-5.0000	-30.000	-1.0000	-1.0000

Elem	Mn2576	Mo2020	Na3302	Ni2316	Pb2203	Se1960	Sb2068
Units	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Avg	307.66	1.5458	19.469	.71962	-.84122	-.49657	-.72133
SDev	1.04	.5121	.161	.31350	1.07586	1.49373	.40107
%RSD	.33807	33.129	.82929	43.565	127.89	300.81	55.602
#1	306.62	1.8350	19.655	.54275	-.49937	1.0135	-.99539
#2	307.66	1.8479	19.365	1.0816	-2.0465	-1.9734	-.26099
#3	308.70	.95453	19.387	.53452	.02219	-.52989	-.90760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	100.00	10000.	10000.	10000.	10000.
Low	-3.0000	-5.0000	-1.0000	-5.0000	-3.0000	-3.0000	-10.000

Elem	Sn1899	Ti3349	Tl1908	V_2924	Zn2062	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	1.5672	2.6111	-1.6464	.43213	3.0520	-3.3579	.41446
SDev	.7521	.0781	1.8572	.37709	.1161	1.9703	2.1466
%RSD	47.989	2.9899	112.81	87.263	3.8034	58.676	517.93
#1	2.0486	2.6474	-1.9334	.21224	2.9180	-1.4961	-.00254
#2	.70056	2.6645	L-3.3434	.21660	3.1195	-3.1565	-1.4931
#3	1.9525	2.5215	.33764	.86755	3.1186	-5.4212	2.7390
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CASE NARRATIVE

September 16, 2008

Client: Empirical Laboratories

Laboratory Work Order: NRI0532

Sample Receipt:

Samples were received intact, properly preserved and in good condition with custody seals and chain of custody documentation. Samples were received on ice, with cooler temperature measured at the laboratory of 0.2 and 0.3 °C.

Please note the cooler receipt form and any sample non-conformance forms for anomalies noted during sample log-in.

Holding Time:

The analysis was extracted and performed within method specified holding time.

Total Cyanide by SW846 9012B

Four samples were analyzed for Total Cyanide by SW846 9012B. The associated reagent water blank was below method detection limit. NRI0532-01, 01GW0601 was used for matrix spike / matrix spike duplicate analysis, and yielded results outside historical range due to sample matrix. The data was flagged accordingly. Blank spike / blank spike duplicate analysis meets target criteria. Initial and continuing calibration requirements were met.

Please let me know if there are any questions regarding this data package, or if I may be of assistance by calling 1-800-765-0980, ext. 1237 or by email at pam.langford@testamericainc.com.

Pamela A. Langford
Data Package Coordinator
TestAmerica, Inc - Nashville

Form 5
ANALYSIS BATCH (SEQUENCE) SUMMARY
SW846 9012B

Laboratory: TestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Sequence:

Instrument:

Calibration:

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
01GW0701	NRI0528-01		09/09/08 11:29
01GW0701D	NRI0528-02		09/09/08 11:29
01GW0801	NRI0528-03		09/09/08-11:29
01GW1201	NRI0528-04		09/11/08 11:31
01GW1301	NRI0528-05		09/11/08 11:31
01GW1101	NRI0528-06		09/11/08 11:31
01GW1501	NRI0528-07		09/11/08 11:31
01GW1401	NRI0528-08		09/11/08 11:31
01GW1001	NRI0528-09		09/11/08 11:31

Prep: .

9/11/08

PREPARATION BENCH SHEET

Printed: 9/11/2008 5:14:34AM

Date: ~~2-11-08~~ 9/11/08

Start: 0720

8091567

Spike ID and Description

Stop: 0855 Initials: RZM

TestAmerica Nashville

8060105 Cyanide Daily Spike Std. [1]

Matrix: Water

08-295-191

Prepared using: NO PREP

Lab Number	Parameter	Analyzed	Initial Amount (mL)	Final Amount (mL)	Raw Result (ug/mL)	Dilution Factor	Final Result (ug/mL)	Recovery %	Spike Amt. (ul)	Extraction Comments
8091567-BLK1	Cyanide	9/11/08 1131-1153	50	50	0.0001	1	0.0001			
8091567-BS1	Cyanide		50	50	0.0180	1	0.0180	98.9%	500	
8091567-DUP	Cyanide		50	50	0.0585	1	0.0585			nd
8091567-MS1	Cyanide		50	50	0.0608	1	0.0608	60.8%	500	nd
8091567-MSD	Cyanide		50	50	0.0491	1	0.0491	49.7%	500	nd=20.1
NRH2796-01	Cyanide		50	50	0.0075	1	0.0075			
NRH2796-02	Cyanide		50	50	0.0031	1	0.0031			
NRI0289-01	Cyanide		50	50	0.0152	1	0.0152			
NRI0528-04	Cyanide		50	50	0.0049	1	0.0049			data package
NRI0528-05	Cyanide		50	50	0.0033	1	0.0033			data package
NRI0528-06	Cyanide		50	50	0.0012	1	0.0012			data package
NRI0528-07	Cyanide		50	50	0.002	1	0.002			data package
NRI0528-08	Cyanide		50	50	0.0125	1	0.0125			data package
NRI0528-09	Cyanide		50	50	0.0021	1	0.0021			data package
NRI0532-01	Cyanide		50	50	0.0023	1	0.0023			data package
NRI0532-02	Cyanide		50	50	0.0098	1	0.0098			data package
NRI0532-03	Cyanide		50	50	0.0063	1	0.0063			data package
NRI0532-04	Cyanide		50	50	0.0052	1	0.0052			data package
NRI0532-05	Cyanide		50	50	0.0078	1	0.0078			data package
NRI0532-06	Cyanide		50	50	0.0024	1	0.0024			data package

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NRI0532-07	Cyanide		50	50	0.0022	1	0.0022			data package
NRI0532-08	Cyanide		50	50	0.0143	1	0.0143			data package
NRI0532-09	Cyanide		50	50	0.0071	1	0.0071			data package

09/17/08
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Prep: Date: 9-9-08

PREPARATION BENCH SHEET

Printed: 9/9/2008 4:34:48AM

Start: 0820

8091106

Spike ID and Description

Stop: 0955

Initials: REC

TestAmerica Nashville

8060105 Cyanide Daily Spike Std. [1]

Matrix: Water 08-295-177

Prepared using: NO PREP

Lab Number	Parameter	Analyzed	Initial Amount (mL)	Final Amount (mL)	Raw Result (ug/mL)	Dilution Factor	Final Result (ug/mL)	Recovery %	Spike Amt. (ul)	Extraction Comments
8091106-BLK1	Cyanide	9/9/08 1129-1312	50	50	0	1	0			
8091106-BS1	Cyanide	|	50	50	0.1012	1	0.1012	101%	500	
8091106-DUP	Cyanide		50	50	0.0056	1	0.0056			mpd=11.3
8091106-MS1	Cyanide		50	50	0.0094	1	0.0094	99.4%	500	
8091106-MSD	Cyanide		50	50	0.1019	1	0.1019	105%	500	mpd=5.19
NRH2679-01R	Cyanide		50	50	0.0050	1	0.0050			Added 9/8/2008 by SAB
NRH2703-01	Cyanide		50	50	0.0117	1	0.0117			Add NaOH to raise pH >12
NR10528-01	Cyanide		50	50	0.0016	1	0.0016			data package
NR10528-02	Cyanide		50	50	0.0016	1	0.0016			data package
NR10528-03	Cyanide		50	50	0.0016	1	0.0016			data package

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CASE NARRATIVE

September 16, 2008

Client: Empirical Laboratories

Laboratory Work Order: NRI0528

Sample Receipt:

Samples were received intact, properly preserved and in good condition with custody seals and chain of custody documentation. Samples were received on ice, with a cooler temperature measured at the laboratory of 0.2 °C.

Please note the cooler receipt form and any sample non-conformance forms for anomalies noted during sample log-in.

Holding Time:

The analysis was extracted and performed within method specified holding time.

Total Cyanide by SW846 9012B

Nine samples were analyzed for Total Cyanide by SW846 9012B. The associated reagent water blank was below method detection limit. NRI0528-01, 01GW0701 was used for matrix spike / matrix spike duplicate analysis, and yielded results within historical range. Blank spike analysis meets target criteria. Initial and continuing calibration requirements were met.

Please let me know if there are any questions regarding this data package, or if I may be of assistance by calling 1-800-765-0980, ext. 1237 or by email at pam.langford@testamericainc.com.

Pamela A. Langford
Data Package Coordinator
TestAmerica, Inc - Nashville

Form 5
ANALYSIS BATCH (SEQUENCE) SUMMARY
SW846 9012B

Laboratory: TestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Sequence:

Instrument:

Calibration:

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
01GW0601	NRI0532-01		09/11/08 11:31
01GW0901	NRI0532-02		09/11/08 11:31
01GW1701	NRI0532-03		09/11/08 11:31
01GW1601	NRI0532-04		09/11/08 11:31
01GW1601D	NRI0532-05		09/11/08 11:31
01GW1801	NRI0532-06		09/11/08 11:31
01GW1901	NRI0532-07		09/11/08 11:31
01GW2101	NRI0532-08		09/11/08 11:31
01GW2001	NRI0532-09RE1		09/11/08 14:45

DUPLICATES
SW846 9012B

01GW2001

Laboratory: TestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Matrix: Water

Laboratory ID: 8091567-DUP1

Batch: 8091567

Lab Source ID: NRI0532-09

Preparation: NO PREP

Initial/Final: 50 mL / 50 mL

Source Sample Name: 01GW2001

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	METHOD
Cyanide	43	0.00790		0.0585		152	*	SW846 9012B

* Values outside of QC limits

DUPLICATES
SW846 9012B

01GW2001

Laboratory: TestAmerica Nashville

SDG:

Client: Empirical Laboratories, LLC (4017)

Project: Empirical Laboratories, LLC

Matrix: Water

Laboratory ID: 8091769-DUP1

Batch: 8091769

Lab Source ID: NRI0532-09RE1

Preparation: NO PREP

Initial/Final: 50 mL / 50 mL

Source Sample Name: 01GW2001

% Solids:

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION (mg/L)	C	DUPLICATE CONCENTRATION (mg/L)	C	RPD %	Q	MEI HOD
Cyanide	43	0.00270		0.00330		20		SW846 9012B

* Values outside of QC limits

Prep:

9/11/08

PREPARATION BENCH SHEET

Printed: 9/11/2008 5:14:34AM

Date:

~~2-10-08~~ 9/11/08

Start:

0720

8091567

Spike ID and Description

Stop:

0855

Initials:

REM

TestAmerica Nashville

8060105 Cyanide Daily Spike Std. [1]

Matrix: Water

08-295-191

Prepared using: NO PREP

Lab Number	Parameter	Analyzed	Initial Amount (mL)	Final Amount (mL)	Raw Result (ug/mL)	Dilution Factor	Final Result (ug/mL)	Recovery %	Spike Amt. (ul)	Extraction Comments
8091567-BLK1	Cyanide	9/11/08 1131-153	50	50	0.0001	1	0.0001			
8091567-BS1	Cyanide	|	50	50	0.0989	1	0.0989	98.9%	500	
8091567-DUP	Cyanide		50	50	0.0585	1	0.0585			npd
8091567-MS1	Cyanide		50	50	0.0008	1	0.0008	60.8%	500	
8091567-MSD	Cyanide		50	50	0.0499	1	0.0499	49.7%	500	npd=70.1
NRH2796-01	Cyanide		50	50	0.0075	1	0.0075			
NRH2796-02	Cyanide		50	50	0.0031	1	0.0031			
NRI0289-01	Cyanide		50	50	0.0152	1	0.0152			
NRI0528-04	Cyanide		50	50	0.0049	1	0.0049			data package
NRI0528-05	Cyanide		50	50	0.0033	1	0.0033			data package
NRI0528-06	Cyanide		50	50	0.0012	1	0.0012			data package
NRI0528-07	Cyanide		50	50	0.0012	1	0.0012			data package
NRI0528-08	Cyanide		50	50	0.0125	1	0.0125			data package
NRI0528-09	Cyanide		50	50	0.0021	1	0.0021			data package
NRI0532-01	Cyanide		50	50	0.0023	1	0.0023			data package
NRI0532-02	Cyanide		50	50	0.0098	1	0.0098			data package
NRI0532-03	Cyanide		50	50	0.0003	1	0.0003			data package
NRI0532-04	Cyanide	50	50	0.0052	1	0.0052			data package	
NRI0532-05	Cyanide	50	50	0.0078	1	0.0078			data package	
NRI0532-06	Cyanide	50	50	0.0024	1	0.0024			data package	

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NRI0532-07	Cyanide		50	50	0.0022	1	0.0022			data package
NRI0532-08	Cyanide		50	50	0.0143	1	0.0143			data package
NRI0532-09	Cyanide		50	50	0.0079	1	0.0079			data package

09/17/08
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Prep: _____
 Date: 9/11/08

PREPARATION BENCH SHEET

Printed: 9/11/2008 4:50:38PM

Start: 1300
 Stop: 1355 Initials: REN/SAB

8091769

TestAmerica Nashville

Spike ID and Description

8060105 Cyanide Daily Spike Std. [1]

Matrix: Water

08-295-08

Prepared using: NO PREP

Lab Number	Parameter	Analyzed	Initial Amount (mL)	Final Amount (mL)	Raw Result (ug/mL)	Dilution Factor	Final Result (ug/mL)	Recovery %	Spike Amt. (ul)	Extraction Comments
8091769-BLK1	Cyanide	<u>all 1000 1000s - 1511</u>	50	50	<u>0</u>	<u>1</u>	<u>0</u>			
8091769-BS1	Cyanide	<u>I</u>	50	50	<u>0.1049</u>	<u>1</u>	<u>0.1049</u>	<u>105%</u>	<u>500</u>	<u>BSD=0.1049 (0.5%) RSD=0.191</u>
8091769-DUP	Cyanide	<u>I</u>	50	50	<u>0.0033</u>	<u>1</u>	<u>0.0033</u>			<u>RSD=0.00</u>
NRI0532-09RE	Cyanide	<u>I</u>	50	50	<u>0.0033</u>	<u>1</u>	<u>0.0033</u>			Re-extract added 9/11/2008 by SAB

0.0033
0.0033
0.0033

09/17/08
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VOC

The continuing calibration run on 09/03/08 at 11:55 on instrument VOA4 had a percent difference result for acetone that was outside of the quality control acceptance range of $\pm 25\%$. The following samples were affected:

01TB082608	01TB082808	01GW0701
01GW0701D	01GW0801	01GW1201
01GW1301	01GW1101	01GW1501
01GW1401	01GW1001	01GW0601
01GW0901	01GW1701	01GW1601
01GW1601D		

Positive and non-detected results for acetone were qualified as estimated (J and UJ, respectively) in the affected samples due to calibration noncompliance.

The following analytes were detected in the method blanks/trip blanks at the following maximum concentrations:

<u>Analyte</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
1,2,4-trichlorobenzene*	0.18 ug/L	0.90 ug/L
Methylene chloride*	0.56 ug/L	5.6 ug/L

* Maximum concentration detected in trip blank

Action levels of 5X the maximum concentration of 1,2,4-trichlorobenzene and 10X the maximum concentration of methylene chloride were used to evaluate the sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results for methylene chloride less the action level were qualified as non-detected (U) for blank contamination. No action was necessary for 1,2,4-trichlorobenzene, as this analyte was non-detected in all environmental samples. Trip blanks were not qualified due to blank contamination.

The laboratory control sample/laboratory control sample duplicate (LCS/LCSD) analysis V4BLK0903 had relative percent difference (RPD) results greater than the quality control maximum for acetone and bromomethane. No action was taken because both the LCS and LCSD percent recoveries were within limits for these analytes.

Positive results for analytes reported to be below the quantitation limit but above the method detection limit were qualified as estimated (J) due to uncertainty near the detection limit.

SVOC

According to the laboratory narrative, sample 01GW0901 was reanalyzed due to low surrogate recoveries. Only data from the reanalysis have been reported by the laboratory.

The laboratory data package originally did not include all of the necessary forms for SVOC initial calibration. The laboratory was contacted, and all forms were obtained and are included in this report.

The Form I report for sample 01GW1001 listed the analysis date for this sample as 09/03/08 but an extraction date of 09/08/08. The run logs indicate that the analysis date is correct for this sample. The extraction log indicates that this sample was extracted on 09/02/08. Therefore, sample 01GW0601 is assumed to have an extraction date of 09/02/08 and be within both the extraction and analysis holding times.

Several samples with a sample date of 08/28/08 were listed with an extraction date of 09/05/08, which is 1 day outside of the 7-day extraction holding time limit. The extraction log included with the raw data records the extraction of these samples on 09/04/08 beginning at 11:00. Specific sample extraction times are unknown. Therefore, non-detected results were qualified as estimated (UJ) for holding time noncompliance in the following samples: 01GW1601, 01GW1601D, 01GW1701, 01GW1801, 01GW2101, 01GW2001, 01GW1901, 01GW0601.

Sample 01GW0901 was extracted 5 days outside of the 7-day holding time limit. Non-detected results in this sample were qualified as estimated (UJ) for holding time noncompliance.

The initial calibration run on 07/24/08 on instrument BNA1 had a correlation coefficient result less than the 0.995 acceptance minimum for caprolactam. All samples were affected. Non-detected results for caprolactam were qualified as estimated (UJ) for calibration noncompliance in all samples.

The continuing calibration run on 09/03/08 at 20:18 on instrument BNA1 had a percent difference result outside of the acceptance range of $\pm 25\%$ for atrazine and di-n-octylphthalate. Samples 01GW1401 and 01GW1001 were affected. Non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

The continuing calibration run on 09/05/08 at 06:22 on instrument BNA1 had percent difference results outside of the $\pm 25\%$ acceptance range for atrazine, butyl benzyl phthalate, and caprolactam. The following samples were affected: 01GW0601, 01GW1701, 01GW1601, 01GW1601D, 01GW1801, 01GW1901, 01GW2101, and 01GW2001. Non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

The continuing calibration run on 09/09/08 at 14:43 on instrument BNA1 had percent difference results outside of the acceptance range of $\pm 25\%$ for atrazine and benzaldehyde. Sample 01GW0901 was affected. Non-detected results for these analytes were qualified as estimated (UJ) in sample 01GW0901 for calibration noncompliance.

The following analyte was detected in the method blanks at the following maximum concentration:

<u>Analyte</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Bis(2-ethylhexyl)phthalate	6.2 ug/L	62 ug/L

An action level of 10X the maximum concentration of bis(2-ethylhexyl)phthalate was used to evaluate sample data for blank contamination. Sample aliquot and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results reported to be less the action level were qualified as non-detected (U) for method blank contamination.

Sample 01GW1101 had surrogate recoveries less than the laboratory quality control minimum (but greater than 10%) for four surrogates: nitrobenzene-d5, 2-fluorobiphenyl, 2,4,6-tribromophenol, and terphenyl-d14. Non-detected results in both the base/neutral and acid fractions were qualified as estimated (UJ) for surrogate recovery noncompliance.

The laboratory control sample (LCS) analysis SBLK0902BW1 had an LCS percent recovery less than the laboratory quality control minimum for caprolactam. No laboratory control sample duplicate (LCSD) analysis was performed. Non-detected results for this analyte were qualified as estimated (UJ) in the associated samples: 01GW0701, 01GW0701D, 01GW0801, 01GW1201, 01GW1301, 01GW1101, 01GW1501, 01GW1401, 01GW1001.

The LCS/LCSD analysis SBLK0904BW1 had both LCS and LCSD percent recoveries that were greater than the laboratory quality control maximum for acenaphthylene. No action was necessary because all acenaphthylene results were non-detected in all samples and high recoveries affect positive results only. The LCS/LCSD percent recoveries were less than the laboratory quality control minimum for caprolactam. Non-detected results for this analyte were qualified as estimated (UJ) in the associated samples: 01GW0601, 01GW1701, 01GW1601, 01GW1601D, 01GW1801, 01GW1901, 01GW2101, and 01GW2001.

The LCS/LCSD analysis SBLK0909BW1 analysis produced LCS percent recovery results that were greater than the laboratory quality control maximums for benzo(a)anthracene, benzo(a)pyrene, and 2,4-dimethylphenol. No action was taken for these analytes because the LCSD percent recoveries were within limits. Both the LCS and LCSD percent recoveries for acenaphthylene were greater than the laboratory maximum. No action was taken for acenaphthylene because all results were non-detected in the associated sample (01GW0901). Bis(2-ethylhexyl)phthalate had both an LCS percent recovery and a relative percent difference (RPD) greater than the laboratory quality control maximums. No action was taken because the LCSD percent recovery for bis(2-ethylhexyl)phthalate was within quality control limits.

PEST/PCB

Toxaphene was run as a single-component analyte in the initial calibration analysis. All results were non-detected, so the laboratory did not perform continuing calibration for toxaphene. However, the the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006) requires that continuing calibration verifications be run for all target analytes. Therefore, all non-detected toxaphene results were qualified as estimated (UJ).

The continuing calibration run on 09/13/08 at 21:13 on Column ZB MR-1 had percent difference results outside of the quality acceptance range of $\pm 15\%$ for delta-BHC and 4,4'-DDD. No action was taken because the percent differences for these analytes were within limits on Column ZB MR-2.

The continuing calibration run on 09/13/08 at 21:13 on Column ZB MR-2 had percent difference results outside of the $\pm 15\%$ limits for methoxychlor and endrin ketone. No action was taken because the percent difference results were within limits for the same calibration on Column ZB MR-1.

The continuing calibration run on 09/13/08 at 2:32 on Column ZB MR-1 had a percent difference result for Peak 4 for Aroclor-1260 that was outside of the quality control acceptance range of $\pm 15\%$. No action was taken because all percent difference results were compliant on Column ZB MR-2.

Continuing calibration run on 09/14/08 at 02:08 on Column ZB MR-1 had a percent difference result outside of the $\pm 15\%$ acceptance range for delta-BHC. No action was taken because the result for delta-BHC was compliant on Column ZB MR-2.

The continuing calibration run on 09/14/08 at 02:08 on Column ZB MR-2 had percent difference results outside of the $\pm 15\%$ acceptance range for methoxychlor and endrin ketone. No action was taken because results for these analytes were within acceptance limits on the Column ZB MR-1.

The continuing calibration run on 09/14/08 at 02:26 on Column ZB MR-1 had percent difference results that were outside of the acceptance range of $\pm 15\%$ for Peak 5 of Aroclor-1016 and Peak 4 of Aroclor-1260. No action was taken because all percent difference results are within limits on Column ZB MR-2.

The continuing calibration run on 09/14/08 at 07:02 on Column ZB MR-2 had a percent difference result for endrin ketone that was outside of the acceptance range of $\pm 15\%$. No action was taken because all results were compliant on Column ZB MR-1.

The continuing calibration run on 09/14/08 at 07:20 on Column ZB MR-1 had a percent difference result for Peak 5 for Aroclor-1016 that was outside the $\pm 15\%$ acceptance range. No action was taken because all results were compliant on Column ZB MR-2 for this calibration.

According to the laboratory narrative, the duplicate sample 01GW0701D was "missed for surrogate spiking." Surrogate recovery results were reported as 0 for all four surrogate recoveries. However, the surrogate recoveries were within limits for the original sample (01GW0701). Therefore, non-detected results in sample 01GW0701D were qualified as estimated (UJ) for surrogate recovery noncompliance.

The LCS/LCSD report PW1BLK0902 had a percent LCS recovery result that was greater than the laboratory quality control maximum for delta-BHC. No action was taken because the LCSD percent recovery was within limits.

The LCS/LCSD report PW1BLK0904 had a percent LCSD recovery that was greater than the laboratory quality control maximum for Endosulfan I. No action was taken because the LCS percent recovery for this analyte was within limits.

The percent difference between columns exceeded the 25% maximum for the following analyte:

<u>Sample</u>	<u>Analyte</u>	<u>Percent Difference</u>
01GW1301	Endrin aldehyde	28.6 %

The positive result for endrin aldehyde was qualified as estimated (J) for having a percent difference exceeding 25% but less than 100%.

HERB

The continuing calibration run on 09/09/08 at 19:37 on Column RTX-CLP2 had a percent difference result outside of the $\pm 15\%$ acceptance range for the target analyte 2,4,5-T. No action was necessary because the percent difference for this analyte was within limits on Column RTX-CLP for the continuing calibration on 09/09/08 at 18:58.

The continuing calibration run on 09/10/08 at 04:03 on Column RTX-CLP2 had percent difference results for 2,4-D, 2,4,5-TP, and 2,4,5-T. No action was taken because all results were within acceptance limits in the corresponding calibration on Column RTX-CLP.

The continuing calibration run on 09/10/09 at 11:12 on Column RTX-CLP2 had percent difference results outside of the $\pm 15\%$ acceptance range for the target analytes 2,4-D, 2,4,5-TP, and 2,4,5-T. The percent difference result for 2,4-D was also outside of the $\pm 15\%$ acceptance range on Column RTX-CLP. Non-detected results for 2,4-D were qualified as estimated (UJ) in the affected samples: 01GW0601, 01GW0901, 01GW1601, 01GW1601D, 01GW1901, 01GW2101, 01GW2001. No action was taken for 2,4,5-TP or 2,4,5-TP because percent difference results for these analytes were within limits on Column RXT-CLP.

The surrogate recoveries were greater than the laboratory quality control acceptance maximum for several samples on Column RTX-CLP2. Samples 01GW0701, 01GW0701D, 01GW0601, 01GW0901, and 01GW2101 were affected. All surrogate recoveries were compliant on Column RTX-CLP. According to the laboratory narrative (and supported by the quantitation reports), all positive detections of 2,4,5-TP were reported from the compliant column except in sample 01GW0701. Therefore, the result for 2,4,5-TP was qualified as estimated (J) in sample 01GW0701 for surrogate recovery noncompliance. No results were qualified in any other samples.

The percent difference between columns exceeded the 25% maximum for the following analyte:

<u>Sample</u>	<u>Analyte</u>	<u>Percent Difference</u>
01GW0701D	2,4,5-TP	26.5 %
01GW1201	2,4,5-TP	124.8%
01GW1301	2,4,5-TP	182.1%
011GW1601	2,4,5-TP	65.6%
01GW1601D	2,4,5-TP	49.3%
01GW2101	2,4,5-TP	149.3%

Results with a percent difference between 25% and 100% were qualified as estimated (J). Results with a percent difference greater than 100% were qualified as rejected (R).

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several SVOC samples were qualified as estimated due to extraction holding time noncompliances. Calibration noncompliances led to qualification in all fractions. One analyte in both the VOC and SVOC fractions was qualified due to blank contamination. Surrogate noncompliances led to qualifications in the SVOC, PEST/PCB, and HERB fractions. LCS noncompliances led to the qualification of caprolactam in multiple samples. Percent difference between columns exceedances led to data qualification in the PEST/PCB and HERB fractions.

Other Factors Affecting Data Quality: Several VOC and PEST results were qualified as estimated due to uncertainty near the detection limits.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM for Environmental Laboratories.


Tetra Tech NUS

Leigh A. Ciofani
Data Validator


TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

- Appendix A – Qualified Analytical Results
- Appendix B – Results as Reported by the Laboratory
- Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	1.6	J	CP
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROETHANE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1.8		
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	0.34	U	B
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROENZENE	1	U	
1,2,4-TRICHLOROENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	0.27	U	B
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROENZENE	1	U	
1,2,4-TRICHLOROENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROENZENE	1	U	
1,4-DICHLOROENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	U	
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	2.8	J	P
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	U	
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	0.3	J	P
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROENZENE	1	U	
1,2,4-TRICHLOROENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROENZENE	1	U	
1,4-DICHLOROENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	U	
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01TB082608
 samp_date 8/26/2008
 lab_id 0808253-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01TB082608
 samp_date 8/26/2008
 lab_id 0808253-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01TB082808
 samp_date 8/28/2008
 lab_id 0808268-01
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	0.18	J	P
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	0.56	J	P
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	UJ	C
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OV

nsample 01TB082808
samp_date 8/28/2008
lab_id 0808268-01
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	0.31	J	P
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.6	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLOROBENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	U	
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	1.9	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	U	
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLOROBENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLOROBENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	U	
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	1.9	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	U	
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLOROBENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLOROBENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	U	
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	1.9	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	U	
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLOROBENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	CH

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	2.7	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	H
CAPROLACTAM	9.2	UJ	HV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLORO BENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	UJ	C
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	2.3	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	UJ	C
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLORO BENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	R
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	R
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	R
2,4,5-TRICHLOROPHENOL	23	UJ	R
2,4,6-TRICHLOROPHENOL	9.2	UJ	R
2,4-DICHLOROPHENOL	9.2	UJ	R
2,4-DIMETHYLPHENOL	9.2	UJ	R
2,4-DINITROPHENOL	23	UJ	R
2,4-DINITROTOLUENE	9.2	UJ	R
2,6-DINITROTOLUENE	9.2	UJ	R
2-CHLORONAPHTHALENE	9.2	UJ	R
2-CHLOROPHENOL	9.2	UJ	R
2-METHYLNAPHTHALENE	9.2	UJ	R
2-METHYLPHENOL	9.2	UJ	R
2-NITROANILINE	23	UJ	R
2-NITROPHENOL	9.2	UJ	R
3,3'-DICHLOROBENZIDINE	9.2	UJ	R
3-NITROANILINE	23	UJ	R
4,6-DINITRO-2-METHYLPHENOL	23	UJ	R
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	R
4-CHLORO-3-METHYLPHENOL	9.2	UJ	R
4-CHLOROANILINE	9.2	UJ	R
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	R
4-METHYLPHENOL	9.2	UJ	R
4-NITROANILINE	23	UJ	R
4-NITROPHENOL	23	UJ	R
ACENAPHTHENE	9.2	UJ	R
ACENAPHTHYLENE	9.2	UJ	R
ACETOPHENONE	9.2	UJ	R
ANTHRACENE	9.2	UJ	R
ATRAZINE	9.2	UJ	R
BENZALDEHYDE	9.2	UJ	R

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	R
BENZO(A)PYRENE	9.2	UJ	R
BENZO(B)FLUORANTHENE	9.2	UJ	R
BENZO(G,H,I)PERYLENE	9.2	UJ	R
BENZO(K)FLUORANTHENE	9.2	UJ	R
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	R
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	R
BIS(2-ETHYLHEXYL)PHTHALATE	3.3	UJ	AR
BUTYL BENZYL PHTHALATE	9.2	UJ	R
CAPROLACTAM	9.2	UJ	ERV
CHRYSENE	9.2	UJ	R
DIBENZO(A,H)ANTHRACENE	9.2	UJ	R
DIBENZOFURAN	9.2	UJ	R
DIETHYL PHTHALATE	9.2	UJ	R
DIMETHYL PHTHALATE	9.2	UJ	R
DI-N-BUTYL PHTHALATE	9.2	UJ	R
DI-N-OCTYL PHTHALATE	9.2	UJ	R
FLUORANTHENE	9.2	UJ	R
FLUORENE	9.2	UJ	R
HEXACHLOROBENZENE	9.2	UJ	R
HEXACHLOROBUTADIENE	9.2	UJ	R
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	R
HEXACHLOROETHANE	9.2	UJ	R
INDENO(1,2,3-CD)PYRENE	9.2	UJ	R
ISOPHORONE	9.2	UJ	R
NAPHTHALENE	9.2	UJ	R
NITROBENZENE	9.2	UJ	R
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	R
N-NITROSODIPHENYLAMINE	9.2	UJ	R
PENTACHLOROPHENOL	23	UJ	R
PHENANTHRENE	9.2	UJ	R
PHENOL	9.2	UJ	R

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	R

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	10	U	
1,2,4,5-TETRACHLOROBENZENE	10	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	10	U	
2,4,5-TRICHLOROPHENOL	25	U	
2,4,6-TRICHLOROPHENOL	10	U	
2,4-DICHLOROPHENOL	10	U	
2,4-DIMETHYLPHENOL	10	U	
2,4-DINITROPHENOL	25	U	
2,4-DINITROTOLUENE	10	U	
2,6-DINITROTOLUENE	10	U	
2-CHLORONAPHTHALENE	10	U	
2-CHLOROPHENOL	10	U	
2-METHYLNAPHTHALENE	10	U	
2-METHYLPHENOL	10	U	
2-NITROANILINE	25	U	
2-NITROPHENOL	10	U	
3,3'-DICHLOROBENZIDINE	10	U	
3-NITROANILINE	25	U	
4,6-DINITRO-2-METHYLPHENOL	25	U	
4-BROMOPHENYL PHENYL ETHER	10	U	
4-CHLORO-3-METHYLPHENOL	10	U	
4-CHLOROANILINE	10	U	
4-CHLOROPHENYL PHENYL ETHER	10	U	
4-METHYLPHENOL	10	U	
4-NITROANILINE	25	U	
4-NITROPHENOL	25	U	
ACENAPHTHENE	10	U	
ACENAPHTHYLENE	10	U	
ACETOPHENONE	10	U	
ANTHRACENE	10	U	
ATRAZINE	10	U	
BENZALDEHYDE	10	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	10	U	
BENZO(A)PYRENE	10	U	
BENZO(B)FLUORANTHENE	10	U	
BENZO(G,H,I)PERYLENE	10	U	
BENZO(K)FLUORANTHENE	10	U	
BIS(2-CHLOROETHOXY)METHANE	10	U	
BIS(2-CHLOROETHYL)ETHER	10	U	
BIS(2-ETHYLHEXYL)PHTHALATE	2.1	U	A
BUTYL BENZYL PHTHALATE	10	U	
CAPROLACTAM	10	UJ	EV
CHRYSENE	10	U	
DIBENZO(A,H)ANTHRACENE	10	U	
DIBENZOFURAN	10	U	
DIETHYL PHTHALATE	10	U	
DIMETHYL PHTHALATE	10	U	
DI-N-BUTYL PHTHALATE	10	U	
DI-N-OCTYL PHTHALATE	10	U	
FLUORANTHENE	10	U	
FLUORENE	10	U	
HEXACHLOROBENZENE	10	U	
HEXACHLOROBUTADIENE	10	U	
HEXACHLOROCYCLOPENTADIENE	10	U	
HEXACHLOROETHANE	10	U	
INDENO(1,2,3-CD)PYRENE	10	U	
ISOPHORONE	10	U	
NAPHTHALENE	10	U	
NITROBENZENE	10	U	
N-NITROSO-DI-N-PROPYLAMINE	10	U	
N-NITROSODIPHENYLAMINE	10	U	
PENTACHLOROPHENOL	25	U	
PHENANTHRENE	10	U	
PHENOL	10	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLOROBENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	U	
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	2.2	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	U	
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLOROBENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	U	
1,2,4,5-TETRACHLOROBENZENE	9.2	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	U	
2,4,5-TRICHLOROPHENOL	23	U	
2,4,6-TRICHLOROPHENOL	9.2	U	
2,4-DICHLOROPHENOL	9.2	U	
2,4-DIMETHYLPHENOL	9.2	U	
2,4-DINITROPHENOL	23	U	
2,4-DINITROTOLUENE	9.2	U	
2,6-DINITROTOLUENE	9.2	U	
2-CHLORONAPHTHALENE	9.2	U	
2-CHLOROPHENOL	9.2	U	
2-METHYLNAPHTHALENE	9.2	U	
2-METHYLPHENOL	9.2	U	
2-NITROANILINE	23	U	
2-NITROPHENOL	9.2	U	
3,3'-DICHLOROBENZIDINE	9.2	U	
3-NITROANILINE	23	U	
4,6-DINITRO-2-METHYLPHENOL	23	U	
4-BROMOPHENYL PHENYL ETHER	9.2	U	
4-CHLORO-3-METHYLPHENOL	9.2	U	
4-CHLOROANILINE	9.2	U	
4-CHLOROPHENYL PHENYL ETHER	9.2	U	
4-METHYLPHENOL	9.2	U	
4-NITROANILINE	23	U	
4-NITROPHENOL	23	U	
ACENAPHTHENE	9.2	U	
ACENAPHTHYLENE	9.2	U	
ACETOPHENONE	9.2	U	
ANTHRACENE	9.2	U	
ATRAZINE	9.2	UJ	C
BENZALDEHYDE	9.2	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	U	
BENZO(A)PYRENE	9.2	U	
BENZO(B)FLUORANTHENE	9.2	U	
BENZO(G,H,I)PERYLENE	9.2	U	
BENZO(K)FLUORANTHENE	9.2	U	
BIS(2-CHLOROETHOXY)METHANE	9.2	U	
BIS(2-CHLOROETHYL)ETHER	9.2	U	
BIS(2-ETHYLHEXYL)PHTHALATE	2.3	U	A
BUTYL BENZYL PHTHALATE	9.2	U	
CAPROLACTAM	9.2	UJ	EV
CHRYSENE	9.2	U	
DIBENZO(A,H)ANTHRACENE	9.2	U	
DIBENZOFURAN	9.2	U	
DIETHYL PHTHALATE	9.2	U	
DIMETHYL PHTHALATE	9.2	U	
DI-N-BUTYL PHTHALATE	9.2	U	
DI-N-OCTYL PHTHALATE	9.2	UJ	C
FLUORANTHENE	9.2	U	
FLUORENE	9.2	U	
HEXACHLOROBENZENE	9.2	U	
HEXACHLOROBUTADIENE	9.2	U	
HEXACHLOROCYCLOPENTADIENE	9.2	U	
HEXACHLOROETHANE	9.2	U	
INDENO(1,2,3-CD)PYRENE	9.2	U	
ISOPHORONE	9.2	U	
NAPHTHALENE	9.2	U	
NITROBENZENE	9.2	U	
N-NITROSO-DI-N-PROPYLAMINE	9.2	U	
N-NITROSODIPHENYLAMINE	9.2	U	
PENTACHLOROPHENOL	23	U	
PHENANTHRENE	9.2	U	
PHENOL	9.2	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	10	U	
1,2,4,5-TETRACHLORO BENZENE	10	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	10	U	
2,4,5-TRICHLOROPHENOL	25	U	
2,4,6-TRICHLOROPHENOL	10	U	
2,4-DICHLOROPHENOL	10	U	
2,4-DIMETHYLPHENOL	10	U	
2,4-DINITROPHENOL	25	U	
2,4-DINITROTOLUENE	10	U	
2,6-DINITROTOLUENE	10	U	
2-CHLORONAPHTHALENE	10	U	
2-CHLOROPHENOL	10	U	
2-METHYLNAPHTHALENE	10	U	
2-METHYLPHENOL	10	U	
2-NITROANILINE	25	U	
2-NITROPHENOL	10	U	
3,3'-DICHLORO BENZIDINE	10	U	
3-NITROANILINE	25	U	
4,6-DINITRO-2-METHYLPHENOL	25	U	
4-BROMOPHENYL PHENYL ETHER	10	U	
4-CHLORO-3-METHYLPHENOL	10	U	
4-CHLOROANILINE	10	U	
4-CHLOROPHENYL PHENYL ETHER	10	U	
4-METHYLPHENOL	10	U	
4-NITROANILINE	25	U	
4-NITROPHENOL	25	U	
ACENAPHTHENE	10	U	
ACENAPHTHYLENE	10	U	
ACETOPHENONE	10	U	
ANTHRACENE	10	U	
ATRAZINE	10	U	
BENZALDEHYDE	10	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	10	U	
BENZO(A)PYRENE	10	U	
BENZO(B)FLUORANTHENE	10	U	
BENZO(G,H,I)PERYLENE	10	U	
BENZO(K)FLUORANTHENE	10	U	
BIS(2-CHLOROETHOXY)METHANE	10	U	
BIS(2-CHLOROETHYL)ETHER	10	U	
BIS(2-ETHYLHEXYL)PHTHALATE	2.3	U	A
BUTYL BENZYL PHTHALATE	10	U	
CAPROLACTAM	10	UJ	EV
CHRYSENE	10	U	
DIBENZO(A,H)ANTHRACENE	10	U	
DIBENZOFURAN	10	U	
DIETHYL PHTHALATE	10	U	
DIMETHYL PHTHALATE	10	U	
DI-N-BUTYL PHTHALATE	10	U	
DI-N-OCTYL PHTHALATE	10	U	
FLUORANTHENE	10	U	
FLUORENE	10	U	
HEXACHLORO BENZENE	10	U	
HEXACHLOROBUTADIENE	10	U	
HEXACHLOROCYCLOPENTADIENE	10	U	
HEXACHLOROETHANE	10	U	
INDENO(1,2,3-CD)PYRENE	10	U	
ISOPHORONE	10	U	
NAPHTHALENE	10	U	
NITROBENZENE	10	U	
N-NITROSO-DI-N-PROPYLAMINE	10	U	
N-NITROSODIPHENYLAMINE	10	U	
PENTACHLOROPHENOL	25	U	
PHENANTHRENE	10	U	
PHENOL	10	U	

Parameter	Result	Val Qual	Qual Code
PYRENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.5	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.6	UJ	H
1,2,4,5-TETRACHLOROENZENE	9.6	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.6	UJ	H
2,4,5-TRICHLOROPHENOL	24	UJ	H
2,4,6-TRICHLOROPHENOL	9.6	UJ	H
2,4-DICHLOROPHENOL	9.6	UJ	H
2,4-DIMETHYLPHENOL	9.6	UJ	H
2,4-DINITROPHENOL	24	UJ	H
2,4-DINITROTOLUENE	9.6	UJ	H
2,6-DINITROTOLUENE	9.6	UJ	H
2-CHLORONAPHTHALENE	9.6	UJ	H
2-CHLOROPHENOL	9.6	UJ	H
2-METHYLNAPHTHALENE	9.6	UJ	H
2-METHYLPHENOL	9.6	UJ	H
2-NITROANILINE	24	UJ	H
2-NITROPHENOL	9.6	UJ	H
3,3'-DICHLOROENZIDINE	9.6	UJ	H
3-NITROANILINE	24	UJ	H
4,6-DINITRO-2-METHYLPHENOL	24	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.6	UJ	H
4-CHLORO-3-METHYLPHENOL	9.6	UJ	H
4-CHLOROANILINE	9.6	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.6	UJ	H
4-METHYLPHENOL	9.6	UJ	H
4-NITROANILINE	24	UJ	H
4-NITROPHENOL	24	UJ	H
ACENAPHTHENE	9.6	UJ	H
ACENAPHTHYLENE	9.6	UJ	H
ACETOPHENONE	9.6	UJ	H
ANTHRACENE	9.6	UJ	H
ATRAZINE	9.6	UJ	CH
BENZALDEHYDE	9.6	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.6	UJ	H
BENZO(A)PYRENE	9.6	UJ	H
BENZO(B)FLUORANTHENE	9.6	UJ	H
BENZO(G,H,I)PERYLENE	9.6	UJ	H
BENZO(K)FLUORANTHENE	9.6	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.6	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.6	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.4	UJ	AH
BUTYL BENZYL PHTHALATE	9.6	UJ	CH
CAPROLACTAM	9.6	UJ	CEHV
CHRYSENE	9.6	UJ	H
DIBENZO(A,H)ANTHRACENE	9.6	UJ	H
DIBENZOFURAN	9.6	UJ	H
DIETHYL PHTHALATE	9.6	UJ	H
DIMETHYL PHTHALATE	9.6	UJ	H
DI-N-BUTYL PHTHALATE	9.6	UJ	H
DI-N-OCTYL PHTHALATE	9.6	UJ	H
FLUORANTHENE	9.6	UJ	H
FLUORENE	9.6	UJ	H
HEXACHLOROENZENE	9.6	UJ	H
HEXACHLOROBUTADIENE	9.6	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.6	UJ	H
HEXACHLOROETHANE	9.6	UJ	H
INDENO(1,2,3-CD)PYRENE	9.6	UJ	H
ISOPHORONE	9.6	UJ	H
NAPHTHALENE	9.6	UJ	H
NITROENZENE	9.6	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.6	UJ	H
N-NITROSODIPHENYLAMINE	9.6	UJ	H
PENTACHLOROPHENOL	24	UJ	H
PHENANTHRENE	9.6	UJ	H
PHENOL	9.6	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.6	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.6	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.4	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.6	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROBENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROBENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.8	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROBENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROBENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: OS

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	9.2	UJ	H
1,2,4,5-TETRACHLOROENZENE	9.2	UJ	H
2,2'-OXYBIS(1-CHLOROPROPANE)	9.2	UJ	H
2,4,5-TRICHLOROPHENOL	23	UJ	H
2,4,6-TRICHLOROPHENOL	9.2	UJ	H
2,4-DICHLOROPHENOL	9.2	UJ	H
2,4-DIMETHYLPHENOL	9.2	UJ	H
2,4-DINITROPHENOL	23	UJ	H
2,4-DINITROTOLUENE	9.2	UJ	H
2,6-DINITROTOLUENE	9.2	UJ	H
2-CHLORONAPHTHALENE	9.2	UJ	H
2-CHLOROPHENOL	9.2	UJ	H
2-METHYLNAPHTHALENE	9.2	UJ	H
2-METHYLPHENOL	9.2	UJ	H
2-NITROANILINE	23	UJ	H
2-NITROPHENOL	9.2	UJ	H
3,3'-DICHLOROENZIDINE	9.2	UJ	H
3-NITROANILINE	23	UJ	H
4,6-DINITRO-2-METHYLPHENOL	23	UJ	H
4-BROMOPHENYL PHENYL ETHER	9.2	UJ	H
4-CHLORO-3-METHYLPHENOL	9.2	UJ	H
4-CHLOROANILINE	9.2	UJ	H
4-CHLOROPHENYL PHENYL ETHER	9.2	UJ	H
4-METHYLPHENOL	9.2	UJ	H
4-NITROANILINE	23	UJ	H
4-NITROPHENOL	23	UJ	H
ACENAPHTHENE	9.2	UJ	H
ACENAPHTHYLENE	9.2	UJ	H
ACETOPHENONE	9.2	UJ	H
ANTHRACENE	9.2	UJ	H
ATRAZINE	9.2	UJ	CH
BENZALDEHYDE	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	9.2	UJ	H
BENZO(A)PYRENE	9.2	UJ	H
BENZO(B)FLUORANTHENE	9.2	UJ	H
BENZO(G,H,I)PERYLENE	9.2	UJ	H
BENZO(K)FLUORANTHENE	9.2	UJ	H
BIS(2-CHLOROETHOXY)METHANE	9.2	UJ	H
BIS(2-CHLOROETHYL)ETHER	9.2	UJ	H
BIS(2-ETHYLHEXYL)PHTHALATE	1.6	UJ	AH
BUTYL BENZYL PHTHALATE	9.2	UJ	CH
CAPROLACTAM	9.2	UJ	CEHV
CHRYSENE	9.2	UJ	H
DIBENZO(A,H)ANTHRACENE	9.2	UJ	H
DIBENZOFURAN	9.2	UJ	H
DIETHYL PHTHALATE	9.2	UJ	H
DIMETHYL PHTHALATE	9.2	UJ	H
DI-N-BUTYL PHTHALATE	9.2	UJ	H
DI-N-OCTYL PHTHALATE	9.2	UJ	H
FLUORANTHENE	9.2	UJ	H
FLUORENE	9.2	UJ	H
HEXACHLOROENZENE	9.2	UJ	H
HEXACHLOROBUTADIENE	9.2	UJ	H
HEXACHLOROCYCLOPENTADIENE	9.2	UJ	H
HEXACHLOROETHANE	9.2	UJ	H
INDENO(1,2,3-CD)PYRENE	9.2	UJ	H
ISOPHORONE	9.2	UJ	H
NAPHTHALENE	9.2	UJ	H
NITROENZENE	9.2	UJ	H
N-NITROSO-DI-N-PROPYLAMINE	9.2	UJ	H
N-NITROSODIPHENYLAMINE	9.2	UJ	H
PENTACHLOROPHENOL	23	UJ	H
PHENANTHRENE	9.2	UJ	H
PHENOL	9.2	UJ	H

Parameter	Result	Val Qual	Qual Code
PYRENE	9.2	UJ	H

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.019	UJ	R
4,4'-DDE	0.019	UJ	R
4,4'-DDT	0.019	UJ	R
ALDRIN	0.0096	UJ	R
ALPHA-BHC	0.0096	UJ	R
ALPHA-CHLORDANE	0.0096	UJ	R
AROCLOR-1016	0.48	UJ	R
AROCLOR-1221	0.48	UJ	R
AROCLOR-1232	0.48	UJ	R
AROCLOR-1242	0.48	UJ	R
AROCLOR-1248	0.48	UJ	R
AROCLOR-1254	0.48	UJ	R
AROCLOR-1260	0.48	UJ	R
BETA-BHC	0.0096	UJ	R
DELTA-BHC	0.0096	UJ	R
DIELDRIN	0.019	UJ	R
ENDOSULFAN I	0.0096	UJ	R
ENDOSULFAN II	0.019	UJ	R
ENDOSULFAN SULFATE	0.019	UJ	R
ENDRIN	0.019	UJ	R
ENDRIN ALDEHYDE	0.019	UJ	R
ENDRIN KETONE	0.019	UJ	R
GAMMA-BHC (LINDANE)	0.0096	UJ	R
GAMMA-CHLORDANE	0.0096	UJ	R
HEPTACHLOR	0.0096	UJ	R
HEPTACHLOR EPOXIDE	0.0096	UJ	R
METHOXYCHLOR	0.0096	UJ	R
TOXAPHENE	0.96	UJ	CR

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW0801
 samp_date 8/26/2008
 lab_id 0808253-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0901
 samp_date 8/28/2008
 lab_id 0808268-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1001
 samp_date 8/27/2008
 lab_id 0808253-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.02	U	
4,4'-DDE	0.02	U	
4,4'-DDT	0.02	U	
ALDRIN	0.01	U	
ALPHA-BHC	0.01	U	
ALPHA-CHLORDANE	0.01	U	
AROCLOR-1016	0.5	U	
AROCLOR-1221	0.5	U	
AROCLOR-1232	0.5	U	
AROCLOR-1242	0.5	U	
AROCLOR-1248	0.5	U	
AROCLOR-1254	0.5	U	
AROCLOR-1260	0.5	U	
BETA-BHC	0.01	U	
DELTA-BHC	0.01	U	
DIELDRIN	0.02	U	
ENDOSULFAN I	0.01	U	
ENDOSULFAN II	0.02	U	
ENDOSULFAN SULFATE	0.02	U	
ENDRIN	0.02	U	
ENDRIN ALDEHYDE	0.02	U	
ENDRIN KETONE	0.02	U	
GAMMA-BHC (LINDANE)	0.01	U	
GAMMA-CHLORDANE	0.01	U	
HEPTACHLOR	0.01	U	
HEPTACHLOR EPOXIDE	0.01	U	
METHOXYCHLOR	0.01	U	
TOXAPHENE	1	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.02	U	
4,4'-DDE	0.02	U	
4,4'-DDT	0.02	U	
ALDRIN	0.01	U	
ALPHA-BHC	0.01	U	
ALPHA-CHLORDANE	0.01	U	
AROCLOR-1016	0.5	U	
AROCLOR-1221	0.5	U	
AROCLOR-1232	0.5	U	
AROCLOR-1242	0.5	U	
AROCLOR-1248	0.5	U	
AROCLOR-1254	0.5	U	
AROCLOR-1260	0.5	U	
BETA-BHC	0.01	U	
DELTA-BHC	0.01	U	
DIELDRIN	0.02	U	
ENDOSULFAN I	0.01	U	
ENDOSULFAN II	0.02	U	
ENDOSULFAN SULFATE	0.02	U	
ENDRIN	0.02	U	
ENDRIN ALDEHYDE	0.02	U	
ENDRIN KETONE	0.02	U	
GAMMA-BHC (LINDANE)	0.01	U	
GAMMA-CHLORDANE	0.01	U	
HEPTACHLOR	0.01	U	
HEPTACHLOR EPOXIDE	0.01	U	
METHOXYCHLOR	0.01	U	
TOXAPHENE	1	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.019	U	
4,4'-DDE	0.019	U	
4,4'-DDT	0.019	U	
ALDRIN	0.0096	U	
ALPHA-BHC	0.0096	U	
ALPHA-CHLORDANE	0.0096	U	
AROCLOR-1016	0.48	U	
AROCLOR-1221	0.48	U	
AROCLOR-1232	0.48	U	
AROCLOR-1242	0.48	U	
AROCLOR-1248	0.48	U	
AROCLOR-1254	0.48	U	
AROCLOR-1260	0.48	U	
BETA-BHC	0.0096	U	
DELTA-BHC	0.0096	U	
DIELDRIN	0.019	U	
ENDOSULFAN I	0.0096	U	
ENDOSULFAN II	0.019	U	
ENDOSULFAN SULFATE	0.019	U	
ENDRIN	0.019	U	
ENDRIN ALDEHYDE	0.019	U	
ENDRIN KETONE	0.019	U	
GAMMA-BHC (LINDANE)	0.0096	U	
GAMMA-CHLORDANE	0.0096	U	
HEPTACHLOR	0.0096	U	
HEPTACHLOR EPOXIDE	0.0096	U	
METHOXYCHLOR	0.0096	U	
TOXAPHENE	0.96	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.0088	J	PU
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.02	U	
4,4'-DDE	0.02	U	
4,4'-DDT	0.02	U	
ALDRIN	0.0098	U	
ALPHA-BHC	0.0098	U	
ALPHA-CHLORDANE	0.0098	U	
AROCLOR-1016	0.49	U	
AROCLOR-1221	0.49	U	
AROCLOR-1232	0.49	U	
AROCLOR-1242	0.49	U	
AROCLOR-1248	0.49	U	
AROCLOR-1254	0.49	U	
AROCLOR-1260	0.49	U	
BETA-BHC	0.0098	U	
DELTA-BHC	0.0098	U	
DIELDRIN	0.02	U	
ENDOSULFAN I	0.0098	U	
ENDOSULFAN II	0.02	U	
ENDOSULFAN SULFATE	0.02	U	
ENDRIN	0.02	U	
ENDRIN ALDEHYDE	0.02	U	
ENDRIN KETONE	0.02	U	
GAMMA-BHC (LINDANE)	0.0098	U	
GAMMA-CHLORDANE	0.0098	U	
HEPTACHLOR	0.0098	U	
HEPTACHLOR EPOXIDE	0.0098	U	
METHOXYCHLOR	0.0098	U	
TOXAPHENE	0.98	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.02	U	
4,4'-DDE	0.02	U	
4,4'-DDT	0.02	U	
ALDRIN	0.0098	U	
ALPHA-BHC	0.0098	U	
ALPHA-CHLORDANE	0.0098	U	
AROCLOR-1016	0.49	U	
AROCLOR-1221	0.49	U	
AROCLOR-1232	0.49	U	
AROCLOR-1242	0.49	U	
AROCLOR-1248	0.49	U	
AROCLOR-1254	0.49	U	
AROCLOR-1260	0.49	U	
BETA-BHC	0.0098	U	
DELTA-BHC	0.0098	U	
DIELDRIN	0.02	U	
ENDOSULFAN I	0.0098	U	
ENDOSULFAN II	0.02	U	
ENDOSULFAN SULFATE	0.02	U	
ENDRIN	0.02	U	
ENDRIN ALDEHYDE	0.02	U	
ENDRIN KETONE	0.02	U	
GAMMA-BHC (LINDANE)	0.0098	U	
GAMMA-CHLORDANE	0.0098	U	
HEPTACHLOR	0.0098	U	
HEPTACHLOR EPOXIDE	0.0098	U	
METHOXYCHLOR	0.0098	U	
TOXAPHENE	0.98	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW1601D
 samp_date 8/28/2008
 lab_id 0808268-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW1601

nsample 01GW1701
 samp_date 8/28/2008
 lab_id 0808268-04
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1801
 samp_date 8/28/2008
 lab_id 0808268-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: PEST/PCB

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.018	U	
4,4'-DDE	0.018	U	
4,4'-DDT	0.018	U	
ALDRIN	0.0092	U	
ALPHA-BHC	0.0092	U	
ALPHA-CHLORDANE	0.0092	U	
AROCLOR-1016	0.46	U	
AROCLOR-1221	0.46	U	
AROCLOR-1232	0.46	U	
AROCLOR-1242	0.46	U	
AROCLOR-1248	0.46	U	
AROCLOR-1254	0.46	U	
AROCLOR-1260	0.46	U	
BETA-BHC	0.0092	U	
DELTA-BHC	0.0092	U	
DIELDRIN	0.018	U	
ENDOSULFAN I	0.0092	U	
ENDOSULFAN II	0.018	U	
ENDOSULFAN SULFATE	0.018	U	
ENDRIN	0.018	U	
ENDRIN ALDEHYDE	0.018	U	
ENDRIN KETONE	0.018	U	
GAMMA-BHC (LINDANE)	0.0092	U	
GAMMA-CHLORDANE	0.0092	U	
HEPTACHLOR	0.0092	U	
HEPTACHLOR EPOXIDE	0.0092	U	
METHOXYCHLOR	0.0092	U	
TOXAPHENE	0.92	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW0601
 samp_date 8/28/2008
 lab_id 0808268-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701
 samp_date 8/26/2008
 lab_id 0808253-02
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW0701D
 samp_date 8/26/2008
 lab_id 0808253-03
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF: 01GW0701

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.046	U	
2,4,5-TP (SILVEX)	0.046	U	
2,4-D	0.46	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.049	J R	
2,4-D	0.49	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.05	J U	
2,4-D	0.47	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW0801
samp_date 8/26/2008
lab_id 0808253-04
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01GW0901
samp_date 8/28/2008
lab_id 0808268-03
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01GW1001
samp_date 8/27/2008
lab_id 0808253-10
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.05	U	
2,4,5-TP (SILVEX)	0.05	U	
2,4-D	0.5	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.049	U	
2,4-D	0.49	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.048	U	
2,4,5-TP (SILVEX)	0.048	U	
2,4-D	0.48	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW1101
 samp_date 8/27/2008
 lab_id 0808253-07
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1201
 samp_date 8/27/2008
 lab_id 0808253-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1301
 samp_date 8/27/2008
 lab_id 0808253-06
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.047	U	
2,4-D	0.47	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.073	R U	
2,4-D	0.47	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.03	R U	
2,4-D	0.47	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW1401
 samp_date 8/27/2008
 lab_id 0808253-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1501
 samp_date 8/27/2008
 lab_id 0808253-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW1601
 samp_date 8/28/2008
 lab_id 0808268-05
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.046	U	
2,4,5-TP (SILVEX)	0.046	U	
2,4-D	0.46	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.047	U	
2,4-D	0.47	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.082	J	U
2,4-D	0.49	UJ	C

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW1601D
samp_date 8/28/2008
lab_id 0808268-06
qc_type NM
units UG/L
Pct_Solids
DUP_OF: 01GW1601

nsample 01GW1701
samp_date 8/28/2008
lab_id 0808268-04
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

nsample 01GW1801
samp_date 8/28/2008
lab_id 0808268-07
qc_type NM
units UG/L
Pct_Solids
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.05	U	
2,4,5-TP (SILVEX)	0.17	J	U
2,4-D	0.5	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.046	U	
2,4,5-TP (SILVEX)	0.046	U	
2,4-D	0.46	U	

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.049	U	
2,4-D	0.49	U	

PROJ_NO: 00700

SDG: GULFPORT-010 MEDIA: WATER DATA FRACTION: HERB

nsample 01GW1901
 samp_date 8/28/2008
 lab_id 0808268-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2001
 samp_date 8/28/2008
 lab_id 0808268-10
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample 01GW2101
 samp_date 8/28/2008
 lab_id 0808268-09
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.049	U	
2,4-D	0.49	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.049	U	
2,4,5-TP (SILVEX)	0.17		
2,4-D	0.49	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	0.047	U	
2,4,5-TP (SILVEX)	0.079	R	U
2,4-D	0.47	UJ	C

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix: (soil/water) WATER Lab Sample ID: 0808268-02
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826802
 Level: (low/med) LOW Date Sampled: 08/28/08 08:15
 % Moisture: not dec. _____ Date Analyzed: 09/03/08 20:44
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826802

Level: (low/med) LOW Date Sampled: 08/28/08 08:15

% Moisture: not dec. _____ Date Analyzed: 09/03/08 20:44

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825302

Level: (low/med) LOW Date Sampled: 08/26/08 13:40

% Moisture: not dec. _____ Date Analyzed: 09/03/08 16:19

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825302

Level: (low/med) LOW Date Sampled: 08/26/08 13:40

% Moisture: not dec. _____ Date Analyzed: 09/03/08 16:19

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix: (soil/water) WATER Lab Sample ID: 0808253-03
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825303
 Level: (low/med) LOW Date Sampled: 08/26/08 13:40
 % Moisture: not dec. _____ Date Analyzed: 09/03/08 16:48
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: MDL	(ug/L or ug/Kg) RL	UG/L CONC	Q
67-64-1-----	Acetone	1.1	5.0	1.6	J
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825303

Level: (low/med) LOW Date Sampled: 08/26/08 13:40

% Moisture: not dec. _____ Date Analyzed: 09/03/08 16:48

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825304

Level: (low/med) LOW Date Sampled: 08/26/08 15:10

% Moisture: not dec. _____ Date Analyzed: 09/03/08 17:18

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			Q
		MDL	RE	CONC	
67-64-1	Acetone	1.1	5.0		U
71-43-2	Benzene	0.11	1.0		U
74-97-5	Bromochloromethane	0.31	1.0		U
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	1.0		U
78-93-3	2-Butanone	1.2	5.0		U
75-15-0	Carbon disulfide	0.13	1.0		U
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	1.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	1.0		U
110-82-7	Cyclohexane	0.18	1.0		U
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	1.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0		U
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0		U
79-20-9	Methyl acetate	0.87	1.0		U
108-87-2	Methyl cyclohexane	0.20	1.0		U
75-09-2	Methylene chloride	0.26	2.0		U
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825304

Level: (low/med) LOW Date Sampled: 08/26/08 15:10

% Moisture: not dec. _____ Date Analyzed: 09/03/08 17:18

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----Toluene	0.18	1.0		U
87-61-6-----1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----Trichloroethene	0.28	1.0		U
76-13-1-----Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----Trichlorofluoromethane	0.15	5.0		U
75-01-4-----Vinyl chloride	0.19	1.0		U
1330-20-7-----Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826803

Level: (low/med) LOW Date Sampled: 08/28/08 09:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 21:14

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0	1.8	
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826803

Level: (low/med) LOW Date Sampled: 08/28/08 09:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 21:14

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825310

Level: (low/med) LOW Date Sampled: 08/27/08 15:50

% Moisture: not dec. _____ Date Analyzed: 09/03/08 20:15

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0	0.34	JB
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825310

Level: (low/med) LOW Date Sampled: 08/27/08 15:50

% Moisture: not dec. _____ Date Analyzed: 09/03/08 20:15

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825307

Level: (low/med) LOW Date Sampled: 08/27/08 11:45

% Moisture: not dec. _____ Date Analyzed: 09/03/08 18:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825307

Level: (low/med) LOW Date Sampled: 08/27/08 11:45

% Moisture: not dec. _____ Date Analyzed: 09/03/08 18:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.18	1.0		U
87-61-6	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6	Trichloroethene	0.28	1.0		U
76-13-1	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4	Trichlorofluoromethane	0.15	5.0		U
75-01-4	Vinyl chloride	0.19	1.0		U
1330-20-7	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825305

Level: (low/med) LOW Date Sampled: 08/27/08 09:10

% Moisture: not dec. _____ Date Analyzed: 09/03/08 17:47

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825305

Level: (low/med) LOW Date Sampled: 08/27/08 09:10

% Moisture: not dec. _____ Date Analyzed: 09/03/08 17:47

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825306

Level: (low/med) LOW Date Sampled: 08/27/08 10:30

% Moisture: not dec. _____ Date Analyzed: 09/03/08 18:17

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825306

Level: (low/med) LOW Date Sampled: 08/27/08 10:30

% Moisture: not dec. _____ Date Analyzed: 09/03/08 18:17

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825309

Level: (low/med) LOW Date Sampled: 08/27/08 14:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 19:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1	Acetone	1.1	5.0		U
71-43-2	Benzene	0.11	1.0		U
74-97-5	Bromochloromethane	0.31	1.0		U
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	1.0		U
78-93-3	2-Butanone	1.2	5.0		U
75-15-0	Carbon disulfide	0.13	1.0		U
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	1.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	1.0		U
110-82-7	Cyclohexane	0.18	1.0		U
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	1.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0		U
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0		U
79-20-9	Methyl acetate	0.87	1.0		U
108-87-2	Methyl cyclohexane	0.20	1.0		U
75-09-2	Methylene chloride	0.26	2.0		U
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825309

Level: (low/med) LOW Date Sampled: 08/27/08 14:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 19:46

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825308

Level: (low/med) LOW Date Sampled: 08/27/08 13:50

% Moisture: not dec. _____ Date Analyzed: 09/03/08 19:16

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
		MDL	RL	CONC Q
67-64-1-----	Acetone	1.1	5.0	U
71-43-2-----	Benzene	0.11	1.0	U
74-97-5-----	Bromochloromethane	0.31	1.0	U
75-27-4-----	Bromodichloromethane	0.086	1.0	U
75-25-2-----	Bromoform	0.24	1.0	U
74-83-9-----	Bromomethane	0.33	1.0	U
78-93-3-----	2-Butanone	1.2	5.0	U
75-15-0-----	Carbon disulfide	0.13	1.0	U
56-23-5-----	Carbon tetrachloride	0.14	1.0	U
108-90-7-----	Chlorobenzene	0.28	1.0	U
75-00-3-----	Chloroethane	0.38	1.0	U
67-66-3-----	Chloroform	0.10	1.0	U
74-87-3-----	Chloromethane	0.40	1.0	U
110-82-7-----	Cyclohexane	0.18	1.0	U
124-48-1-----	Dibromochloromethane	0.080	1.0	U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0	U
106-93-4-----	1,2-Dibromoethane	0.070	1.0	U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0	U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0	U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0	U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0	U
75-34-3-----	1,1-Dichloroethane	0.15	1.0	U
107-06-2-----	1,2-Dichloroethane	0.15	1.0	U
75-35-4-----	1,1-Dichloroethene	0.42	1.0	U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0	U
78-87-5-----	1,2-Dichloropropane	0.18	1.0	U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0	U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0	U
100-41-4-----	Ethylbenzene	0.14	1.0	U
591-78-6-----	2-Hexanone	0.83	5.0	U
98-82-8-----	Isopropylbenzene	0.034	1.0	U
79-20-9-----	Methyl acetate	0.87	1.0	U
108-87-2-----	Methyl cyclohexane	0.20	1.0	U
75-09-2-----	Methylene chloride	0.26	2.0	0.27 JB
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0	U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0	U
100-42-5-----	Styrene	0.22	1.0	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0	U
127-18-4-----	Tetrachloroethene	0.14	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825308

Level: (low/med) LOW Date Sampled: 08/27/08 13:50

% Moisture: not dec. _____ Date Analyzed: 09/03/08 19:16

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix: (soil/water) WATER Lab Sample ID: 0808268-05
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826805
 Level: (low/med) LOW Date Sampled: 08/28/08 11:00
 % Moisture: not dec. _____ Date Analyzed: 09/03/08 22:13
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC	Q
		MDL	RL	CONC		
67-64-1	Acetone	1.1	5.0		U	
71-43-2	Benzene	0.11	1.0		U	
74-97-5	Bromochloromethane	0.31	1.0		U	
75-27-4	Bromodichloromethane	0.086	1.0		U	
75-25-2	Bromoform	0.24	1.0		U	
74-83-9	Bromomethane	0.33	1.0		U	
78-93-3	2-Butanone	1.2	5.0		U	
75-15-0	Carbon disulfide	0.13	1.0		U	
56-23-5	Carbon tetrachloride	0.14	1.0		U	
108-90-7	Chlorobenzene	0.28	1.0		U	
75-00-3	Chloroethane	0.38	1.0		U	
67-66-3	Chloroform	0.10	1.0		U	
74-87-3	Chloromethane	0.40	1.0		U	
110-82-7	Cyclohexane	0.18	1.0		U	
124-48-1	Dibromochloromethane	0.080	1.0		U	
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U	
106-93-4	1,2-Dibromoethane	0.070	1.0		U	
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U	
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U	
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U	
75-71-8	Dichlorodifluoromethane	0.24	1.0		U	
75-34-3	1,1-Dichloroethane	0.15	1.0		U	
107-06-2	1,2-Dichloroethane	0.15	1.0		U	
75-35-4	1,1-Dichloroethene	0.42	1.0		U	
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U	
78-87-5	1,2-Dichloropropane	0.18	1.0		U	
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U	
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U	
100-41-4	Ethylbenzene	0.14	1.0		U	
591-78-6	2-Hexanone	0.83	5.0		U	
98-82-8	Isopropylbenzene	0.034	1.0		U	
79-20-9	Methyl acetate	0.87	1.0		U	
108-87-2	Methyl cyclohexane	0.20	1.0		U	
75-09-2	Methylene chloride	0.26	2.0		U	
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U	
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U	
100-42-5	Styrene	0.22	1.0		U	
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U	
127-18-4	Tetrachloroethene	0.14	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-05

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826805

Level: (low/med) LOW Date Sampled: 08/28/08 11:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 22:13

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826806

Level: (low/med) LOW Date Sampled: 08/28/08 11:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 22:42

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826806

Level: (low/med) LOW Date Sampled: 08/28/08 11:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 22:42

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix: (soil/water) WATER Lab Sample ID: 0808268-04
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826804
 Level: (low/med) LOW Date Sampled: 08/28/08 10:30
 % Moisture: not dec. _____ Date Analyzed: 09/03/08 21:43
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-04

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826804

Level: (low/med) LOW Date Sampled: 08/28/08 10:30

% Moisture: not dec. _____ Date Analyzed: 09/03/08 21:43

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	Q
		MDL	RL		
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826807

Level: (low/med) LOW Date Sampled: 08/28/08 13:45

% Moisture: not dec. _____ Date Analyzed: 09/04/08 03:04

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L
		MDL	RL		CONC
67-64-1-----	Acetone	1.1	5.0	U
71-43-2-----	Benzene	0.11	1.0	U
74-97-5-----	Bromochloromethane	0.31	1.0	U
75-27-4-----	Bromodichloromethane	0.086	1.0	U
75-25-2-----	Bromoform	0.24	1.0	U
74-83-9-----	Bromomethane	0.33	1.0	U
78-93-3-----	2-Butanone	1.2	5.0	U
75-15-0-----	Carbon disulfide	0.13	1.0	U
56-23-5-----	Carbon tetrachloride	0.14	1.0	U
108-90-7-----	Chlorobenzene	0.28	1.0	U
75-00-3-----	Chloroethane	0.38	1.0	U
67-66-3-----	Chloroform	0.10	1.0	U
74-87-3-----	Chloromethane	0.40	1.0	U
110-82-7-----	Cyclohexane	0.18	1.0	U
124-48-1-----	Dibromochloromethane	0.080	1.0	U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0	U
106-93-4-----	1,2-Dibromoethane	0.070	1.0	U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0	U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0	U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0	U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0	U
75-34-3-----	1,1-Dichloroethane	0.15	1.0	U
107-06-2-----	1,2-Dichloroethane	0.15	1.0	U
75-35-4-----	1,1-Dichloroethene	0.42	1.0	U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0	U
78-87-5-----	1,2-Dichloropropane	0.18	1.0	U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0	U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0	U
100-41-4-----	Ethylbenzene	0.14	1.0	U
591-78-6-----	2-Hexanone	0.83	5.0	U
98-82-8-----	Isopropylbenzene	0.034	1.0	U
79-20-9-----	Methyl acetate	0.87	1.0	U
108-87-2-----	Methyl cyclohexane	0.20	1.0	U
75-09-2-----	Methylene chloride	0.26	2.0	U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0	U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0	U
100-42-5-----	Styrene	0.22	1.0	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0	U
127-18-4-----	Tetrachloroethene	0.14	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826807

Level: (low/med) LOW Date Sampled: 08/28/08 13:45

% Moisture: not dec. _____ Date Analyzed: 09/04/08 03:04

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL			CONC
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826808

Level: (low/med) LOW Date Sampled: 08/28/08 13:50

% Moisture: not dec. _____ Date Analyzed: 09/04/08 03:34

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

67-64-1-----	Acetone	1.1	5.0	2.8	J
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826808

Level: (low/med) LOW Date Sampled: 08/28/08 13:50

% Moisture: not dec. _____ Date Analyzed: 09/04/08 03:34

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826810

Level: (low/med) LOW Date Sampled: 08/28/08 15:25

% Moisture: not dec. _____ Date Analyzed: 09/04/08 04:32

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5-----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6-----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826810

Level: (low/med) LOW Date Sampled: 08/28/08 15:25

% Moisture: not dec. _____ Date Analyzed: 09/04/08 04:32

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC	Q
		MDL	RL			
108-88-3	Toluene	0.18	1.0			U
87-61-6	1,2,3-Trichlorobenzene	0.16	1.0			U
120-82-1	1,2,4-Trichlorobenzene	0.14	1.0			U
71-55-6	1,1,1-Trichloroethane	0.15	1.0			U
79-00-5	1,1,2-Trichloroethane	0.17	1.0			U
79-01-6	Trichloroethene	0.28	1.0	0.30		J
76-13-1	Trichlorotrifluoroethane	0.22	1.0			U
75-69-4	Trichlorofluoromethane	0.15	5.0			U
75-01-4	Vinyl chloride	0.19	1.0			U
1330-20-7	Xylene (total)	0.21	1.0			U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix: (soil/water) WATER Lab Sample ID: 0808268-09
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826809
 Level: (low/med) LOW Date Sampled: 08/28/08 15:25
 % Moisture: not dec. _____ Date Analyzed: 09/04/08 04:03
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1	Acetone	1.1	5.0		U
71-43-2	Benzene	0.11	1.0		U
74-97-5	Bromochloromethane	0.31	1.0		U
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	1.0		U
78-93-3	2-Butanone	1.2	5.0		U
75-15-0	Carbon disulfide	0.13	1.0		U
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	1.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	1.0		U
110-82-7	Cyclohexane	0.18	1.0		U
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	1.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0		U
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0		U
79-20-9	Methyl acetate	0.87	1.0		U
108-87-2	Methyl cyclohexane	0.20	1.0		U
75-09-2	Methylene chloride	0.26	2.0		U
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-09

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826809

Level: (low/med) LOW Date Sampled: 08/28/08 15:25

% Moisture: not dec. _____ Date Analyzed: 09/04/08 04:03

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB082608

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825301

Level: (low/med) LOW Date Sampled: 08/26/08 13:30

% Moisture: not dec. _____ Date Analyzed: 09/03/08 14:21

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
67-64-1	Acetone	1.1	5.0		U
71-43-2	Benzene	0.11	1.0		U
74-97-5	Bromochloromethane	0.31	1.0		U
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	1.0		U
78-93-3	2-Butanone	1.2	5.0		U
75-15-0	Carbon disulfide	0.13	1.0		U
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	1.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	1.0		U
110-82-7	Cyclohexane	0.18	1.0		U
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	1.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0		U
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0		U
79-20-9	Methyl acetate	0.87	1.0		U
108-87-2	Methyl cyclohexane	0.20	1.0		U
75-09-2	Methylene chloride	0.26	2.0	0.56	JB
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB082608

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0825301

Level: (low/med) LOW Date Sampled: 08/26/08 13:30

% Moisture: not dec. _____ Date Analyzed: 09/03/08 14:21

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.18	1.0		U
87-61-6	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.14	1.0	0.18	J
71-55-6	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6	Trichloroethene	0.28	1.0		U
76-13-1	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4	Trichlorofluoromethane	0.15	5.0		U
75-01-4	Vinyl chloride	0.19	1.0		U
1330-20-7	Xylene (total)	0.21	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB082808

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826801

Level: (low/med) LOW Date Sampled: 08/28/08 08:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 15:20

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1	Acetone	1.1	5.0		U
71-43-2	Benzene	0.11	1.0		U
74-97-5	Bromochloromethane	0.31	1.0		U
75-27-4	Bromodichloromethane	0.086	1.0		U
75-25-2	Bromoform	0.24	1.0		U
74-83-9	Bromomethane	0.33	1.0		U
78-93-3	2-Butanone	1.2	5.0		U
75-15-0	Carbon disulfide	0.13	1.0		U
56-23-5	Carbon tetrachloride	0.14	1.0		U
108-90-7	Chlorobenzene	0.28	1.0		U
75-00-3	Chloroethane	0.38	1.0		U
67-66-3	Chloroform	0.10	1.0		U
74-87-3	Chloromethane	0.40	1.0		U
110-82-7	Cyclohexane	0.18	1.0		U
124-48-1	Dibromochloromethane	0.080	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4	1,2-Dibromoethane	0.070	1.0		U
95-50-1	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8	Dichlorodifluoromethane	0.24	1.0		U
75-34-3	1,1-Dichloroethane	0.15	1.0		U
107-06-2	1,2-Dichloroethane	0.15	1.0		U
75-35-4	1,1-Dichloroethene	0.42	1.0		U
156-59-2	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5	1,2-Dichloropropane	0.18	1.0		U
10061-01-5	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4	Ethylbenzene	0.14	1.0		U
591-78-6	2-Hexanone	0.83	5.0		U
98-82-8	Isopropylbenzene	0.034	1.0		U
79-20-9	Methyl acetate	0.87	1.0		U
108-87-2	Methyl cyclohexane	0.20	1.0		U
75-09-2	Methylene chloride	0.26	2.0	0.31	JB
1634-04-4	Methyl tert-butyl ether	0.17	1.0		U
108-10-1	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5	Styrene	0.22	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01TB082808

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-01

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0826801

Level: (low/med) LOW Date Sampled: 08/28/08 08:00

% Moisture: not dec. _____ Date Analyzed: 09/03/08 15:20

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826802

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 08:15

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 09:25

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.6	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826802

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 08:15

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 09:25

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825302

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 13:52

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1, 1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.9	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3, 3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825302

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 13:52

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Matrix: (soil/water) WATER Lab Sample ID: 0808253-03
 Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825303
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08
 Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 14:29
 Injection Volume: 0.5 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1,1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.9	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2,4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2,4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-03

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825303

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 14:29

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno (1,2,3-cd) pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825304

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 15:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 15:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1, 1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.9	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3, 3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825304

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 15:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 15:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 826803RE

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/09/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/09/08 17:45

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1, 1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	2.7	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3, 3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 826803RE

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/09/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/09/08 17:45

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825310

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/08/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 21:31

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			
		MDL	RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U Y
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1, 1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	2.3	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3, 3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825310

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/08/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 21:31

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825307

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 11:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 16:56

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1, 1' -Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	3.3	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3, 3' -Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825307

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 11:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 16:56

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
534-52-1	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5	2,4-Dinitrophenol	0.79	23		U
121-14-2	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0	Di-n-octylphthalate	0.30	9.2		U
206-44-0	Fluoranthene	0.65	9.2		U
86-73-7	Fluorene	0.51	9.2		U
118-74-1	Hexachlorobenzene	0.44	9.2		U
87-68-3	Hexachlorobutadiene	0.86	9.2		U
77-47-4	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1	Hexachloroethane	0.42	9.2		U
193-39-5	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1	Isophorone	0.51	9.2		U
91-57-6	2-Methylnaphthalene	0.63	9.2		U
91-20-3	Naphthalene	0.42	9.2		U
95-48-7	2-Methylphenol	0.77	9.2		U
106-44-5	4-Methylphenol	0.71	9.2		U
88-74-4	2-Nitroaniline	1.1	23		U
99-09-2	3-Nitroaniline	0.97	23		U
100-01-6	4-Nitroaniline	1.9	23		U
98-95-3	Nitrobenzene	0.57	9.2		U
88-75-5	2-Nitrophenol	0.68	9.2		U
100-02-7	4-Nitrophenol	0.77	23		U
86-30-6	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5	Pentachlorophenol	0.92	23		U
85-01-8	Phenanthrene	0.71	9.2		U
108-95-2	Phenol	0.42	9.2		U
129-00-0	Pyrene	0.60	9.2		U
95-94-3	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4	2,4,5-Trichlorophenol	0.46	23		U
88-06-2	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0825305

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 09:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 15:42

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9-----	Acenaphthene	0.63	10		U
208-96-8-----	Acenaphthylene	0.47	10		U
98-86-2-----	Acetophenone	0.75	10		U
1912-24-9-----	Atrazine	0.69	10		U
120-12-7-----	Anthracene	0.77	10		U
100-52-7-----	Benzaldehyde	0.57	10		U
56-55-3-----	Benzo (a) anthracene	0.91	10		U
205-99-2-----	Benzo (b) fluoranthene	0.71	10		U
207-08-9-----	Benzo (k) fluoranthene	0.50	10		U
191-24-2-----	Benzo (g, h, i) perylene	1.5	10		U
50-32-8-----	Benzo (a) pyrene	0.60	10		U
92-52-4-----	1,1'-Biphenyl	0.39	10		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4-----	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.3	5.0	2.1	JB
101-55-3-----	4-Bromophenyl-phenylether	0.57	10		U
85-68-7-----	Butylbenzylphthalate	0.82	10		U
105-60-2-----	Caprolactam	0.36	10		U
106-47-8-----	4-Chloroaniline	0.95	10		U
59-50-7-----	4-Chloro-3-methylphenol	0.58	10		U
91-58-7-----	2-Chloronaphthalene	0.58	10		U
95-57-8-----	2-Chlorophenol	0.59	10		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9-----	Chrysene	1.0	10		U
53-70-3-----	Dibenz (a, h) anthracene	1.7	10		U
132-64-9-----	Dibenzofuran	0.65	10		U
91-94-1-----	3,3'-Dichlorobenzidine	0.89	10		U
120-83-2-----	2,4-Dichlorophenol	0.44	10		U
84-66-2-----	Diethylphthalate	1.0	10		U
105-67-9-----	2,4-Dimethylphenol	0.71	10		U
131-11-3-----	Dimethylphthalate	0.74	10		U
84-74-2-----	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0825305

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 09:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 15:42

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.74	25		U
51-28-5-----	2,4-Dinitrophenol	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene	0.66	10		U
117-84-0-----	Di-n-octylphthalate	0.33	10		U
206-44-0-----	Fluoranthene	0.70	10		U
86-73-7-----	Fluorene	0.55	10		U
118-74-1-----	Hexachlorobenzene	0.47	10		U
87-68-3-----	Hexachlorobutadiene	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene	0.89	10		U
67-72-1-----	Hexachloroethane	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	10		U
78-59-1-----	Isophorone	0.55	10		U
91-57-6-----	2-Methylnaphthalene	0.68	10		U
91-20-3-----	Naphthalene	0.45	10		U
95-48-7-----	2-Methylphenol	0.83	10		U
106-44-5-----	4-Methylphenol	0.77	10		U
88-74-4-----	2-Nitroaniline	1.2	25		U
99-09-2-----	3-Nitroaniline	1.0	25		U
100-01-6-----	4-Nitroaniline	2.0	25		U
98-95-3-----	Nitrobenzene	0.62	10		U
88-75-5-----	2-Nitrophenol	0.74	10		U
100-02-7-----	4-Nitrophenol	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.90	10		U
87-86-5-----	Pentachlorophenol	1.0	25		U
85-01-8-----	Phenanthrene	0.77	10		U
108-95-2-----	Phenol	0.46	10		U
129-00-0-----	Pyrene	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825306

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 16:20

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1, 1' -Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	2.2	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3, 3' -Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2, 4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2, 4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825306

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 16:20

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825309

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 14:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 20:54

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U <i>2/24/08</i>
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1,1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	2.3	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2,4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2,4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0825309

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 14:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 20:54

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0825308

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 17:33

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9-----	Acenaphthene	0.63	10		U
208-96-8-----	Acenaphthylene	0.47	10		U
98-86-2-----	Acetophenone	0.75	10		U
1912-24-9-----	Atrazine	0.69	10		U
120-12-7-----	Anthracene	0.77	10		U
100-52-7-----	Benzaldehyde	0.57	10		U
56-55-3-----	Benzo (a) anthracene	0.91	10		U
205-99-2-----	Benzo (b) fluoranthene	0.71	10		U
207-08-9-----	Benzo (k) fluoranthene	0.50	10		U
191-24-2-----	Benzo (g, h, i) perylene	1.5	10		U
50-32-8-----	Benzo (a) pyrene	0.60	10		U
92-52-4-----	1, 1'-Biphenyl	0.39	10		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4-----	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.3	5.0	2.3	JB
101-55-3-----	4-Bromophenyl-phenylether	0.57	10		U
85-68-7-----	Butylbenzylphthalate	0.82	10		U
105-60-2-----	Caprolactam	0.36	10		U
106-47-8-----	4-Chloroaniline	0.95	10		U
59-50-7-----	4-Chloro-3-methylphenol	0.58	10		U
91-58-7-----	2-Chloronaphthalene	0.58	10		U
95-57-8-----	2-Chlorophenol	0.59	10		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9-----	Chrysene	1.0	10		U
53-70-3-----	Dibenz (a, h) anthracene	1.7	10		U
132-64-9-----	Dibenzofuran	0.65	10		U
91-94-1-----	3, 3'-Dichlorobenzidine	0.89	10		U
120-83-2-----	2, 4-Dichlorophenol	0.44	10		U
84-66-2-----	Diethylphthalate	1.0	10		U
105-67-9-----	2, 4-Dimethylphenol	0.71	10		U
131-11-3-----	Dimethylphthalate	0.74	10		U
84-74-2-----	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0825308

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 17:33

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.74	25		U
51-28-5-----	2,4-Dinitrophenol	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene	0.66	10		U
117-84-0-----	Di-n-octylphthalate	0.33	10		U
206-44-0-----	Fluoranthene	0.70	10		U
86-73-7-----	Fluorene	0.55	10		U
118-74-1-----	Hexachlorobenzene	0.47	10		U
87-68-3-----	Hexachlorobutadiene	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene	0.89	10		U
67-72-1-----	Hexachloroethane	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	10		U
78-59-1-----	Isophorone	0.55	10		U
91-57-6-----	2-Methylnaphthalene	0.68	10		U
91-20-3-----	Naphthalene	0.45	10		U
95-48-7-----	2-Methylphenol	0.83	10		U
106-44-5-----	4-Methylphenol	0.77	10		U
88-74-4-----	2-Nitroaniline	1.2	25		U
99-09-2-----	3-Nitroaniline	1.0	25		U
100-01-6-----	4-Nitroaniline	2.0	25		U
98-95-3-----	Nitrobenzene	0.62	10		U
88-75-5-----	2-Nitrophenol	0.74	10		U
100-02-7-----	4-Nitrophenol	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.90	10		U
87-86-5-----	Pentachlorophenol	1.0	25		U
85-01-8-----	Phenanthrene	0.77	10		U
108-95-2-----	Phenol	0.46	10		U
129-00-0-----	Pyrene	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-05

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826805

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 11:15

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1,1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.5	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2,4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2,4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-05

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826805

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 11:15

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 0826806

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 11:51

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.60	9.6		U
208-96-8	Acenaphthylene	0.45	9.6		U
98-86-2	Acetophenone	0.72	9.6		U
1912-24-9	Atrazine	0.66	9.6		U
120-12-7	Anthracene	0.74	9.6		U
100-52-7	Benzaldehyde	0.55	9.6		U
56-55-3	Benzo (a) anthracene	0.88	9.6		U
205-99-2	Benzo (b) fluoranthene	0.68	9.6		U
207-08-9	Benzo (k) fluoranthene	0.48	9.6		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.6		U
50-32-8	Benzo (a) pyrene	0.58	9.6		U
92-52-4	1,1'-Biphenyl	0.38	9.6		U
111-91-1	bis (2-Chloroethoxy) methane	0.50	9.6		U
111-44-4	bis (2-Chloroethyl) ether	0.43	9.6		U
108-60-1	bis (2-Chloroisopropyl) ether	0.82	9.6		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.8	1.4	JB
101-55-3	4-Bromophenyl-phenylether	0.55	9.6		U
85-68-7	Butylbenzylphthalate	0.79	9.6		U
105-60-2	Caprolactam	0.35	9.6		U
106-47-8	4-Chloroaniline	0.91	9.6		U
59-50-7	4-Chloro-3-methylphenol	0.56	9.6		U
91-58-7	2-Chloronaphthalene	0.56	9.6		U
95-57-8	2-Chlorophenol	0.57	9.6		U
7005-72-3	4-Chlorophenyl-phenylether	0.86	9.6		U
218-01-9	Chrysene	0.97	9.6		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.6		U
132-64-9	Dibenzofuran	0.62	9.6		U
91-94-1	3,3'-Dichlorobenzidine	0.86	9.6		U
120-83-2	2,4-Dichlorophenol	0.42	9.6		U
84-66-2	Diethylphthalate	0.98	9.6		U
105-67-9	2,4-Dimethylphenol	0.68	9.6		U
131-11-3	Dimethylphthalate	0.71	9.6		U
84-74-2	Di-n-butylphthalate	1.2	9.6		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 0826806

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 11:51

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.71	24		U
51-28-5-----	2,4-Dinitrophenol	0.82	24		U
121-14-2-----	2,4-Dinitrotoluene	0.47	9.6		U
606-20-2-----	2,6-Dinitrotoluene	0.63	9.6		U
117-84-0-----	Di-n-octylphthalate	0.32	9.6		U
206-44-0-----	Fluoranthene	0.67	9.6		U
86-73-7-----	Fluorene	0.53	9.6		U
118-74-1-----	Hexachlorobenzene	0.45	9.6		U
87-68-3-----	Hexachlorobutadiene	0.89	9.6		U
77-47-4-----	Hexachlorocyclopentadiene	0.86	9.6		U
67-72-1-----	Hexachloroethane	0.44	9.6		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	9.6		U
78-59-1-----	Isophorone	0.53	9.6		U
91-57-6-----	2-Methylnaphthalene	0.65	9.6		U
91-20-3-----	Naphthalene	0.43	9.6		U
95-48-7-----	2-Methylphenol	0.80	9.6		U
106-44-5-----	4-Methylphenol	0.74	9.6		U
88-74-4-----	2-Nitroaniline	1.1	24		U
99-09-2-----	3-Nitroaniline	1.0	24		U
100-01-6-----	4-Nitroaniline	2.0	24		U
98-95-3-----	Nitrobenzene	0.60	9.6		U
88-75-5-----	2-Nitrophenol	0.71	9.6		U
100-02-7-----	4-Nitrophenol	0.80	24		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.44	9.6		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.86	9.6		U
87-86-5-----	Pentachlorophenol	0.96	24		U
85-01-8-----	Phenanthrene	0.74	9.6		U
108-95-2-----	Phenol	0.44	9.6		U
129-00-0-----	Pyrene	0.62	9.6		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.9	9.6		U
95-95-4-----	2,4,5-Trichlorophenol	0.48	24		U
88-06-2-----	2,4,6-Trichlorophenol	0.70	9.6		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826804

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 10:38

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.6	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826804

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 10:38

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L Q
		MDL	(ug/L or ug/Kg) RL CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23	U
51-28-5-----	2,4-Dinitrophenol	0.79	23	U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2	U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2	U
117-84-0-----	Di-n-octylphthalate	0.30	9.2	U
206-44-0-----	Fluoranthene	0.65	9.2	U
86-73-7-----	Fluorene	0.51	9.2	U
118-74-1-----	Hexachlorobenzene	0.44	9.2	U
87-68-3-----	Hexachlorobutadiene	0.86	9.2	U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2	U
67-72-1-----	Hexachloroethane	0.42	9.2	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2	U
78-59-1-----	Isophorone	0.51	9.2	U
91-57-6-----	2-Methylnaphthalene	0.63	9.2	U
91-20-3-----	Naphthalene	0.42	9.2	U
95-48-7-----	2-Methylphenol	0.77	9.2	U
106-44-5-----	4-Methylphenol	0.71	9.2	U
88-74-4-----	2-Nitroaniline	1.1	23	U
99-09-2-----	3-Nitroaniline	0.97	23	U
100-01-6-----	4-Nitroaniline	1.9	23	U
98-95-3-----	Nitrobenzene	0.57	9.2	U
88-75-5-----	2-Nitrophenol	0.68	9.2	U
100-02-7-----	4-Nitrophenol	0.77	23	U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2	U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2	U
87-86-5-----	Pentachlorophenol	0.92	23	U
85-01-8-----	Phenanthrene	0.71	9.2	U
108-95-2-----	Phenol	0.42	9.2	U
129-00-0-----	Pyrene	0.60	9.2	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2	U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23	U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826807

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 12:28

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g,h,i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.4	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a,h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826807

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 12:28

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L Q
		MDL	(ug/L or ug/Kg) RL CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23	U
51-28-5-----	2,4-Dinitrophenol	0.79	23	U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2	U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2	U
117-84-0-----	Di-n-octylphthalate	0.30	9.2	U
206-44-0-----	Fluoranthene	0.65	9.2	U
86-73-7-----	Fluorene	0.51	9.2	U
118-74-1-----	Hexachlorobenzene	0.44	9.2	U
87-68-3-----	Hexachlorobutadiene	0.86	9.2	U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2	U
67-72-1-----	Hexachloroethane	0.42	9.2	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2	U
78-59-1-----	Isophorone	0.51	9.2	U
91-57-6-----	2-Methylnaphthalene	0.63	9.2	U
91-20-3-----	Naphthalene	0.42	9.2	U
95-48-7-----	2-Methylphenol	0.77	9.2	U
106-44-5-----	4-Methylphenol	0.71	9.2	U
88-74-4-----	2-Nitroaniline	1.1	23	U
99-09-2-----	3-Nitroaniline	0.97	23	U
100-01-6-----	4-Nitroaniline	1.9	23	U
98-95-3-----	Nitrobenzene	0.57	9.2	U
88-75-5-----	2-Nitrophenol	0.68	9.2	U
100-02-7-----	4-Nitrophenol	0.77	23	U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2	U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2	U
87-86-5-----	Pentachlorophenol	0.92	23	U
85-01-8-----	Phenanthrene	0.71	9.2	U
108-95-2-----	Phenol	0.42	9.2	U
129-00-0-----	Pyrene	0.60	9.2	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2	U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23	U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826808

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 13:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	0.58	9.2		U
208-96-8	Acenaphthylene	0.44	9.2		U
98-86-2	Acetophenone	0.69	9.2		U
1912-24-9	Atrazine	0.64	9.2		U
120-12-7	Anthracene	0.71	9.2		U
100-52-7	Benzaldehyde	0.53	9.2		U
56-55-3	Benzo (a) anthracene	0.84	9.2		U
205-99-2	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8	Benzo (a) pyrene	0.56	9.2		U
92-52-4	1,1'-Biphenyl	0.36	9.2		U
111-91-1	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.6	JB
101-55-3	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7	Butylbenzylphthalate	0.76	9.2		U
105-60-2	Caprolactam	0.33	9.2		U
106-47-8	4-Chloroaniline	0.88	9.2		U
59-50-7	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7	2-Chloronaphthalene	0.54	9.2		U
95-57-8	2-Chlorophenol	0.55	9.2		U
7005-72-3	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9	Chrysene	0.94	9.2		U
53-70-3	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9	Dibenzofuran	0.60	9.2		U
91-94-1	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2	2,4-Dichlorophenol	0.41	9.2		U
84-66-2	Diethylphthalate	0.94	9.2		U
105-67-9	2,4-Dimethylphenol	0.66	9.2		U
131-11-3	Dimethylphthalate	0.68	9.2		U
84-74-2	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826808

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 13:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826810

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 14:18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g, h, i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.8	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a, h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826810

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 14:18

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23		U
51-28-5-----	2,4-Dinitrophenol	0.79	23		U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2		U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2		U
117-84-0-----	Di-n-octylphthalate	0.30	9.2		U
206-44-0-----	Fluoranthene	0.65	9.2		U
86-73-7-----	Fluorene	0.51	9.2		U
118-74-1-----	Hexachlorobenzene	0.44	9.2		U
87-68-3-----	Hexachlorobutadiene	0.86	9.2		U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2		U
67-72-1-----	Hexachloroethane	0.42	9.2		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2		U
78-59-1-----	Isophorone	0.51	9.2		U
91-57-6-----	2-Methylnaphthalene	0.63	9.2		U
91-20-3-----	Naphthalene	0.42	9.2		U
95-48-7-----	2-Methylphenol	0.77	9.2		U
106-44-5-----	4-Methylphenol	0.71	9.2		U
88-74-4-----	2-Nitroaniline	1.1	23		U
99-09-2-----	3-Nitroaniline	0.97	23		U
100-01-6-----	4-Nitroaniline	1.9	23		U
98-95-3-----	Nitrobenzene	0.57	9.2		U
88-75-5-----	2-Nitrophenol	0.68	9.2		U
100-02-7-----	4-Nitrophenol	0.77	23		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2		U
87-86-5-----	Pentachlorophenol	0.92	23		U
85-01-8-----	Phenanthrene	0.71	9.2		U
108-95-2-----	Phenol	0.42	9.2		U
129-00-0-----	Pyrene	0.60	9.2		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2		U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23		U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826809

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 13:41

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	0.58	9.2		U
208-96-8-----	Acenaphthylene	0.44	9.2		U
98-86-2-----	Acetophenone	0.69	9.2		U
1912-24-9-----	Atrazine	0.64	9.2		U
120-12-7-----	Anthracene	0.71	9.2		U
100-52-7-----	Benzaldehyde	0.53	9.2		U
56-55-3-----	Benzo (a) anthracene	0.84	9.2		U
205-99-2-----	Benzo (b) fluoranthene	0.66	9.2		U
207-08-9-----	Benzo (k) fluoranthene	0.46	9.2		U
191-24-2-----	Benzo (g,h,i) perylene	1.4	9.2		U
50-32-8-----	Benzo (a) pyrene	0.56	9.2		U
92-52-4-----	1,1'-Biphenyl	0.36	9.2		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.48	9.2		U
111-44-4-----	bis (2-Chloroethyl) ether	0.42	9.2		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.79	9.2		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.2	4.6	1.6	JB
101-55-3-----	4-Bromophenyl-phenylether	0.53	9.2		U
85-68-7-----	Butylbenzylphthalate	0.76	9.2		U
105-60-2-----	Caprolactam	0.33	9.2		U
106-47-8-----	4-Chloroaniline	0.88	9.2		U
59-50-7-----	4-Chloro-3-methylphenol	0.54	9.2		U
91-58-7-----	2-Chloronaphthalene	0.54	9.2		U
95-57-8-----	2-Chlorophenol	0.55	9.2		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.82	9.2		U
218-01-9-----	Chrysene	0.94	9.2		U
53-70-3-----	Dibenz (a,h) anthracene	1.6	9.2		U
132-64-9-----	Dibenzofuran	0.60	9.2		U
91-94-1-----	3,3'-Dichlorobenzidine	0.82	9.2		U
120-83-2-----	2,4-Dichlorophenol	0.41	9.2		U
84-66-2-----	Diethylphthalate	0.94	9.2		U
105-67-9-----	2,4-Dimethylphenol	0.66	9.2		U
131-11-3-----	Dimethylphthalate	0.68	9.2		U
84-74-2-----	Di-n-butylphthalate	1.2	9.2		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 0826809

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/05/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 13:41

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L Q
		MDL	(ug/L or ug/Kg) RL CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.68	23	U
51-28-5-----	2,4-Dinitrophenol	0.79	23	U
121-14-2-----	2,4-Dinitrotoluene	0.45	9.2	U
606-20-2-----	2,6-Dinitrotoluene	0.61	9.2	U
117-84-0-----	Di-n-octylphthalate	0.30	9.2	U
206-44-0-----	Fluoranthene	0.65	9.2	U
86-73-7-----	Fluorene	0.51	9.2	U
118-74-1-----	Hexachlorobenzene	0.44	9.2	U
87-68-3-----	Hexachlorobutadiene	0.86	9.2	U
77-47-4-----	Hexachlorocyclopentadiene	0.82	9.2	U
67-72-1-----	Hexachloroethane	0.42	9.2	U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.3	9.2	U
78-59-1-----	Isophorone	0.51	9.2	U
91-57-6-----	2-Methylnaphthalene	0.63	9.2	U
91-20-3-----	Naphthalene	0.42	9.2	U
95-48-7-----	2-Methylphenol	0.77	9.2	U
106-44-5-----	4-Methylphenol	0.71	9.2	U
88-74-4-----	2-Nitroaniline	1.1	23	U
99-09-2-----	3-Nitroaniline	0.97	23	U
100-01-6-----	4-Nitroaniline	1.9	23	U
98-95-3-----	Nitrobenzene	0.57	9.2	U
88-75-5-----	2-Nitrophenol	0.68	9.2	U
100-02-7-----	4-Nitrophenol	0.77	23	U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.42	9.2	U
621-64-7-----	N-Nitroso-di-n-propylamine	0.83	9.2	U
87-86-5-----	Pentachlorophenol	0.92	23	U
85-01-8-----	Phenanthrene	0.71	9.2	U
108-95-2-----	Phenol	0.42	9.2	U
129-00-0-----	Pyrene	0.60	9.2	U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	2.8	9.2	U
95-95-4-----	2,4,5-Trichlorophenol	0.46	23	U
88-06-2-----	2,4,6-Trichlorophenol	0.68	9.2	U

(1) - Cannot be separated from Diphenylamine

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 062F6201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 08:15

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 04:16

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	RL		
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 046F4601

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 23:22

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-03

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 047F4701

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 23:40

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
		MDL	RL	CONC Q
309-00-2-----	Aldrin	0.0032	0.0096	U
319-84-6-----	Alpha-BHC	0.0032	0.0096	U
5103-71-9-----	Alpha-Chlordane	0.0032	0.0096	U
319-85-7-----	Beta-BHC	0.0032	0.0096	U
72-54-8-----	4,4'-DDD	0.0048	0.019	U
72-55-9-----	4,4'-DDE	0.0048	0.019	U
50-29-3-----	4,4'-DDT	0.0048	0.019	U
319-86-8-----	Delta-BHC	0.0032	0.0096	U
60-57-1-----	Dieldrin	0.0048	0.019	U
959-98-8-----	Endosulfan I	0.0032	0.0096	U
33213-65-9----	Endosulfan II	0.0048	0.019	U
1031-07-8-----	Endosulfan Sulfate	0.0048	0.019	U
72-20-8-----	Endrin	0.0048	0.019	U
7421-93-4-----	Endrin Aldehyde	0.0048	0.019	U
53494-70-5----	Endrin Ketone	0.0048	0.019	U
58-89-9-----	Gamma-BHC	0.0032	0.0096	U
5103-74-2-----	Gamma-Chlordane	0.0032	0.0096	U
76-44-8-----	Heptachlor	0.0032	0.0096	U
1024-57-3-----	Heptachlor Epoxide	0.0032	0.0096	U
72-43-5-----	Methoxychlor	0.0032	0.0096	U
8001-35-2-----	Toxaphene	0.32	0.96	U
12674-11-2----	PCB-1016	0.12	0.48	U
11104-28-2----	PCB-1221	0.12	0.48	U
11141-16-5----	PCB-1232	0.12	0.48	U
53469-21-9----	PCB-1242	0.12	0.48	U
12672-29-6----	PCB-1248	0.12	0.48	U
11097-69-1----	PCB-1254	0.12	0.48	U
11096-82-5----	PCB-1260	0.12	0.48	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 048F4801

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 15:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 23:59

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
		MDL	RL	CONC Q
309-00-2-----	Aldrin	0.0030	0.0092	U
319-84-6-----	Alpha-BHC	0.0030	0.0092	U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092	U
319-85-7-----	Beta-BHC	0.0030	0.0092	U
72-54-8-----	4,4'-DDD	0.0046	0.018	U
72-55-9-----	4,4'-DDE	0.0046	0.018	U
50-29-3-----	4,4'-DDT	0.0046	0.018	U
319-86-8-----	Delta-BHC	0.0030	0.0092	U
60-57-1-----	Dieldrin	0.0046	0.018	U
959-98-8-----	Endosulfan I	0.0030	0.0092	U
33213-65-9----	Endosulfan II	0.0046	0.018	U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018	U
72-20-8-----	Endrin	0.0046	0.018	U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018	U
53494-70-5----	Endrin Ketone	0.0046	0.018	U
58-89-9-----	Gamma-BHC	0.0030	0.0092	U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092	U
76-44-8-----	Heptachlor	0.0030	0.0092	U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092	U
72-43-5-----	Methoxychlor	0.0030	0.0092	U
8001-35-2-----	Toxaphene	0.30	0.92	U
12674-11-2----	PCB-1016	0.12	0.46	U
11104-28-2----	PCB-1221	0.12	0.46	U
11141-16-5----	PCB-1232	0.12	0.46	U
53469-21-9----	PCB-1242	0.12	0.46	U
12672-29-6----	PCB-1248	0.12	0.46	U
11097-69-1----	PCB-1254	0.12	0.46	U
11096-82-5----	PCB-1260	0.12	0.46	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 063F6301

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 04:35

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0033	0.010		U
319-84-6-----	Alpha-BHC	0.0033	0.010		U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010		U
319-85-7-----	Beta-BHC	0.0033	0.010		U
72-54-8-----	4,4'-DDD	0.0050	0.020		U
72-55-9-----	4,4'-DDE	0.0050	0.020		U
50-29-3-----	4,4'-DDT	0.0050	0.020		U
319-86-8-----	Delta-BHC	0.0033	0.010		U
60-57-1-----	Dieldrin	0.0050	0.020		U
959-98-8-----	Endosulfan I	0.0033	0.010		U
33213-65-9----	Endosulfan II	0.0050	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020		U
72-20-8-----	Endrin	0.0050	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020		U
53494-70-5----	Endrin Ketone	0.0050	0.020		U
58-89-9-----	Gamma-BHC	0.0033	0.010		U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010		U
76-44-8-----	Heptachlor	0.0033	0.010		U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010		U
72-43-5-----	Methoxychlor	0.0033	0.010		U
8001-35-2-----	Toxaphene	0.33	1.0		U
12674-11-2----	PCB-1016	0.12	0.50		U
11104-28-2----	PCB-1221	0.12	0.50		U
11141-16-5----	PCB-1232	0.12	0.50		U
53469-21-9----	PCB-1242	0.12	0.50		U
12672-29-6----	PCB-1248	0.12	0.50		U
11097-69-1----	PCB-1254	0.12	0.50		U
11096-82-5----	PCB-1260	0.12	0.50		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 054F5401

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 01:49

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0033	0.010		U
319-84-6-----	Alpha-BHC	0.0033	0.010		U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010		U
319-85-7-----	Beta-BHC	0.0033	0.010		U
72-54-8-----	4,4'-DDD	0.0050	0.020		U
72-55-9-----	4,4'-DDE	0.0050	0.020		U
50-29-3-----	4,4'-DDT	0.0050	0.020		U
319-86-8-----	Delta-BHC	0.0033	0.010		U
60-57-1-----	Dieldrin	0.0050	0.020		U
959-98-8-----	Endosulfan I	0.0033	0.010		U
33213-65-9----	Endosulfan II	0.0050	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020		U
72-20-8-----	Endrin	0.0050	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020		U
53494-70-5----	Endrin Ketone	0.0050	0.020		U
58-89-9-----	Gamma-BHC	0.0033	0.010		U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010		U
76-44-8-----	Heptachlor	0.0033	0.010		U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010		U
72-43-5-----	Methoxychlor	0.0033	0.010		U
8001-35-2-----	Toxaphene	0.33	1.0		U
12674-11-2----	PCB-1016	0.12	0.50		U
11104-28-2----	PCB-1221	0.12	0.50		U
11141-16-5----	PCB-1232	0.12	0.50		U
53469-21-9----	PCB-1242	0.12	0.50		U
12672-29-6----	PCB-1248	0.12	0.50		U
11097-69-1----	PCB-1254	0.12	0.50		U
11096-82-5----	PCB-1260	0.12	0.50		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 051F5101

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 11:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 00:54

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 049F4901

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 09:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 00:17

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0032	0.0096		U
319-84-6-----	Alpha-BHC	0.0032	0.0096		U
5103-71-9-----	Alpha-Chlordane	0.0032	0.0096		U
319-85-7-----	Beta-BHC	0.0032	0.0096		U
72-54-8-----	4,4'-DDD	0.0048	0.019		U
72-55-9-----	4,4'-DDE	0.0048	0.019		U
50-29-3-----	4,4'-DDT	0.0048	0.019		U
319-86-8-----	Delta-BHC	0.0032	0.0096		U
60-57-1-----	Dieldrin	0.0048	0.019		U
959-98-8-----	Endosulfan I	0.0032	0.0096		U
33213-65-9----	Endosulfan II	0.0048	0.019		U
1031-07-8-----	Endosulfan Sulfate	0.0048	0.019		U
72-20-8-----	Endrin	0.0048	0.019		U
7421-93-4-----	Endrin Aldehyde	0.0048	0.019		U
53494-70-5----	Endrin Ketone	0.0048	0.019		U
58-89-9-----	Gamma-BHC	0.0032	0.0096		U
5103-74-2-----	Gamma-Chlordane	0.0032	0.0096		U
76-44-8-----	Heptachlor	0.0032	0.0096		U
1024-57-3-----	Heptachlor Epoxide	0.0032	0.0096		U
72-43-5-----	Methoxychlor	0.0032	0.0096		U
8001-35-2-----	Toxaphene	0.32	0.96		U
12674-11-2----	PCB-1016	0.12	0.48		U
11104-28-2----	PCB-1221	0.12	0.48		U
11141-16-5----	PCB-1232	0.12	0.48		U
53469-21-9----	PCB-1242	0.12	0.48		U
12672-29-6----	PCB-1248	0.12	0.48		U
11097-69-1----	PCB-1254	0.12	0.48		U
11096-82-5----	PCB-1260	0.12	0.48		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 050F5001

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 00:36

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL			CONC
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018	0.0088	J
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 053F5301

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/27/08 14:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 01:31

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 052F5201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 01:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

309-00-2-----Aldrin	0.0032	0.0098		U
319-84-6-----Alpha-BHC	0.0032	0.0098		U
5103-71-9-----Alpha-Chlordane	0.0032	0.0098		U
319-85-7-----Beta-BHC	0.0032	0.0098		U
72-54-8-----4,4'-DDD	0.0049	0.020		U
72-55-9-----4,4'-DDE	0.0049	0.020		U
50-29-3-----4,4'-DDT	0.0049	0.020		U
319-86-8-----Delta-BHC	0.0032	0.0098		U
60-57-1-----Dieldrin	0.0049	0.020		U
959-98-8-----Endosulfan I	0.0032	0.0098		U
33213-65-9----Endosulfan II	0.0049	0.020		U
1031-07-8----Endosulfan Sulfate	0.0049	0.020		U
72-20-8-----Endrin	0.0049	0.020		U
7421-93-4----Endrin Aldehyde	0.0049	0.020		U
53494-70-5----Endrin Ketone	0.0049	0.020		U
58-89-9-----Gamma-BHC	0.0032	0.0098		U
5103-74-2----Gamma-Chlordane	0.0032	0.0098		U
76-44-8-----Heptachlor	0.0032	0.0098		U
1024-57-3----Heptachlor Epoxide	0.0032	0.0098		U
72-43-5-----Methoxychlor	0.0032	0.0098		U
8001-35-2----Toxaphene	0.32	0.98		U
12674-11-2----PCB-1016	0.12	0.49		U
11104-28-2----PCB-1221	0.12	0.49		U
11141-16-5----PCB-1232	0.12	0.49		U
53469-21-9----PCB-1242	0.12	0.49		U
12672-29-6----PCB-1248	0.12	0.49		U
11097-69-1----PCB-1254	0.12	0.49		U
11096-82-5----PCB-1260	0.12	0.49		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-05

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 065F6501

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 05:12

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
309-00-2-----	Aldrin	0.0032	0.0098		U
319-84-6-----	Alpha-BHC	0.0032	0.0098		U
5103-71-9-----	Alpha-Chlordane	0.0032	0.0098		U
319-85-7-----	Beta-BHC	0.0032	0.0098		U
72-54-8-----	4,4'-DDD	0.0049	0.020		U
72-55-9-----	4,4'-DDE	0.0049	0.020		U
50-29-3-----	4,4'-DDT	0.0049	0.020		U
319-86-8-----	Delta-BHC	0.0032	0.0098		U
60-57-1-----	Dieldrin	0.0049	0.020		U
959-98-8-----	Endosulfan I	0.0032	0.0098		U
33213-65-9----	Endosulfan II	0.0049	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0049	0.020		U
72-20-8-----	Endrin	0.0049	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0049	0.020		U
53494-70-5----	Endrin Ketone	0.0049	0.020		U
58-89-9-----	Gamma-BHC	0.0032	0.0098		U
5103-74-2-----	Gamma-Chlordane	0.0032	0.0098		U
76-44-8-----	Heptachlor	0.0032	0.0098		U
1024-57-3-----	Heptachlor Epoxide	0.0032	0.0098		U
72-43-5-----	Methoxychlor	0.0032	0.0098		U
8001-35-2-----	Toxaphene	0.32	0.98		U
12674-11-2----	PCB-1016	0.12	0.49		U
11104-28-2----	PCB-1221	0.12	0.49		U
11141-16-5----	PCB-1232	0.12	0.49		U
53469-21-9----	PCB-1242	0.12	0.49		U
12672-29-6----	PCB-1248	0.12	0.49		U
11097-69-1----	PCB-1254	0.12	0.49		U
11096-82-5----	PCB-1260	0.12	0.49		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 066F6601

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 05:30

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 064F6401

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 04:53

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 067F6701

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 05:48

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
		MDL	RL	CONC Q
309-00-2-----	Aldrin	0.0030	0.0092	U
319-84-6-----	Alpha-BHC	0.0030	0.0092	U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092	U
319-85-7-----	Beta-BHC	0.0030	0.0092	U
72-54-8-----	4,4'-DDD	0.0046	0.018	U
72-55-9-----	4,4'-DDE	0.0046	0.018	U
50-29-3-----	4,4'-DDT	0.0046	0.018	U
319-86-8-----	Delta-BHC	0.0030	0.0092	U
60-57-1-----	Dieldrin	0.0046	0.018	U
959-98-8-----	Endosulfan I	0.0030	0.0092	U
33213-65-9----	Endosulfan II	0.0046	0.018	U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018	U
72-20-8-----	Endrin	0.0046	0.018	U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018	U
53494-70-5----	Endrin Ketone	0.0046	0.018	U
58-89-9-----	Gamma-BHC	0.0030	0.0092	U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092	U
76-44-8-----	Heptachlor	0.0030	0.0092	U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092	U
72-43-5-----	Methoxychlor	0.0030	0.0092	U
8001-35-2-----	Toxaphene	0.30	0.92	U
12674-11-2----	PCB-1016	0.12	0.46	U
11104-28-2----	PCB-1221	0.12	0.46	U
11141-16-5----	PCB-1232	0.12	0.46	U
53469-21-9----	PCB-1242	0.12	0.46	U
12672-29-6----	PCB-1248	0.12	0.46	U
11097-69-1----	PCB-1254	0.12	0.46	U
11096-82-5----	PCB-1260	0.12	0.46	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 068F6801

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 06:07

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	RL			CONC
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 070F7001

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 06:44

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 069F6901

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 06:25

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION MDL	UNITS: (ug/L or ug/Kg) RL	UG/L CONC	UG/L Q
309-00-2-----	Aldrin	0.0030	0.0092		U
319-84-6-----	Alpha-BHC	0.0030	0.0092		U
5103-71-9-----	Alpha-Chlordane	0.0030	0.0092		U
319-85-7-----	Beta-BHC	0.0030	0.0092		U
72-54-8-----	4,4'-DDD	0.0046	0.018		U
72-55-9-----	4,4'-DDE	0.0046	0.018		U
50-29-3-----	4,4'-DDT	0.0046	0.018		U
319-86-8-----	Delta-BHC	0.0030	0.0092		U
60-57-1-----	Dieldrin	0.0046	0.018		U
959-98-8-----	Endosulfan I	0.0030	0.0092		U
33213-65-9----	Endosulfan II	0.0046	0.018		U
1031-07-8-----	Endosulfan Sulfate	0.0046	0.018		U
72-20-8-----	Endrin	0.0046	0.018		U
7421-93-4-----	Endrin Aldehyde	0.0046	0.018		U
53494-70-5----	Endrin Ketone	0.0046	0.018		U
58-89-9-----	Gamma-BHC	0.0030	0.0092		U
5103-74-2-----	Gamma-Chlordane	0.0030	0.0092		U
76-44-8-----	Heptachlor	0.0030	0.0092		U
1024-57-3-----	Heptachlor Epoxide	0.0030	0.0092		U
72-43-5-----	Methoxychlor	0.0030	0.0092		U
8001-35-2-----	Toxaphene	0.30	0.92		U
12674-11-2----	PCB-1016	0.12	0.46		U
11104-28-2----	PCB-1221	0.12	0.46		U
11141-16-5----	PCB-1232	0.12	0.46		U
53469-21-9----	PCB-1242	0.12	0.46		U
12672-29-6----	PCB-1248	0.12	0.46		U
11097-69-1----	PCB-1254	0.12	0.46		U
11096-82-5----	PCB-1260	0.12	0.46		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0601

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-02

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 025F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 08:15

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 04:03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL			CONC
94-75-7-----	2,4-D	0.23	0.46		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----	2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-02

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 015F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/09/08 21:34

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.24	0.49		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.049	0.049	
93-76-5-----	2,4,5-T	0.024	0.049		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-03

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 016F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/26/08 13:40

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/09/08 22:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.24	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.047	0.050	
93-76-5-----	2,4,5-T	0.024	0.047		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 017F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/26/08 15:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/09/08 22:51

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L Q
		MDL	RL CONC	
94-75-7-----	2,4-D	0.25	0.50	U
93-72-1-----	2,4,5-TP (Silvex)	0.025	0.050	U
93-76-5-----	2,4,5-T	0.025	0.050	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW0901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-03

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 026F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/28/08 09:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 04:41

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		
		MDL	RL	CONC Q
94-75-7-----	2,4-D	0.24	0.49	U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.049	U
93-76-5-----	2,4,5-T	0.024	0.049	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-10

Sample wt/vol: 1040 (g/mL) ML Lab File ID: 023F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/27/08 15:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 02:45

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

94-75-7-----2,4-D	0.24	0.48		U
93-72-1-----2,4,5-TP (Silvex)	0.024	0.048		U
93-76-5-----2,4,5-T	0.024	0.048		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-07

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 020F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 11:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 00:48

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL			CONC
94-75-7-----	2,4-D	0.23	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.047		U
93-76-5-----	2,4,5-T	0.023	0.047		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-05

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 018F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 09:10

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/09/08 23:30

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.24	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.047	0.073	PM
93-76-5-----	2,4,5-T	0.024	0.047		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-06

Sample wt/vol: 1070 (g/mL) ML Lab File ID: 019F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/27/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 00:09

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	UG/L Q
		MDL	RL		
94-75-7-----	2,4-D	0.23	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.023	0.047	0.030	PM
93-76-5-----	2,4,5-T	0.023	0.047		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1401

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-09

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 022F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/27/08 14:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 02:06

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

94-75-7-----2,4-D	0.23	0.46		U
93-72-1-----2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1501

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808253-08

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 021F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/27/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 01:27

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	UG/L Q
		MDL	RL		
94-75-7-----	2,4-D	0.24	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.047		U
93-76-5-----	2,4,5-T	0.024	0.047		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-05

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 028F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 05:59

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	UG/L Q
		MDL	RL		
94-75-7-----	2,4-D	0.24	0.49		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.049	0.082	PM
93-76-5-----	2,4,5-T	0.024	0.049		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 029F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 06:38

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	0.25	0.50		U
93-72-1-----	2,4,5-TP (Silvex)	0.025	0.050	0.17	P
93-76-5-----	2,4,5-T	0.025	0.050		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-04

Sample wt/vol: 1080 (g/mL) ML Lab File ID: 012F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/28/08 10:30

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 20:03

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

94-75-7-----2,4-D	0.23	0.46		U
93-72-1-----2,4,5-TP (Silvex)	0.023	0.046		U
93-76-5-----2,4,5-T	0.023	0.046		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1801

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-07

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 013F0201

% Moisture: _____ decanted: (Y/N) ___ Date Sampled: 08/28/08 13:45

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 20:42

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	UG/L Q
		MDL	RL		
94-75-7-----	2,4-D	0.24	0.49		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.049		U
93-76-5-----	2,4,5-T	0.024	0.049		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW1901

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-08

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 031F0201

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: 08/28/08 13:50

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 07:56

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L
		MDL	RL CONC		Q
94-75-7-----	2,4-D	0.24	0.49	U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.049	U
93-76-5-----	2,4,5-T	0.024	0.049	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-10

Sample wt/vol: 1020 (g/mL) ML Lab File ID: 033F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 09:14

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

94-75-7-----2,4-D	0.24	0.49		U
93-72-1-----2,4,5-TP (Silvex)	0.024	0.049	0.17	
93-76-5-----2,4,5-T	0.024	0.049		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: 0808268-09

Sample wt/vol: 1060 (g/mL) ML Lab File ID: 032F0201

% Moisture: _____ decanted: (Y/N)____ Date Sampled: 08/28/08 15:25

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted:09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/10/08 08:35

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	UG/L Q
		MDL	RL		
94-75-7-----	2,4-D	0.24	0.47		U
93-72-1-----	2,4,5-TP (Silvex)	0.024	0.047	0.079	PM
93-76-5-----	2,4,5-T	0.024	0.047		U

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG GULFPORT-0

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	%	01GW1601	0808268-05	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	%	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	%	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	%	01GW0901	0808268-03	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	%	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	%	01GW0601	0808268-02	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	%	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
HERB	%	01GW1601D	0808268-06	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW1701	0808268-04	NM	8/28/2008	9/2/2008	9/13/2008	5	11	16
HERB	%	01GW1801	0808268-07	NM	8/28/2008	9/2/2008	9/13/2008	5	11	16
HERB	%	01GW1901	0808268-08	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW2001	0808268-10	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HERB	%	01GW2101	0808268-09	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	%	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	%	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
HERB	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
HERB	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/10/2008	6	8	14
HERB	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/2/2008	9/13/2008	5	11	16

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/2/2008	9/13/2008	5	11	16
HERB	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HERB	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/2/2008	9/10/2008	5	8	13
HG	UG/L	01GW1401	0808253-09	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW0701	0808253-02	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW0701D	0808253-03	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW0801	0808253-04	NM	8/26/2008	8/29/2008	9/2/2008	3	4	7
HG	UG/L	01GW1001	0808253-10	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1201	0808253-05	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/5/2008	9/8/2008	8	3	11
HG	UG/L	01GW1501	0808253-08	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
HG	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
HG	UG/L	01GW1301	0808253-06	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
HG	UG/L	01GW1101	0808253-07	NM	8/27/2008	8/29/2008	9/2/2008	2	4	6
M	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/9/2008	7	7	14
M	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/2/2008	9/9/2008	5	7	12
M	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13

SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
M	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
M	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/9/2008	6	7	13
M	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/8/2008	9/10/2008	11	2	13
CN	MG/L	01GW2101	NRI0532-08	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0701	NRI0528-01	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
CN	MG/L	01GW2001	NRI0532-09RE1	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1901	NRI0532-07	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1801	NRI0532-06	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1701	NRI0532-03	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1601D	NRI0532-05	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0601	NRI0532-01	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1601	NRI0532-04	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW0901	NRI0532-02	NM	8/28/2008	9/11/2008	9/11/2008	14	0	14
CN	MG/L	01GW1401	NRI0528-08	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1301	NRI0528-05	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1201	NRI0528-04	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW0701D	NRI0528-02	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
CN	MG/L	01GW1101	NRI0528-06	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/L	01GW1001	NRI0528-09	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW1501	NRI0528-07	NM	8/27/2008	9/11/2008	9/11/2008	15	0	15
CN	MG/L	01GW0801	NRI0528-03	NM	8/26/2008	9/9/2008	9/9/2008	14	0	14
OS	%	01GW1601	0808268-05	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1601D	0808268-06	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1701	0808268-04	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1801	0808268-07	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW2101	0808268-09	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW2001	0808268-10	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW0901	0808268-03	NM	8/28/2008	9/9/2008	9/9/2008	12	0	12
OS	%	01GW1901	0808268-08	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW1001	0808253-10	NM	8/27/2008	9/2/2008 9/2/08	9/3/2008 OK	12	5	7
OS	%	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	%	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	%	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8

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SORT	UNITS	NSAMPLE	LAB ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
OS	%	01GW0601	0808268-02	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	%	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	%	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/8/2008	9/3/2008	12	-5	7
OS	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/9/2008	9/9/2008	12	0	12
OS	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/3/2008	7	1	8
OS	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/3/2008	6	1	7
OS	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OS	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OS	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/5/2008	9/5/2008	8	0	8
OV	%	01GW1601	0808268-05	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01GW1701	0808268-04	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01GW1801	0808268-07	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	%	01GW1901	0808268-08	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	%	01GW2001	0808268-10	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	%	01TB082808	0808268-01	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01TB082608	0808253-01	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	%	01GW1501	0808253-08	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	%	01GW2101	0808268-09	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	%	01GW0701	0808253-02	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	%	01GW1601D	0808268-06	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01GW0601	0808268-02	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01GW1401	0808253-09	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	%	01GW0701D	0808253-03	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	%	01GW0801	0808253-04	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	%	01GW0901	0808268-03	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	%	01GW1001	0808253-10	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	%	01GW1101	0808253-07	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	%	01GW1201	0808253-05	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	%	01GW1301	0808253-06	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01TB082608	0808253-01	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/3/2008	9/4/2008	6	1	7
OV	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01TB082808	0808268-01	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/3/2008	9/3/2008	6	0	6
OV	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
OV	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/3/2008	9/3/2008	7	0	7
OV	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/3/2008	9/3/2008	8	0	8
PCB	%	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	%	01GW1601D	0808268-06	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1601	0808268-05	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1801	0808268-07	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1901	0808268-08	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW2001	0808268-10	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	%	01GW2101	0808268-09	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PCB	%	01GW0601	0808268-02	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	%	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PCB	%	01GW0901	0808268-03	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	%	01GW1701	0808268-04	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	%	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	%	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	%	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PCB	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PCB	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PCB	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PCB	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PCB	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PCB	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1601	0808268-05	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1601D	0808268-06	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW2101	0808268-09	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1701	0808268-04	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1801	0808268-07	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW2001	0808268-10	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	%	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	%	01GW1901	0808268-08	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	%	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	%	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	%	01GW0901	0808268-03	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	%	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	%	01GW0601	0808268-02	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	%	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	%	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	UG/L	01GW2001	0808268-10	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1501	0808253-08	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	UG/L	01GW1601	0808268-05	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1601D	0808268-06	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1701	0808268-04	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1401	0808253-09	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	UG/L	01GW1901	0808268-08	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW0801	0808253-04	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	UG/L	01GW1801	0808268-07	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1301	0808253-06	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	UG/L	01GW1201	0808253-05	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18

SORT	UNITS	NSAMPLE	LAB_ID	QC_TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP_EXTR	EXTR_ANL	SMP_ANL
PEST	UG/L	01GW1101	0808253-07	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18
PEST	UG/L	01GW0901	0808268-03	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW0701D	0808253-03	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	UG/L	01GW0701	0808253-02	NM	8/26/2008	9/2/2008	9/13/2008	7	11	18
PEST	UG/L	01GW0601	0808268-02	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW2101	0808268-09	NM	8/28/2008	9/4/2008	9/14/2008	7	10	17
PEST	UG/L	01GW1001	0808253-10	NM	8/27/2008	9/2/2008	9/14/2008	6	12	18

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42021

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:		
Name <u>Bob Fisher</u>		Name <u>Der msa</u>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TCL VOL</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TEL SUCC/RES/RES/</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">H₂O</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TAL METALS</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CW</div> </div> <div style="font-size: 2em; font-weight: bold; text-align: center;">X</div>				VOA Headspace Y <input checked="" type="radio"/> N NA		
Company <u>Tetra Tech NCS</u>		Company _____						Field Filtered Y <input checked="" type="radio"/> N NA		
Address <u>3360 Capital Dr. NE</u>		Address _____						Correct Containers <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA		
City <u>Tallahassee</u>		City _____						Discrepancies Y <input checked="" type="radio"/> N NA		
State, Zip <u>FL 32308</u>		State, Zip _____						Cust. Seals Intact <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA		
Phone <u>850 385 9899</u>		Phone _____		Containers Intact <input checked="" type="radio"/> Y <input checked="" type="radio"/> N NA						
Fax _____		Fax _____		Airbill #: <u>2493</u>						
E-mail _____		E-mail _____		CAR #: _____						
Project No./Name: <u>GULFPORT 5, 6, 1</u>		Sampler's (Signature): <u>[Signature]</u>								

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	Analysis				Comments	No. of Bottles	Lab Use Only Containers/Pres.
				H ₂ O	4°	MNO ₃	MNO ₂			
0808268-01	8/28/08 0800	OLTB 082808	QA	2					2	25-HY
-02	8/28/08 0815	OLGW 060L	GW	3	5	1			10	5H, 1C-NI, 1C-SH, 37#
-03	8-28/08 0900	OLGW 090L	GW	3	5	1			10	
-04	8-28/08 1030	OLGW 01701	GW	3	5	1			10	
-05	8-28/08 1100	OLGW 1601	GW	3	5	1			10	
-06	8-28/08 1100	OLGW 1601D	GW	3	5	1			10	
-07	8-28/08 1345	OLGW 1801	GW	3	5	1			10	
-08	8/28/08 1350	OLGW 1901	GW	3	5	1			10	
-09	8-28/08 1525	OLGW 2101	GW	3	5	1			10	
-10	8-28/08 1525	OLGW 2001	GW	3	5	1			10	

Sample Kit Prep'd by: (Signature) <u>[Signature]</u>		Date/Time 8-28/08 1000	Received By: (Signature) <u>[Signature]</u>	REMARKS:	Details:	
Relinquished by: (Signature) <u>[Signature]</u>		Date/Time 8-29/08 1730	Received By: (Signature)		Page _____ of _____	
Relinquished by: (Signature)		Date/Time	Received By: (Signature)		Cooler No. _____ of _____	
Received for Laboratory by: (Signature) <u>[Signature]</u>		Date/Time 8-29-08 900	Temperature 5.1°C		Date Shipped _____	
					Shipped By _____	
					Turnaround _____	

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42028

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:		
Name <u>Bob Fisher</u>		Name _____		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);"> TCL VOC TCL Spex / Pest / RB HMO: TAL metals Agox CN </div> <div style="font-size: 4em; font-weight: bold;">X</div> </div>				VOA Headspace <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
Company <u>T+was</u>		Company _____						Field Filtered <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
Address <u>3360 Capital Cir. NE</u>		Address _____						Correct Containers <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA		
City <u>Tallahassee</u>		City _____						Discrepancies <input type="checkbox"/> Y <input checked="" type="checkbox"/> N NA		
State, Zip <u>FL 32308</u>		State, Zip _____						Cust. Seals Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA		
Phone <u>850 385 9899</u>		Phone _____						Containers Intact <input checked="" type="checkbox"/> Y <input type="checkbox"/> N NA		
Fax _____		Fax _____		Airbill #: <u>0245, 0414, 0425, 0436, 421</u>						
E-mail _____		E-mail _____		CAR #: _____						
Project No./Name: <u>Gulfport Site L</u>		Sampler's (Signature): <u>[Signature]</u>								

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix	Hz	40	HMO	Agox	Comments	No. of Bottles	Lab Use Only Containers/Pres.
0808253-01	1330 ^{8/22}	OLTB082608	QA	2	—	—	—		2	25-HP
-02	1340 ^{8/22}	OLGW070L	GW	3	5	1	1		10	35-HP 1C-101 1C-5H 5H
-03	1340 ^{8/22}	OLGW070LD	GW	3	5	1	1		10	
-04	1510 ^{8/22}	OLGW080L	GW	3	5	1	1			
-05	0910 ^{8/27}	OLGW120L	GW	3	5	1	1		10	
-06	1030 ^{8/27}	OLGW130L	GW	3	5	1	1		10	
-07	1145 ^{8/27}	OLGW110L	GW	3	5	1	1		10	
-08	1350 ⁸⁻²⁷	OLGW150L	GW	3	5	1	1		10	
-09	1400 ⁸⁻²⁷	OLGW140L	GW	3	5	1	1		10	
-10	1550 ⁸⁻²⁷	OLGW100L	GW	3	5	1	1		10	

Sample Kit Prep'd by: (Signature) <u>[Signature]</u>		Date/Time <u>8-28-08 1000</u>	Received By: (Signature) <u>[Signature]</u>	REMARKS: Airbill 8645 1469 4264	Details:	
Relinquished by: (Signature) <u>[Signature]</u>		Date/Time <u>8-27-08 1700</u>	Received By: (Signature) _____		Page _____ of _____	
Relinquished by: (Signature) _____		Date/Time _____	Received By: (Signature) _____		Cooler No. _____ of _____	
Received for Laboratory by: (Signature) <u>[Signature]</u>		Date/Time <u>8/28/08 08:00</u>	Temperature <u>3.20C 2.60C 3.40C 2.10C 2.20C</u>		Date Shipped _____	
					Shipped By _____	
					Turnaround _____	

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

8/28/08

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808253 COC ID(s): 42028

Client Tetra Tech NUS Project GO1+port

Sample Custodian WS Today's Date 8/28/08

Date/Time Samples Received 8/28/08 09:00

Courier & Airbill Number Fedex - 0425

Cooler Opened: Date 8/28/08

Custody seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of custody provided?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample labels present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bottle labels correspond w/COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Preservation at correct levels?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8/27/08

Type of coolant used Ice

Coolant condition: Melted Partially melted/frozen
Frozen

of Coolers 1 Temp. of Coolers 2.1°C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808253 COC ID(s): 42028

Client Tetra Tech NUS Project GW1port

Sample Custodian WS Today's Date 8/28/08

Date/Time Samples Received 8/28/08 09:00

Courier & Airbill Number Fedex 0414

Cooler Opened: Date 8/28/08

Custody seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of custody provided?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample labels present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bottle labels correspond w/COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Preservation at correct levels?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8/27/08

Type of coolant used Ice

Coolant condition: Melted Partially melted/frozen
Frozen

of Coolers 1 Temp. of Coolers 3.2°C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808253 COC ID(s): 42028

Client Tetra Tech NUS Project GW+port

Sample Custodian WS Today's Date 8/28/08

Date/Time Samples Received 8/28/08 09:00

Courier & Airbill Number Fedex - 4264^{WS} 8/28/08 0245

Cooler Opened: Date 8/28/08

Custody seals intact?	<u>Yes</u>	No	
Chain of custody provided?	<u>Yes</u>	No	
Sample labels present?	<u>Yes</u>	No	
Bottle labels correspond w/COC?	<u>Yes</u>	No	
Preservation at correct levels?	<u>Yes</u>	No	N/A

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8/27/08

Type of coolant used Ice

Coolant condition: Melted _____ Partially melted/frozen _____
Frozen _____

of Coolers 1 Temp. of Coolers 3.4°C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808253 COC ID(s): 42028

Client Tetra Tech NUS Project GO1+port

Sample Custodian WS Today's Date 8/28/08

Date/Time Samples Received 8/28/08 09:00

Courier & Airbill Number Fedex 4264

Cooler Opened: Date 8/28/08

Custody seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of custody provided?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample labels present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bottle labels correspond w/COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Preservation at correct levels?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8/27/08

Type of coolant used Ice

Coolant condition: Melted _____ Partially melted/frozen _____
Frozen _____

of Coolers 1 Temp. of Coolers 2:20C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808253 COC ID(s): 42028

Client Tetra Tech NUS Project GD1port

Sample Custodian WS Today's Date 8/28/08

Date/Time Samples Received 8/28/08 09:00

Courier & Airbill Number Fedex 0436

Cooler Opened: Date 8/28/08

Custody seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of custody provided?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample labels present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bottle labels correspond w/COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Preservation at correct levels?	<input checked="" type="radio"/> Yes	<input type="radio"/> No

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8/27/08

Type of coolant used Ice

Coolant condition: Melted _____ Partially melted/frozen Frozen _____

of Coolers 1 Temp. of Coolers 2.6°C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0808268 Number of Coolers: 1 of 5
Client: Tetra Tech Project: Gulfport
Date/Time Received: 8-29-08 9:00 Date cooler(s) opened: 8-29-08
Opened By (print): E.J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 2493

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 8-28-08 Seal Initials: MAP ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 5.1°C

Dates samples were logged-in: 8-29-08

9. Initial this form to acknowledge login of sample(s): (Name): E.J. Overby (Initial): [Signature]

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0808268 Number of Coolers: 2 of 5
Client: Tetra Tech Project: Gulfport
Date/Time Received: 08/29/08 09:30 Date cooler(s) opened: 08/29/08
Opened By (print): WILLIAM SCHWAB (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 2519

2. Were custody seals on outside of cooler(s)? Yes No
How many: 2 Seal date: 8/28/08 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A

NO ICE
in cooler

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 5.10C
Dates samples were logged-in: 8-29-08

9. Initial this form to acknowledge login of sample(s): (Name): E.J. Overby (Initial): EJO

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0808268 Number of Coolers: 3 of 5
Client: Tetra Tech Project: Gulfport
Date/Time Received: 8-29-08 9:00 Date cooler(s) opened: 8-29-08
Opened By (print): E.J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 2482

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 8-28-08 Seal Initials: MAD ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.0°C

Dates samples were logged-in: 8-29-08

9. Initial this form to acknowledge login of sample(s): (Name): E.J. Overby (Initial): [Signature]

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was sufficient amount of sample sent for the analyses required? Yes No N/A

17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0808268 Number of Coolers: 4 of 5
Client: Tetra Tech Project: Gulfport
Date/Time Received: 8-29-08 9:00 Date cooler(s) opened: 8-29-08
Opened By (print): E.J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 3110

2. Were custody seals on outside of cooler(s)? Yes No
How many: 2 Seal date: 8-28-08 Seal Initials: WDL?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 1.5°C

Dates samples were logged-in: 8-29-08

9. Initial this form to acknowledge login of sample(s): (Name): E.J. Overby (Initial): [Signature]

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was sufficient amount of sample sent for the analyses required? Yes No N/A

17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0808268 Number of Coolers: 5 of 5
Client: Tetra Tech Project: Gulfport
Date/Time Received: 8-29-08 9:00 Date cooler(s) opened: 8-29-08
Opened By (print): E.J. Overby (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
 EL Courier Other: _____

If applicable, enter airbill number here: 2508

2. Were custody seals on outside of cooler(s)? Yes No
How many: 2 Seal date: 8-28-08 Seal Initials: MAD ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

Dates samples were logged-in: 8-29-08

9. Initial this form to acknowledge login of sample(s): (Name): E.J. Overby (Initial): [Signature]

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-010

Date Sampled	Date Received	Lab ID	Client ID
8/26/2008	8/28/2008	0808253-01	01TB082608
8/26/2008	8/28/2008	0808253-02	01GW0701
8/26/2008	8/28/2008	0808253-03	01GW0701D
8/26/2008	8/28/2008	0808253-04	01GW0801
8/27/2008	8/28/2008	0808253-05	01GW1201
8/27/2008	8/28/2008	0808253-06	01GW1301
8/27/2008	8/28/2008	0808253-07	01GW1101
8/27/2008	8/28/2008	0808253-08	01GW1501
8/27/2008	8/28/2008	0808253-09	01GW1401
8/27/2008	8/28/2008	0808253-10	01GW1001
8/28/2008	8/29/2008	0808268-01	01TB082808
8/28/2008	8/29/2008	0808268-02	01GW0601
8/28/2008	8/29/2008	0808268-03	01GW0901
8/28/2008	8/29/2008	0808268-04	01GW1701
8/28/2008	8/29/2008	0808268-05	01GW1601
8/28/2008	8/29/2008	0808268-06	01GW1601D
8/28/2008	8/29/2008	0808268-07	01GW1801
8/28/2008	8/29/2008	0808268-08	01GW1901
8/28/2008	8/29/2008	0808268-09	01GW2101
8/28/2008	8/29/2008	0808268-10	01GW2001

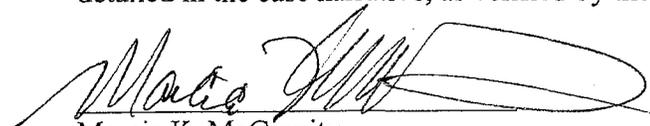
Volatiles

Method: The samples were extracted/analyzed by USEPA SW-846 Methods 5030B/8260B (purge and trap followed by capillary column GC/MS) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The volatile analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following note/exceptions:

- The method blanks associated with these samples had reported concentrations of methylene chloride at concentrations less than 1/2 the quantitation limit. Reported concentrations in the associated samples are qualified with a "B".
- In spike samples V4BLK0903LCS/LCSD, relative percent differences for acetone and bromomethane exceeded the limit of 30 at 40 and 34, respectively. These analytes were not detected above the quantitation limits in the associated samples.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.



Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

Sample Delivery Group Assignment Form - Empirical Laboratories

Matrix: WATER/TB

QC LEVEL: EDD/IV

Analytical Due: 9/24/2008

Report Due: 9/29/2008 28 day TAT + Holiday

Client: TetraTech NUS, Inc.

Project Name: Gulfport Site 1 CTO065

Project Manager: Bob Fisher

SDG #: Gulfport-010

Sample Type/count	Date Sampled	Date Received	Work Order	Client ID	VOA	SVOC	Pest/PCB	Herb	TAL Metals	Cyanide
					8260B	8270C	8081/8082	8151A	6010B/7470A	9012
TB	8/26/2008	8/28/2008	0808253-01	01TB082608	X					
1	8/26/2008	8/28/2008	0808253-02	01GW0701	X	X	X	X	X	X
FD	8/26/2008	8/28/2008	0808253-03	01GW0701D	X	X	X	X	X	X
3	8/26/2008	8/28/2008	0808253-04	01GW0801	X	X	X	X	X	X
4	8/27/2008	8/28/2008	0808253-05	01GW1201	X	X	X	X	X	X
5	8/27/2008	8/28/2008	0808253-06	01GW1301	X	X	X	X	X	X
6	8/27/2008	8/28/2008	0808253-07	01GW1101	X	X	X	X	X	X
7	8/27/2008	8/28/2008	0808253-08	01GW1501	X	X	X	X	X	X
8	8/27/2008	8/28/2008	0808253-09	01GW1401	X	X	X	X	X	X
9	8/27/2008	8/28/2008	0808253-10	01GW1001	X	X	X	X	X	X
TB	8/28/2008	8/29/2008	0808268-01	01TB082808	X					
10	8/28/2008	8/29/2008	0808268-02	01GW0601	X	X	X	X	X	X
11	8/28/2008	8/29/2008	0808268-03	01GW0901	X	X	X	X	X	X
12	8/28/2008	8/29/2008	0808268-04	01GW1701	X	X	X	X	X	X
13	8/28/2008	8/29/2008	0808268-05	01GW1601	X	X	X	X	X	X
FD	8/28/2008	8/29/2008	0808268-06	01GW1601D	X	X	X	X	X	X
15	8/28/2008	8/29/2008	0808268-07	01GW1801	X	X	X	X	X	X
16	8/28/2008	8/29/2008	0808268-08	01GW1901	X	X	X	X	X	X
17	8/28/2008	8/29/2008	0808268-09	01GW2101	X	X	X	X	X	X
18	8/28/2008	8/29/2008	0808268-10	01GW2001	X	X	X	X	X	X

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-010

Date Sampled	Date Received	Lab ID	Client ID
8/26/2008	8/28/2008	0808253-02	01GW0701
8/26/2008	8/28/2008	0808253-03	01GW0701D
8/26/2008	8/28/2008	0808253-04	01GW0801
8/27/2008	8/28/2008	0808253-05	01GW1201
8/27/2008	8/28/2008	0808253-06	01GW1301
8/27/2008	8/28/2008	0808253-07	01GW1101
8/27/2008	8/28/2008	0808253-08	01GW1501
8/27/2008	8/28/2008	0808253-09	01GW1401
8/27/2008	8/28/2008	0808253-10	01GW1001
8/28/2008	8/29/2008	0808268-02	01GW0601
8/28/2008	8/29/2008	0808268-03	01GW0901
8/28/2008	8/29/2008	0808268-04	01GW1701
8/28/2008	8/29/2008	0808268-05	01GW1601
8/28/2008	8/29/2008	0808268-06	01GW1601D
8/28/2008	8/29/2008	0808268-07	01GW1801
8/28/2008	8/29/2008	0808268-08	01GW1901
8/28/2008	8/29/2008	0808268-09	01GW2101
8/28/2008	8/29/2008	0808268-10	01GW2001

Semi-Volatiles

Method: The samples were extracted/analyzed by USEPA SW-846 Methods 3510C/8270C (separatory funnel extraction followed by capillary column GC/MS) for waters upon receipt to the laboratory in satisfactory condition.

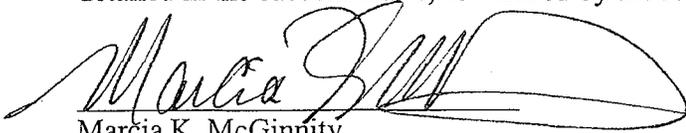
Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following note/exceptions:

- In the initial calibration verification, 3,3'-dichlorobenzidine exceeded 25% difference with a positive bias. It was not detected in the associated samples.
- In the continuing calibration verification standard analyzed 9/3/08 at 20:18, continuing calibration compound di-n-octylphthalate exceeded 20% difference with a positive bias at 35.1%. Evaluating all compounds against the 20% difference limit, 2 additional compounds exceeded with a positive bias while atrazine exceeded with a negative bias at 21.5%. None of the analytes with a positive bias were detected above the quantitation limits. All associated results for atrazine are qualified with a "Y" to indicate a potential low bias.
- Bis(2-ethylhexyl)phthalate was detected in the method blanks. Reported concentrations in the associated samples are qualified with a "B".
- In spike sample SBLK0902BW1LCS, caprolactam recovery was below the limit of 20% at 16%. All other recoveries were within limits.
- In spike samples SBLK0904BW1LCS/LCSD, caprolactam recoveries were below the limit of 20% at 19%/17% while acenaphthylene recoveries exceeded the limit of 105% at 107%/106%. All other recoveries and relative percent differences were within limits.
- In spike samples SBLK0909BW1LCS/LCSD, 7 of 130 recoveries exceeded the limits with a positive bias while the relative percent difference for bis(2-ethylhexyl)phthalate exceeded the limit of 30 at 56. See form 3. No target analytes were detected above the quantitation limit in the associated sample. Recoveries of the surrogates d5-nitrobenzene, 2-fluorobiphenyl,

2,4,6-tribromophenol and terphenyl-d14 are below the limits in sample 01GW1101 but greater than 10% (estimated). As this was discovered 8 days after sampling, re-extracted results would also have been validated as estimated so no re-extraction was performed.

- Recoveries of the surrogates were less than the limits with some less than 10% (rejectable) in the original extract for sample 01GW0901. Re-extraction was performed 12 days after sampling with good surrogate recoveries. The re-extract is included in the data package.
- Manual integrations: Quantitation signals were manually integrated in order to accurately reflect the peak areas based on the technical judgment of the analyst. A listing of the manual integrations performed and reason for the integration is attached to this case narrative. Before and after "pictures" are included with the raw data for each integration performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.



Marcia K. McGinnity
Senior Project Manager

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- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.

CHROMATOGRAPHIC FLAGS FOR MANUAL INTEGRATIONS

- A:** The peak was manually integrated as it was not integrated in the original chromatogram.
- B:** The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
- C:** The peak was manually integrated to correct the baseline from the original chromatogram.
- D:** The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.
- E:** The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

7/24/08 BNA1	Cal001	Cal005	Cal010	Cal020	Cal040	Cal050	Cal080	Cal100
pyridine	E							
3-methylphenol	D							D
4-methylphenol	D							D
benzoic acid	A	A	A	A	A	A	A	A
caprolactam	E	C	C					
hexachlorocyclopentadiene	E							
2,4,5-trichloropheno	A							
dimethylphthalate	A							
2,4-dinitrophenol	A							
4-nitrophenol	A							
4-nitroaniline	A							
4,6-dinitro-2-methylphenol	A							
pentachlorophenol	A							
di-n-butylphthalate	A							
bis(2-ethylhexyl)phthalate	A							
di-n-octylphthalate	A							
indeno(1,2,3-cd)pyrene	C							
d5-nitrobenzene								C
7/24/08 BNA1	CalB001							
atrazine	A							
2,3,4,6-tetrachlorophenol	A							
benzidine	A							
7/24/08 BNA1	ICV							
bis(2-chloroethyl)ether	A							
9/3/08 AM CCV050	benzoic acid A							
9/3/08 PM CCV050	benzoic acid A							
9/5/08 CCV050	benzoic acid A							
9/9/08 CCV050	benzoic acid A							
0902BW1LCS	benzoic acid A							
0904BW1LCS	benzoic acid A							
0904BW1LCSD	benzoic acid A							
0904BW1LCSD	pyridine A							
0909BW1LCS	benzoic acid A							
0909BW1LCSD	benzoic acid A							

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-010

Date Sampled	Date Received	Lab ID	Client ID
8/26/2008	8/28/2008	0808253-02	01GW0701
8/26/2008	8/28/2008	0808253-03	01GW0701D
8/26/2008	8/28/2008	0808253-04	01GW0801
8/27/2008	8/28/2008	0808253-05	01GW1201
8/27/2008	8/28/2008	0808253-06	01GW1301
8/27/2008	8/28/2008	0808253-07	01GW1101
8/27/2008	8/28/2008	0808253-08	01GW1501
8/27/2008	8/28/2008	0808253-09	01GW1401
8/27/2008	8/28/2008	0808253-10	01GW1001
8/28/2008	8/29/2008	0808268-02	01GW0601
8/28/2008	8/29/2008	0808268-03	01GW0901
8/28/2008	8/29/2008	0808268-04	01GW1701
8/28/2008	8/29/2008	0808268-05	01GW1601
8/28/2008	8/29/2008	0808268-06	01GW1601D
8/28/2008	8/29/2008	0808268-07	01GW1801
8/28/2008	8/29/2008	0808268-08	01GW1901
8/28/2008	8/29/2008	0808268-09	01GW2101
8/28/2008	8/29/2008	0808268-10	01GW2001

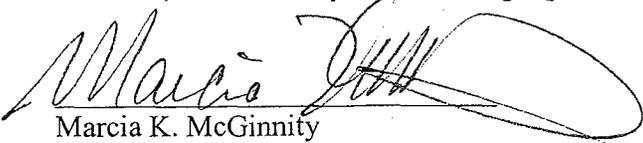
Pesticides/PCBs

Method: The samples were analyzed by USEPA SW-846 Methods 3510C/8081A/8082 (separatory funnel extraction followed by capillary column GC/ECD) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Analyses of the samples were completed using full calibration for 1016/1260. As no other aroclor patterns were identified, no other aroclor calibration checks were performed.
- Some analytes in the continuing calibration verifications (CCVs) exceeded the 20%D limit with a positive bias. None of the affected analytes were detected in the associated samples.
- In spike samples PW1BLK0902LCS/LCSD, recoveries of delta-BHC exceeded the limit of 135% at 137%/(129%). All other recoveries and relative percent differences were within limits.
- In spike samples PW1BLK0904LCS/LCSD, recoveries of endosulfan I exceeded the limit of 110% at (107%)/111%. All other recoveries and relative percent differences were within limits.
- Sample 01GW0701D was missed for surrogate spiking. Results are reported at the request of the client.
- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

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- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
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- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

CHROMATOGRAPHIC FLAGS FOR MANUAL INTEGRATIONS

- A:** The peak was manually integrated as it was not integrated in the original chromatogram.
- B:** The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
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ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-010

Date Sampled	Date Received	Lab ID	Client ID
8/26/2008	8/28/2008	0808253-02	01GW0701
8/26/2008	8/28/2008	0808253-03	01GW0701D
8/26/2008	8/28/2008	0808253-04	01GW0801
8/27/2008	8/28/2008	0808253-05	01GW1201
8/27/2008	8/28/2008	0808253-06	01GW1301
8/27/2008	8/28/2008	0808253-07	01GW1101
8/27/2008	8/28/2008	0808253-08	01GW1501
8/27/2008	8/28/2008	0808253-09	01GW1401
8/27/2008	8/28/2008	0808253-10	01GW1001
8/28/2008	8/29/2008	0808268-02	01GW0601
8/28/2008	8/29/2008	0808268-03	01GW0901
8/28/2008	8/29/2008	0808268-04	01GW1701
8/28/2008	8/29/2008	0808268-05	01GW1601
8/28/2008	8/29/2008	0808268-06	01GW1601D
8/28/2008	8/29/2008	0808268-07	01GW1801
8/28/2008	8/29/2008	0808268-08	01GW1901
8/28/2008	8/29/2008	0808268-09	01GW2101
8/28/2008	8/29/2008	0808268-10	01GW2001

Herbicide Samples

Method: The samples were analyzed by USEPA SW-846 Methods 8151A (separatory funnel extraction then esterification and capillary column GC/ECD) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Some analytes in the continuing calibration verifications (CCVs) exceeded the 20 %D limit with a high bias. None of the affected target analytes were detected in the associated samples.
- Surrogate recoveries exceeded the limit of 140% as high as 166% in some of the RTX-CLP2 analyses. Spike recoveries were within limits and reported concentrations of silvex were taken from the RTX-CLP column with the exception of sample 01GW0701.
- As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A “before” chromatogram and “after” chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


 Marcia K. McGinnity
 Senior Project Manager

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NCBC GULFPORT
WATER DATA
GULFPORT-010

FRACTION	CHEMICAL		01GW0701	UNITS	01GW0701D	RPD	D
OV	ACETONE	RL 5	ND 5 U	UG/L	1.6 J	200.00	1.60 3.4

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

NCBC GULFPORT
WATER DATA
GULFPORT-010

FRACTION	CHEMICAL	RL	01GW1601	UNITS	01GW1601D	RPD	D
HERB	2,4,5-TP (SILVEX)	0.05	0.082 J	UG/L	0.17 J	59.84	0.09

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

**NCBC GULFPORT
WATER DATA
GULFPORT-010**

FRACTION	CHEMICAL	01GW0701	UNITS	01GW0701D	RPD	D
HERB	2,4,5-TP (SILVEX)	0.049 J	UG/L	0.05 J	2.02	0.00

Current RPD Quality Control Limit: 30 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

Volatile Section

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	V4BLK0903LCS	98	97	103	101	0
02	V4BLK0903	99	99	100	101	0
03	01TB082608	100	102	102	98	0
04	01TB082808	104	105	100	100	0
05	01GW0701	102	99	102	99	0
06	01GW0701D	103	96	103	99	0
07	01GW0801	103	104	104	104	0
08	01GW1201	113	107	99	102	0
09	01GW1301	112	97	106	106	0
10	01GW1101	110	104	102	108	0
11	01GW1501	106	101	100	102	0
12	01GW1401	112	97	99	101	0
13	01GW1001	112	102	99	98	0
14	01GW0601	109	99	103	101	0
15	01GW0901	110	102	103	102	0
16	01GW1701	106	95	102	102	0
17	01GW1601	113	96	103	99	0
18	01GW1601D	106	106	101	101	0
19	V4BLK0903LCS	106	92	94	97	0
20	V4BLK0903ELC	99	92	92	98	0
21	V4BLK0903E	104	101	101	98	0
22	01GW1801	107	100	100	96	0
23	01GW1901	110	100	98	100	0
24	01GW2101	111	107	101	105	0
25	01GW2001	111	95	98	98	0
26						
27						
28						
29						
30						

		EL	SPIKE
		QC LIMITS	CONC (ug/L)
SMC1	(DFM) = Dibromofluoromethane	(85-120)	30
SMC2	(DCE) = 1,2-Dichloroethane-d4	(80-135)	30
SMC3	(TOL) = Toluene-d8	(85-115)	30
SMC4	(BFB) = Bromofluorobenzene	(85-120)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix Spike - Client Sample No.: V4BLK0903

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	124.6	125	35-175
Benzene	50.00	0.0000	49.76	100	75-125
Bromochloromethane	50.00	0.0000	47.71	95	80-125
Bromodichloromethane	50.00	0.0000	45.74	91	85-135
Bromoform	50.00	0.0000	50.43	101	70-140
Bromomethane	50.00	0.0000	48.39	97	45-150
2-Butanone	100.0	0.0000	112.2	112	65-145
Carbon disulfide	50.00	0.0000	56.91	114	65-130
Carbon tetrachloride	50.00	0.0000	47.15	94	75-135
Chlorobenzene	50.00	0.0000	49.96	100	75-120
Chloroethane	50.00	0.0000	51.87	104	65-145
Chloroform	50.00	0.0000	44.85	90	75-125
Chloromethane	50.00	0.0000	56.40	113	45-145
Cyclohexane	50.00	0.0000	51.23	102	60-130
Dibromochloromethane	50.00	0.0000	51.89	104	80-140
1,2-Dibromo-3-chloropro	50.00	0.0000	42.22	84	70-130
1,2-Dibromoethane	50.00	0.0000	45.97	92	75-130
1,2-Dichlorobenzene	50.00	0.0000	47.34	95	70-130
1,3-Dichlorobenzene	50.00	0.0000	47.86	96	65-125
1,4-Dichlorobenzene	50.00	0.0000	47.54	95	70-125
Dichlorodifluoromethane	50.00	0.0000	59.14	118	40-160
1,1-Dichloroethane	50.00	0.0000	47.70	95	75-130
1,2-Dichloroethane	50.00	0.0000	47.46	95	70-135
1,1-Dichloroethene	50.00	0.0000	48.06	96	70-125
cis-1,2-Dichloroethene	50.00	0.0000	44.10	88	80-120
1,2-Dichloropropane	50.00	0.0000	47.16	94	75-130
cis-1,3-Dichloropropene	50.00	0.0000	50.49	101	75-130
trans-1,3-Dichloroprope	50.00	0.0000	55.68	111	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Matrix Spike - Client Sample No.: V4BLK0903

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Ethylbenzene	50.00	0.0000	48.39	97	75-130
2-Hexanone	100.0	0.0000	112.9	113	70-140
Isopropylbenzene	50.00	0.0000	52.74	105	65-130
Methyl acetate	50.00	0.0000	52.00	104	55-150
Methyl cyclohexane	50.00	0.0000	49.54	99	60-125
Methylene chloride	50.00	0.3441	49.31	98	70-130
Methyl tert-butyl ether	50.00	0.0000	49.94	100	75-125
4-Methyl-2-pentanone	100.0	0.0000	105.0	105	75-135
Styrene	50.00	0.0000	59.22	118	75-125
1,1,2,2-Tetrachloroetha	50.00	0.0000	46.39	93	70-130
Tetrachloroethene	50.00	0.0000	55.18	110	70-125
Toluene	50.00	0.0000	56.51	113	75-125
1,2,3-Trichlorobenzene	50.00	0.0000	48.90	98	60-125
1,2,4-Trichlorobenzene	50.00	0.0000	46.64	93	45-135
1,1,1-Trichloroethane	50.00	0.0000	46.83	94	80-125
1,1,2-Trichloroethane	50.00	0.0000	48.27	96	80-130
Trichloroethene	50.00	0.0000	49.26	98	80-125
Trichlorotrifluoroethan	50.00	0.0000	52.10	104	60-130
Trichlorofluoromethane	50.00	0.0000	51.29	102	70-140
Vinyl chloride	50.00	0.0000	53.30	107	65-140
Xylene (total)	150.0	0.0000	178.2	119	75-125

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix Spike - Client Sample No.: V4BLK0903

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	83.45	83	40*	30	35-175
Benzene	50.00	44.53	89	11	30	75-125
Bromochloromethane	50.00	46.98	94	2	30	80-125
Bromodichloromethane	50.00	47.84	96	4	30	85-135
Bromoform	50.00	46.71	93	8	30	70-140
Bromomethane	50.00	34.31	69	34*	30	45-150
2-Butanone	100.0	94.33	94	17	30	65-145
Carbon disulfide	50.00	51.66	103	10	30	65-130
Carbon tetrachloride	50.00	51.25	102	8	30	75-135
Chlorobenzene	50.00	45.96	92	8	30	75-120
Chloroethane	50.00	44.75	90	15	30	65-145
Chloroform	50.00	47.05	94	5	30	75-125
Chloromethane	50.00	54.83	110	3	30	45-145
Cyclohexane	50.00	48.45	97	6	30	60-130
Dibromochloromethane	50.00	49.48	99	5	30	80-140
1,2-Dibromo-3-chloropro	50.00	41.43	83	2	30	70-130
1,2-Dibromoethane	50.00	46.06	92	0	30	75-130
1,2-Dichlorobenzene	50.00	46.31	93	2	30	70-130
1,3-Dichlorobenzene	50.00	42.60	85	12	30	65-125
1,4-Dichlorobenzene	50.00	47.69	95	0	30	70-125
Dichlorodifluoromethane	50.00	61.40	123	4	30	40-160
1,1-Dichloroethane	50.00	47.70	95	0	30	75-130
1,2-Dichloroethane	50.00	52.47	105	10	30	70-135
1,1-Dichloroethene	50.00	46.46	93	3	30	70-125
cis-1,2-Dichloroethene	50.00	42.77	86	3	30	80-120
1,2-Dichloropropane	50.00	45.20	90	4	30	75-130
cis-1,3-Dichloropropene	50.00	45.54	91	10	30	75-130
trans-1,3-Dichloroprope	50.00	50.76	102	9	30	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix Spike - Client Sample No.: V4BLK0903

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Ethylbenzene	50.00	44.88	90	8	30	75-130
2-Hexanone	100.0	95.10	95	17	30	70-140
Isopropylbenzene	50.00	51.70	103	2	30	65-130
Methyl acetate	50.00	47.45	95	9	30	55-150
Methyl cyclohexane	50.00	45.45	91	9	30	60-125
Methylene chloride	50.00	46.31	92	6	30	70-130
Methyl tert-butyl ether	50.00	48.00	96	4	30	75-125
4-Methyl-2-pentanone	100.0	99.81	100	5	30	75-135
Styrene	50.00	54.77	110	8	30	75-125
1,1,2,2-Tetrachloroetha	50.00	44.75	90	4	30	70-130
Tetrachloroethene	50.00	47.79	96	14	30	70-125
Toluene	50.00	51.79	104	9	30	75-125
1,2,3-Trichlorobenzene	50.00	48.50	97	1	30	60-125
1,2,4-Trichlorobenzene	50.00	45.08	90	3	30	45-135
1,1,1-Trichloroethane	50.00	51.27	102	9	30	80-125
1,1,2-Trichloroethane	50.00	43.18	86	11	30	80-130
Trichloroethene	50.00	47.77	96	3	30	80-125
Trichlorotrifluoroethan	50.00	51.04	102	2	30	60-130
Trichlorofluoromethane	50.00	54.80	110	7	30	70-140
Vinyl chloride	50.00	53.53	107	0	30	65-140
Xylene(total)	150.0	165.6	110	7	30	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 49 outside limits

Spike Recovery: 0 out of 98 outside limits

COMMENTS: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0903

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: V4BLK0903

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/03/08 13:51

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0	0.34	J
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0903

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: V4BLK0903

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/03/08 13:51

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4BLK0903

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Lab File ID: V4BLK01 Lab Sample ID: V4BLK0903

Date Analyzed: 09/03/08 Time Analyzed: 1351

Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4BLK0903LCS	V4BLK0903LCS	V4LCS01	1225
02	01TB082608	0808253-01	0825301	1421
03	01TB082808	0808268-01	0826801	1520
04	01GW0701	0808253-02	0825302	1619
05	01GW0701D	0808253-03	0825303	1648
06	01GW0801	0808253-04	0825304	1718
07	01GW1201	0808253-05	0825305	1747
08	01GW1301	0808253-06	0825306	1817
09	01GW1101	0808253-07	0825307	1846
10	01GW1501	0808253-08	0825308	1916
11	01GW1401	0808253-09	0825309	1946
12	01GW1001	0808253-10	0825310	2015
13	01GW0601	0808268-02	0826802	2044
14	01GW0901	0808268-03	0826803	2114
15	01GW1701	0808268-04	0826804	2143
16	01GW1601	0808268-05	0826805	2213
17	01GW1601D	0808268-06	0826806	2242
18	V4BLK0903LCS	V4BLK0903LCSD	V4LCSD01	2312
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix Spike - Client Sample No.: V4BLK0903E

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	80.85	81	40-140
Benzene	50.00	0.0000	49.15	98	80-120
Bromochloromethane	50.00	0.0000	47.91	96	65-130
Bromodichloromethane	50.00	0.0000	46.55	93	75-120
Bromoform	50.00	0.0000	46.17	92	70-130
Bromomethane	50.00	0.0000	46.48	93	30-145
2-Butanone	100.0	0.0000	92.93	93	30-150
Carbon disulfide	50.00	0.0000	55.96	112	35-160
Carbon tetrachloride	50.00	0.0000	47.84	96	65-140
Chlorobenzene	50.00	0.0000	47.28	94	80-120
Chloroethane	50.00	0.0000	50.43	101	60-135
Chloroform	50.00	0.0000	46.75	94	65-135
Chloromethane	50.00	0.0000	56.23	112	40-125
Cyclohexane	50.00	0.0000	49.74	99	60-130
Dibromochloromethane	50.00	0.0000	49.77	100	60-135
1,2-Dibromo-3-chloropro	50.00	0.0000	41.60	83	50-130
1,2-Dibromoethane	50.00	0.0000	44.55	89	80-120
1,2-Dichlorobenzene	50.00	0.0000	46.90	94	70-120
1,3-Dichlorobenzene	50.00	0.0000	46.64	93	75-125
1,4-Dichlorobenzene	50.00	0.0000	54.57	109	75-125
Dichlorodifluoromethane	50.00	0.0000	59.14	118	30-155
1,1-Dichloroethane	50.00	0.0000	49.40	99	70-135
1,2-Dichloroethane	50.00	0.0000	47.57	95	70-130
1,1-Dichloroethene	50.00	0.0000	48.89	98	70-130
cis-1,2-Dichloroethene	50.00	0.0000	44.98	90	70-125
1,2-Dichloropropane	50.00	0.0000	45.40	91	75-125
cis-1,3-Dichloropropene	50.00	0.0000	47.39	95	70-130
trans-1,3-Dichloroprope	50.00	0.0000	49.53	99	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix Spike - Client Sample No.: V4BLK0903E

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Ethylbenzene	50.00	0.0000	45.65	91	75-125
2-Hexanone	100.0	0.0000	91.87	92	55-130
Isopropylbenzene	50.00	0.0000	52.12	104	75-125
Methyl acetate	50.00	0.0000	47.64	95	55-150
Methyl cyclohexane	50.00	0.0000	47.58	95	60-125
Methylene chloride	50.00	0.5191	48.80	96	55-140
Methyl tert-butyl ether	50.00	0.0000	48.16	96	65-125
4-Methyl-2-pentanone	100.0	0.0000	97.18	97	60-135
Styrene	50.00	0.0000	56.40	113	65-135
1,1,2,2-Tetrachloroetha	50.00	0.0000	45.13	90	65-130
Tetrachloroethene	50.00	0.0000	50.50	101	45-150
Toluene	50.00	0.0000	53.74	107	75-120
1,2,3-Trichlorobenzene	50.00	0.0000	47.16	94	55-140
1,2,4-Trichlorobenzene	50.00	0.0000	44.93	90	65-135
1,1,1-Trichloroethane	50.00	0.0000	49.44	99	65-130
1,1,2-Trichloroethane	50.00	0.0000	44.02	88	75-125
Trichloroethene	50.00	0.0000	48.54	97	70-125
Trichlorotrifluoroethan	50.00	0.0000	52.05	104	60-130
Trichlorofluoromethane	50.00	0.0000	52.13	104	60-145
Vinyl chloride	50.00	0.0000	52.83	106	50-145
Xylene (total)	150.0	0.0000	163.6	109	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 49 outside limits

COMMENTS: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0903E

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: V4BLK0903E

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01E

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/04/08 02:05

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0	0.52	J
1634-04-4----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0903E

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Matrix: (soil/water) WATER Lab Sample ID: V4BLK0903E

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01E

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 09/04/08 02:05

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L			Q
		MDL	RL	CONC	
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4BLK0903E

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010

Lab File ID: V4BLK01E Lab Sample ID: V4BLK0903E

Date Analyzed: 09/04/08 Time Analyzed: 0205

Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4BLK0903ELC	V4BLK0903ELCS	V4LCS01E	0040
02	01GW1801	0808268-07	0826807	0304
03	01GW1901	0808268-08	0826808	0334
04	01GW2101	0808268-09	0826809	0403
05	01GW2001	0808268-10	0826810	0432
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COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA25189

Lab File ID: V4BFB01E BFB Injection Date: 09/02/08

Instrument ID: VOA4 BFB Injection Time: 1923

GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	43.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	65.4
175	5.0 - 9.0% of mass 174	5.6 (8.6)1
176	95.0 - 101.0% of mass 174	64.8 (99.1)1
177	5.0 - 9.0% of mass 176	5.7 (8.7)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		V4STD0.25PPB	V4STD01	09/02/08	1952
02		V4STD0.5PPB	V4STD02	09/02/08	2021
03		V4STD1PPB	V4STD03	09/02/08	2051
04		V4STD2PPB	V4STD04	09/02/08	2120
05		V4STD10PPB	V4STD05	09/02/08	2150
06		V4STD20PPB	V4STD06	09/02/08	2219
07		V4STD50PPB	V4STD07	09/02/08	2249
08	V4BLK0902ELC	V4BLK0902ELCS	V4ICV01	09/02/08	2318
09		V4STD100PPB	V4STD08	09/02/08	2348
10		V4STD200PPB	V4STD09	09/03/08	0017
11					
12					
13					
14					
15					
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17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
Acetone		0.138	0.129	0.136	0.136
Acrolein	0.045	0.039	0.035	0.034	0.035
Acrylonitrile	0.110	0.110	0.105	0.114	0.124
Benzene	2.227	1.697	1.101	1.094	1.043
Bromobenzene		1.239	0.805	0.849	0.853
Bromochloromethane	0.211	0.131	0.158	0.183	0.175
Bromodichloromethane	0.616	0.539	0.413	0.427	0.445
Bromoform	0.536	0.560	0.465	0.492	0.536
Bromomethane		0.664	0.390	0.402	0.262
2-Butanone		0.058	0.078	0.135	0.144
n-Butylbenzene		2.665	1.707	1.718	1.706
sec-Butylbenzene		3.909	2.500	2.563	2.244
tert-Butylbenzene		2.869	1.804	1.789	1.677
Carbon disulfide		1.430	0.835	0.902	0.851
Carbon tetrachloride		0.464	0.373	0.374	0.340
Chlorobenzene		3.003	1.863	1.896	1.814
Chloroethane		0.454	0.226	0.281	0.235
2-Chloroethyl vinyl ether	0.162	0.159	0.136	0.171	0.164
Chloroform		0.767	0.552	0.571	0.551
1-Chlorohexane		1.420	0.918	0.887	0.711
Chloromethane		0.898	0.506	0.524	0.475
2-Chlorotoluene		3.860	2.173	2.239	2.311
4-Chlorotoluene		4.171	2.749	2.700	2.457
Cyclohexane		0.427	0.389	0.401	0.340
Dibromochloromethane		0.893	0.751	0.773	0.855
1,2-Dibromo-3-chloropropane	0.438	0.270	0.170	0.167	0.155
1,2-Dibromoethane	0.842	0.724	0.760	0.720	0.743
Dibromomethane	0.227	0.224	0.184	0.236	0.222
1,2-Dichlorobenzene		1.773	1.459	1.339	1.408
1,3-Dichlorobenzene		2.008	1.279	1.683	1.346
1,4-Dichlorobenzene		2.389	1.750	1.463	1.477
Dichlorodifluoromethane		0.315	0.306	0.375	0.340
1,1-Dichloroethane	1.071	0.856	0.522	0.634	0.572
1,2-Dichloroethane	0.534	0.494	0.407	0.455	0.469
1,1-Dichloroethene		0.340	0.264	0.272	0.241
cis-1,2-Dichloroethene		0.459	0.318	0.346	0.322
trans-1,2-Dichloroethene		0.469	0.277	0.315	0.282

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
1,2-Dichloroethene (total)		0.464	0.297	0.330	0.302
1,2-Dichloropropane		0.386	0.288	0.286	0.300
1,3-Dichloropropane		1.087	1.070	1.060	1.026
2,2-Dichloropropane		0.566	0.359	0.421	0.383
1,1-Dichloropropene		0.509	0.376	0.395	0.340
cis-1,3-Dichloropropene		0.627	0.402	0.472	0.470
trans-1,3-Dichloropropene		1.194	0.900	0.961	0.958
Ethylbenzene		4.821	2.885	3.062	3.052
Ethyl methacrylate	0.885	0.674	0.776	0.804	0.832
Hexachlorobutadiene	2.552	0.897	0.319	0.320	0.258
2-Hexanone	0.468	0.371	0.419	0.512	0.467
Iodomethane		0.419	0.308	0.373	0.416
Isopropylbenzene		3.977	2.443	2.334	2.249
p-Isopropyltoluene		3.518	2.044	2.103	1.963
Methyl acetate			0.236	0.260	0.254
Methyl cyclohexane		0.394	0.313	0.284	0.254
Methylene chloride		2.079	1.099	0.786	0.464
Methyl methacrylate	0.273	0.203	0.234	0.238	0.276
MTBE	0.748	0.767	0.704	0.788	0.806
4-Methyl-2-pentanone	0.281	0.240	0.246	0.289	0.293
Naphthalene		2.909	1.852	1.725	1.668
n-Propylbenzene		5.276	3.149	3.230	3.226
Styrene		2.938	1.790	1.974	2.071
1,1,1,2-Tetrachloroethane		1.136	0.643	0.633	0.677
1,1,2,2-Tetrachloroethane		0.964	0.868	0.835	0.749
Tetrachloroethene		1.127	0.686	0.652	0.616
Tetrahydrofuran			0.064	0.074	0.078
Toluene		2.420	1.538	1.642	1.546
1,2,3-Trichlorobenzene	3.465	1.238	0.758	0.716	0.641
1,2,4-Trichlorobenzene		1.266	0.787	0.765	0.727
1,1,1-Trichloroethane		0.590	0.351	0.424	0.408
1,1,2-Trichloroethane		0.643	0.573	0.480	0.510
Trichloroethene		0.463	0.286	0.324	0.294
Trichlorofluoromethane		0.524	0.417	0.613	0.464
Trichlorotrifluoroethane	0.364	0.274	0.250	0.269	0.233
1,2,3-Trichloropropane		0.307	0.265	0.226	0.244
1,2,4-Trimethylbenzene		3.844	2.424	2.504	2.310

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
1,3,5-Trimethylbenzene		3.791	2.169	2.302	2.199
Vinyl acetate		0.576	0.580	0.672	0.716
Vinyl chloride		0.627	0.419	0.407	0.401
m,p-Xylene		3.929	2.301	2.461	2.320
Xylene (total)		4.064	2.515	2.632	2.496
Dibromofluoromethane	0.323	0.319	0.299	0.333	0.332
1,2-Dichloroethane-d4	0.064	0.067	0.065	0.062	0.067
Toluene-d8	2.239	2.224	2.195	2.150	2.172
Bromofluorobenzene	0.972	1.039	0.977	0.948	0.972

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
Acetone	0.118	0.132	0.112	0.104
Acrolein	0.036	0.043	0.038	0.035
Acrylonitrile	0.114	0.120	0.119	0.112
Benzene	1.038	1.064	1.120	1.030
Bromobenzene	0.793	0.811	0.844	0.851
Bromochloromethane	0.178	0.191	0.187	0.177
Bromodichloromethane	0.432	0.450	0.438	0.416
Bromoform	0.520	0.548	0.523	0.485
Bromomethane	0.282	0.319	0.345	0.332
2-Butanone	0.145	0.152	0.149	0.136
n-Butylbenzene	1.666	1.768	1.880	1.867
sec-Butylbenzene	2.380	2.432	2.546	2.516
tert-Butylbenzene	1.700	1.709	1.765	1.790
Carbon disulfide	0.870	0.917	0.964	0.934
Carbon tetrachloride	0.379	0.399	0.402	0.374
Chlorobenzene	1.749	1.786	1.652	1.479
Chloroethane	0.251	0.254	0.276	0.258
2-Chloroethyl vinyl ether	0.166	0.177	0.177	0.168
Chloroform	0.529	0.560	0.568	0.524
1-Chlorohexane	0.767	0.770	0.748	0.674
Chloromethane	0.480	0.496	0.492	0.445
2-Chlorotoluene	1.996	2.107	2.156	2.152
4-Chlorotoluene	1.752	2.190	2.280	2.447
Cyclohexane	0.356	0.378	0.410	0.391
Dibromochloromethane	0.816	0.814	0.768	0.705
1,2-Dibromo-3-chloropropane	0.161	0.160	0.160	0.176
1,2-Dibromoethane	0.701	0.717	0.656	0.597
Dibromomethane	0.222	0.236	0.226	0.208
1,2-Dichlorobenzene	1.309	1.336	1.382	1.368
1,3-Dichlorobenzene	1.573	1.361	1.521	1.564
1,4-Dichlorobenzene	1.384	1.440	1.671	1.579
Dichlorodifluoromethane	0.377	0.402	0.406	0.370
1,1-Dichloroethane	0.553	0.606	0.611	0.573
1,2-Dichloroethane	0.460	0.478	0.464	0.408
1,1-Dichloroethene	0.258	0.278	0.296	0.279
cis-1,2-Dichloroethene	0.317	0.329	0.345	0.320
trans-1,2-Dichloroethene	0.289	0.317	0.323	0.305

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
1,2-Dichloroethene (total)	0.303	0.323	0.334	0.312
1,2-Dichloropropane	0.295	0.314	0.304	0.300
1,3-Dichloropropane	0.992	1.002	0.916	0.838
2,2-Dichloropropane	0.372	0.389	0.376	0.343
1,1-Dichloropropene	0.368	0.397	0.404	0.378
cis-1,3-Dichloropropene	0.467	0.497	0.489	0.472
trans-1,3-Dichloropropene	0.944	0.963	0.899	0.781
Ethylbenzene	2.907	2.919	2.843	2.413
Ethyl methacrylate	0.787	0.842	0.789	0.743
Hexachlorobutadiene	0.259	0.262	0.284	0.307
2-Hexanone	0.438	0.455	0.415	0.384
Iodomethane	0.438	0.515	0.541	0.526
Isopropylbenzene	2.336	2.465	2.254	2.023
p-Isopropyltoluene	1.991	1.986	2.090	2.040
Methyl acetate	0.246	0.255	0.263	0.245
Methyl cyclohexane	0.286	0.286	0.308	0.308
Methylene chloride	0.402	0.399	0.389	0.364
Methyl methacrylate	0.262	0.285	0.272	0.261
MTBE	0.769	0.809	0.833	0.774
4-Methyl-2-pentanone	0.285	0.284	0.277	0.272
Naphthalene	1.687	1.752	1.783	1.914
n-Propylbenzene	3.090	3.166	3.309	3.186
Styrene	1.994	2.016	1.887	1.708
1,1,1,2-Tetrachloroethane	0.632	0.665	0.621	0.562
1,1,2,2-Tetrachloroethane	0.713	0.757	0.758	0.757
Tetrachloroethene	0.645	0.653	0.622	0.553
Tetrahydrofuran	0.074	0.074	0.078	0.074
Toluene	1.529	1.570	1.469	1.334
1,2,3-Trichlorobenzene	0.635	0.687	0.699	0.753
1,2,4-Trichlorobenzene	0.716	0.762	0.796	0.816
1,1,1-Trichloroethane	0.424	0.441	0.448	0.413
1,1,2-Trichloroethane	0.500	0.522	0.470	0.426
Trichloroethene	0.304	0.294	0.309	0.296
Trichlorofluoromethane	0.531	0.524	0.548	0.491
Trichlorotrifluoroethane	0.269	0.275	0.286	0.268
1,2,3-Trichloropropane	0.220	0.224	0.207	0.182
1,2,4-Trimethylbenzene	2.369	2.337	2.428	2.425

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
=====	=====	=====	=====	=====
1,3,5-Trimethylbenzene	2.156	2.201	2.305	2.320
Vinyl acetate	0.705	0.730	0.734	0.690
Vinyl chloride	0.412	0.451	0.445	0.396
m,p-Xylene	2.274	2.295	2.116	1.818
Xylene (total)	2.385	2.431	2.232	1.963
=====	=====	=====	=====	=====
Dibromofluoromethane	0.326	0.332	0.317	0.302
1,2-Dichloroethane-d4	0.062	0.065	0.059	0.062
Toluene-d8	2.047	2.060	1.974	1.812
Bromofluorobenzene	0.954	0.985	0.873	0.821

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
Acetone	AVRG		0.12553386		10.2
Acrolein	AVRG		3.799e-002		10.3 NA
Acrylonitrile	AVRG		0.11425188		5.1
Benzene	LINR	0.00000000	1.04977071		0.998
Bromobenzene	LINR	0.00000000	0.84778004		1.000
Bromochloromethane	AVRG		0.17685453		12.7
Bromodichloromethane	AVRG		0.46408871		14.7
Bromoform	AVRG		0.51838246		6.1
Bromomethane	LINR	0.00000000	0.33335542		0.999
2-Butanone	LINR	0.00000000	0.13972669		0.997
n-Butylbenzene	LINR	0.00000000	1.86369334		1.000
sec-Butylbenzene	LINR	0.00000000	2.51686125		1.000
tert-Butylbenzene	LINR	0.00000000	1.78064038		1.000
Carbon disulfide	LINR	0.00000000	0.93854315		1.000
Carbon tetrachloride	AVRG		0.38816401		9.3
Chlorobenzene	2ORDR	0.00000000	0.51813741	1.602e-002	1.000
Chloroethane	LINR	0.00000000	0.26098951		0.999
2-Chloroethyl vinyl ether	AVRG		0.16450213		7.5
Chloroform	AVRG		0.57778386		13.6
1-Chlorohexane	LINR	0.00000000	0.69480033		0.996
Chloromethane	LINR	0.00000000	0.45756488		0.997
2-Chlorotoluene	LINR	0.00000000	2.15032356		1.000
4-Chlorotoluene	LINR	0.00000000	2.40235746		0.997
Cyclohexane	AVRG		0.38667715		7.3
Dibromochloromethane	AVRG		0.79681386		7.5
1,2-Dibromo-3-chloropropane	LINR	0.00000000	0.17283896		0.998
1,2-Dibromoethane	AVRG		0.71789354		9.4
Dibromomethane	AVRG		0.22048287		7.3
1,2-Dichlorobenzene	AVRG		1.42184187		10.5
1,3-Dichlorobenzene	LINR	0.00000000	1.54769168		0.999
1,4-Dichlorobenzene	LINR	0.00000000	1.59009646		0.998
Dichlorodifluoromethane	AVRG		0.36135388		10.3
1,1-Dichloroethane	LINR	0.00000000	0.58198845		0.999
1,2-Dichloroethane	AVRG		0.46334606		8.5
1,1-Dichloroethene	AVRG		0.27860648		10.6
cis-1,2-Dichloroethene	AVRG		0.34443484		13.9
trans-1,2-Dichloroethene	LINR	0.00000000	0.30869506		0.999

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,2-Dichloroethene (total)	LINR	0.00000000	0.31698588		0.999
1,2-Dichloropropane	AVRG		0.30933128		10.4
1,3-Dichloropropane	AVRG		0.99885411		8.5
2,2-Dichloropropane	LINR	0.00000000	0.35250388		0.997
1,1-Dichloropropene	AVRG		0.39588577		12.6
cis-1,3-Dichloropropene	AVRG		0.48700204		13.0
trans-1,3-Dichloropropene	AVRG		0.95013464		12.2
Ethylbenzene	2ORDR	0.00000000	0.29082779	7.58e-003	0.999
Ethyl methacrylate	AVRG		0.79245848		7.7
Hexachlorobutadiene	LINR	0.00000000	0.30074073		0.997
2-Hexanone	AVRG		0.43674407		10.2
Iodomethane	LINR	0.00000000	0.52742982		0.999
Isopropylbenzene	2ORDR	0.00000000	0.38000215	8.469e-003	1.000
p-Isopropyltoluene	LINR	0.00000000	2.04653135		1.000
Methyl acetate	AVRG		0.25135560		3.8
Methyl cyclohexane	AVRG		0.30405105		13.4
Methylene chloride	LINR	0.00000000	0.37145555		0.998
Methyl methacrylate	AVRG		0.25598374		10.2
MTBE	AVRG		0.77758416		4.8
4-Methyl-2-pentanone	AVRG		0.27434102		6.8
Naphthalene	LINR	0.00000000	1.88126993		0.998
n-Propylbenzene	LINR	0.00000000	3.20809253		1.000
Styrene	LINR	0.00000000	1.76426640		0.996
1,1,1,2-Tetrachloroethane	LINR	0.00000000	0.58067654		0.996
1,1,2,2-Tetrachloroethane	AVRG		0.80031392		10.4
Tetrachloroethene	LINR	0.00000000	0.57331576		0.995
Tetrahydrofuran	AVRG		7.378e-002		6.5
Toluene	LINR	0.00000000	1.37624308		0.996
1,2,3-Trichlorobenzene	LINR	0.00000000	0.73937241		0.998
1,2,4-Trichlorobenzene	LINR	0.00000000	0.80865808		0.999
1,1,1-Trichloroethane	LINR	0.00000000	0.42151580		0.998
1,1,2-Trichloroethane	AVRG		0.51555151		12.9
Trichloroethene	LINR	0.00000000	0.29840909		0.999
Trichlorofluoromethane	AVRG		0.51396475		11.4
Trichlorotrifluoroethane	AVRG		0.27662800		13.2
1,2,3-Trichloropropane	2ORDR	0.00000000	4.03722673	1.18156666	1.000
1,2,4-Trimethylbenzene	LINR	0.00000000	2.42111317		1.000

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
=====	=====	=====	=====	=====	=====
1,3,5-Trimethylbenzene	LINR	0.00000000	2.31084379		1.000
Vinyl acetate	AVRG		0.67544926		9.4
Vinyl chloride	LINR	0.00000000	0.40910620		0.996
m,p-Xylene	2ORDR	0.00000000	0.38023235	6.955e-003	1.000
Xylene(total)	2ORDR	0.00000000	0.37198278	1.047e-002	1.000
=====	=====	=====	=====	=====	=====
Dibromofluoromethane	AVRG		0.32042628		4.0
1,2-Dichloroethane-d4	AVRG		6.358e-002		4.0
Toluene-d8	AVRG		2.09707599		6.6
Bromofluorobenzene	AVRG		0.94912410		6.8

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date: 09/02/08 Time: 2318

Lab File ID: V4ICV01 Init. Calib. Date(s): 09/02/08 09/03/08

Heated Purge: (Y/N) N Init. Calib. Times: 1952 0017

GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.126	0.115	100.0	91.57		AVRG	-8.4	25.0
Acrolein	0.038	0.048	250.0	319.7		AVRG	27.9	25.0
Acrylonitrile	0.114	0.116	250.0	254.3		AVRG	1.7	25.0
Benzene	1.268	1.121	50.00	53.38		LINR	6.8	25.0
Bromobenzene	0.881	0.836	50.00	49.28		LINR	-1.4	25.0
Bromochloromethane	0.177	0.178	50.00	50.19		AVRG	0.4	25.0
Bromodichloromethane	0.464	0.453	50.00	48.77		AVRG	-2.5	25.0
Bromoform	0.518	0.510	50.00	49.17	0.100	AVRG	-1.6	25.0
Bromomethane	0.374	0.363	50.00	54.50		LINR	9.0	25.0
2-Butanone	0.125	0.135	100.0	96.68		LINR	-3.3	25.0
n-Butylbenzene	1.872	1.820	50.00	48.83		LINR	-2.3	25.0
sec-Butylbenzene	2.636	2.471	50.00	49.09		LINR	-1.8	25.0
tert-Butylbenzene	1.888	1.732	50.00	48.62		LINR	-2.7	25.0
Carbon disulfide	0.963	1.113	50.00	59.30		LINR	18.6	25.0
Carbon tetrachloride	0.388	0.379	50.00	48.87		AVRG	-2.3	25.0
Chlorobenzene	1.905	1.778	50.00	50.30	0.300	2ORDR	0.6	25.0
Chloroethane	0.279	0.278	50.00	53.25		LINR	6.5	25.0
2-Chloroethyl vinyl ether	0.164	0.178	100.0	108.4		AVRG	8.4	25.0
Chloroform	0.578	0.562	50.00	48.60		AVRG	-2.8	25.0
1-Chlorohexane	0.862	0.801	50.00	57.63		LINR	15.2	25.0
Chloromethane	0.540	0.537	50.00	58.69	0.100	LINR	17.4	25.0
2-Chlorotoluene	2.374	2.086	50.00	48.51		LINR	-3.0	25.0
4-Chlorotoluene	2.593	2.487	50.00	51.76		LINR	3.5	25.0
Cyclohexane	0.386	0.389	50.00	50.33		AVRG	0.6	25.0
Dibromochloromethane	0.797	0.819	50.00	51.37		AVRG	2.7	25.0
1,2-Dibromo-3-chloropropane	0.206	0.148	50.00	42.94		LINR	-14.1	25.0
1,2-Dibromoethane	0.718	0.652	50.00	45.41		AVRG	-9.2	25.0
Dibromomethane	0.220	0.217	50.00	49.27		AVRG	-1.4	25.0
1,2-Dichlorobenzene	1.422	1.358	50.00	47.76		AVRG	-4.5	25.0
1,3-Dichlorobenzene	1.542	1.683	50.00	54.37		LINR	8.7	25.0
1,4-Dichlorobenzene	1.644	1.630	50.00	51.24		LINR	2.5	25.0
Dichlorodifluoromethane	0.361	0.421	50.00	58.31		AVRG	16.6	25.0
1,1-Dichloroethane	0.666	0.598	50.00	51.40	0.100	LINR	2.8	25.0
1,2-Dichloroethane	0.463	0.446	50.00	48.11		AVRG	-3.8	25.0
1,1-Dichloroethene	0.278	0.287	50.00	51.53		AVRG	3.0	25.0
cis-1,2-Dichloroethene	0.344	0.334	50.00	48.53		AVRG	-2.9	25.0
trans-1,2-Dichloroethene	0.322	0.309	50.00	50.00		LINR	-0.0	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date: 09/02/08 Time: 2318

Lab File ID: V4ICV01 Init. Calib. Date(s): 09/02/08 09/03/08

Heated Purge: (Y/N) N Init. Calib. Times: 1952 0017

GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.333	0.322	100.0	101.4		LINR	1.4	25.0
1,2-Dichloropropane	0.309	0.309	50.00	49.89		AVRG	-0.2	25.0
1,3-Dichloropropane	0.999	0.945	50.00	47.32		AVRG	-5.4	25.0
2,2-Dichloropropane	0.401	0.369	50.00	52.32		LINR	4.6	25.0
1,1-Dichloropropene	0.396	0.387	50.00	48.88		AVRG	-2.2	25.0
cis-1,3-Dichloropropene	0.487	0.478	50.00	49.10		AVRG	-1.8	25.0
trans-1,3-Dichloropropene	0.950	1.023	50.00	53.82		AVRG	7.6	25.0
Ethylbenzene	3.113	3.071	50.00	50.61		2ORDR	1.2	25.0
Ethyl methacrylate	0.792	0.837	50.00	52.81		AVRG	5.6	25.0
Hexachlorobutadiene	0.606	0.298	50.00	49.64		LINR	-0.7	25.0
2-Hexanone	0.436	0.442	100.0	101.1		AVRG	1.1	25.0
Iodomethane	0.442	0.579	50.00	54.86		LINR	9.7	25.0
Isopropylbenzene	2.510	2.562	50.00	53.32		2ORDR	6.6	25.0
p-Isopropyltoluene	2.217	2.144	50.00	52.38		LINR	4.8	25.0
Methyl acetate	0.251	0.253	50.00	50.40		AVRG	0.8	25.0
Methyl cyclohexane	0.304	0.297	50.00	48.86		AVRG	-2.3	25.0
Methylene chloride	0.748	0.391	50.00	52.62		LINR	5.2	25.0
Methyl methacrylate	0.256	0.273	50.00	53.32		AVRG	6.6	25.0
MTBE	0.778	0.786	50.00	50.58		AVRG	1.2	25.0
4-Methyl-2-pentanone	0.274	0.274	100.0	99.84		AVRG	-0.2	25.0
Naphthalene	1.911	1.847	50.00	49.08		LINR	-1.8	25.0
n-Propylbenzene	3.454	3.356	50.00	52.31		LINR	4.6	25.0
Styrene	2.047	2.135	50.00	60.50		LINR	21.0	25.0
1,1,1,2-Tetrachloroethane	0.696	0.648	50.00	55.77		LINR	11.5	25.0
1,1,2,2-Tetrachloroethane	0.800	0.734	50.00	45.84	0.300	AVRG	-8.3	25.0
Tetrachloroethene	0.694	0.619	50.00	53.95		LINR	7.9	25.0
Tetrahydrofuran	0.074	0.074	50.00	50.01		AVRG	0.0	25.0
Toluene	1.631	1.622	50.00	58.94		LINR	17.9	25.0
1,2,3-Trichlorobenzene	1.066	0.732	50.00	49.49		LINR	-1.0	25.0
1,2,4-Trichlorobenzene	0.829	0.793	50.00	49.02		LINR	-2.0	25.0
1,1,1-Trichloroethane	0.437	0.416	50.00	49.33		LINR	-1.3	25.0
1,1,2-Trichloroethane	0.516	0.493	50.00	47.84		AVRG	-4.3	25.0
Trichloroethene	0.321	0.302	50.00	50.69		LINR	1.4	25.0
Trichlorofluoromethane	0.514	0.533	50.00	51.86		AVRG	3.7	25.0
Trichlorotrifluoroethane	0.276	0.287	50.00	51.82		AVRG	3.6	25.0
1,2,3-Trichloropropane	0.234	0.212	50.00	47.30		2ORDR	-5.4	25.0
1,2,4-Trimethylbenzene	2.580	2.492	50.00	51.47		LINR	2.9	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549
 Instrument ID: VOA4 Calibration Date: 09/02/08 Time: 2318
 Lab File ID: V4ICV01 Init. Calib. Date(s): 09/02/08 09/03/08
 Heated Purge: (Y/N) N Init. Calib. Times: 1952 0017
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	2.430	2.404	50.00	52.02		LINR	4.0	25.0
Vinyl acetate	0.675	0.698	100.0	103.4		AVRG	3.4	25.0
Vinyl chloride	0.445	0.468	50.00	57.26		LINR	14.5	25.0
Xylene(total)	2.590	2.526	150.0	187.4		2ORDR	24.9	25.0
Dibromofluoromethane	0.320	0.312	30.00	29.17		AVRG	-2.8	25.0
1,2-Dichloroethane-d4	0.064	0.065	30.00	30.86		AVRG	2.8	25.0
Toluene-d8	2.097	2.050	30.00	29.32		AVRG	-2.2	25.0
Bromofluorobenzene	0.949	0.917	30.00	28.98		AVRG	-3.4	25.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Instrument ID: VOA4 Calibration Date: 09/03/08 Time: 1155
 Lab File ID: V4CCV01 Init. Calib. Date(s): 03/05/08 09/03/08
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0017
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.126	0.163	100.0	129.8		AVRG	29.8	
Benzene	1.268	1.076	50.00	51.27		LINR	2.5	
Bromochloromethane	0.177	0.181	50.00	51.20		AVRG	2.4	
Bromodichloromethane	0.464	0.435	50.00	46.92		AVRG	-6.2	
Bromoform	0.518	0.554	50.00	53.47	0.100	AVRG	6.9	
Bromomethane	0.374	0.314	50.00	47.18		LINR	-5.6	
2-Butanone	0.125	0.166	100.0	119.2		LINR	19.2	
Carbon disulfide	0.963	0.935	50.00	49.79		LINR	-0.4	
Carbon tetrachloride	0.388	0.393	50.00	50.66		AVRG	1.3	
Chlorobenzene	1.905	1.829	50.00	51.86	0.300	2ORDR	3.7	
Chloroethane	0.279	0.268	50.00	51.34		LINR	2.7	
Chloroform	0.578	0.562	50.00	48.68		AVRG	-2.6	20.0
Chloromethane	0.540	0.497	50.00	54.34	0.100	LINR	8.7	
Cyclohexane	0.386	0.372	50.00	48.11		AVRG	-3.8	
Dibromochloromethane	0.797	0.839	50.00	52.66		AVRG	5.3	
1,2-Dibromo-3-chloropropane	0.206	0.150	50.00	43.40		LINR	-13.2	
1,2-Dibromoethane	0.718	0.715	50.00	49.78		AVRG	-0.4	
1,2-Dichlorobenzene	1.422	1.335	50.00	46.94		AVRG	-6.1	
1,3-Dichlorobenzene	1.542	1.434	50.00	46.34		LINR	-7.3	
1,4-Dichlorobenzene	1.644	1.522	50.00	47.86		LINR	-4.3	
Dichlorodifluoromethane	0.361	0.399	50.00	55.25		AVRG	10.5	
1,1-Dichloroethane	0.666	0.599	50.00	51.50	0.100	LINR	3.0	
1,2-Dichloroethane	0.463	0.448	50.00	48.31		AVRG	-3.4	
1,1-Dichloroethene	0.278	0.282	50.00	50.57		AVRG	1.1	20.0
cis-1,2-Dichloroethene	0.344	0.329	50.00	47.72		AVRG	-4.6	
1,2-Dichloropropane	0.309	0.296	50.00	47.78		AVRG	-4.4	20.0
cis-1,3-Dichloropropene	0.487	0.475	50.00	48.76		AVRG	-2.5	
trans-1,3-Dichloropropene	0.950	1.000	50.00	52.60		AVRG	5.2	
Ethylbenzene	3.113	3.059	50.00	50.40		2ORDR	0.8	20.0
2-Hexanone	0.436	0.478	100.0	109.5		AVRG	9.5	
Isopropylbenzene	2.510	2.447	50.00	50.71		2ORDR	1.4	
Methyl acetate	0.251	0.254	50.00	50.55		AVRG	1.1	
Methyl cyclohexane	0.304	0.290	50.00	47.67		AVRG	-4.6	
Methylene chloride	0.748	0.381	50.00	51.28		LINR	2.6	
Methyl tert-butyl ether	0.778	0.808	50.00	51.96		AVRG	3.9	
4-Methyl-2-pentanone	0.274	0.276	100.0	100.6		AVRG	0.6	
Styrene	2.047	2.099	50.00	59.49		LINR	19.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Instrument ID: VOA4 Calibration Date: 09/03/08 Time: 1155
 Lab File ID: V4CCV01 Init. Calib. Date(s): 03/05/08 09/03/08
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0017
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,1,2,2-Tetrachloroethane	0.800	0.730	50.00	45.64	0.300	AVRG	-8.7	
Tetrachloroethene	0.694	0.664	50.00	57.93		LINR	15.9	
Toluene	1.631	1.618	50.00	58.79		LINR	17.6	20.0
1,2,3-Trichlorobenzene	1.066	0.662	50.00	44.74		LINR	-10.5	
1,2,4-Trichlorobenzene	0.829	0.747	50.00	46.17		LINR	-7.7	
1,1,1-Trichloroethane	0.437	0.427	50.00	50.67		LINR	1.3	
1,1,2-Trichloroethane	0.516	0.527	50.00	51.15		AVRG	2.3	
Trichloroethene	0.321	0.300	50.00	50.28		LINR	0.6	
Trichlorotrifluoroethane	0.276	0.280	50.00	50.57		AVRG	1.1	
Trichlorofluoromethane	0.514	0.543	50.00	52.79		AVRG	5.6	
Vinyl chloride	0.445	0.452	50.00	55.20		LINR	10.4	20.0
Xylene (total)	2.590	2.396	150.0	176.8		2ORDR	17.9	
Dibromofluoromethane	0.320	0.328	30.00	30.74		AVRG	2.5	
1,2-Dichloroethane-d4	0.064	0.065	30.00	30.78		AVRG	2.6	
Toluene-d8	2.097	2.081	30.00	29.78		AVRG	-0.7	
Bromofluorobenzene	0.949	1.000	30.00	31.61		AVRG	5.4	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Instrument ID: VOA4 Calibration Date: 09/04/08 Time: 0010
 Lab File ID: V4CCV01E Init. Calib. Date(s): 03/05/08 09/03/08
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0017
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.126	0.111	100.0	88.21		AVRG	-11.8	
Benzene	1.268	1.041	50.00	49.59		LINR	-0.8	
Bromochloromethane	0.177	0.187	50.00	52.76		AVRG	5.5	
Bromodichloromethane	0.464	0.449	50.00	48.38		AVRG	-3.2	
Bromoform	0.518	0.515	50.00	49.70	0.100	AVRG	-0.6	
Bromomethane	0.374	0.288	50.00	43.17		LINR	-13.6	
2-Butanone	0.125	0.140	100.0	100.1		LINR	0.1	
Carbon disulfide	0.963	0.904	50.00	48.17		LINR	-3.6	
Carbon tetrachloride	0.388	0.419	50.00	53.93		AVRG	7.8	
Chlorobenzene	1.905	1.739	50.00	49.08	0.300	2ORDR	-1.8	
Chloroethane	0.279	0.264	50.00	50.58		LINR	1.2	
Chloroform	0.578	0.586	50.00	50.70		AVRG	1.4	20.0
Chloromethane	0.540	0.509	50.00	55.62	0.100	LINR	11.2	
Cyclohexane	0.386	0.384	50.00	49.61		AVRG	-0.8	
Dibromochloromethane	0.797	0.828	50.00	51.99		AVRG	4.0	
1,2-Dibromo-3-chloropropane	0.206	0.153	50.00	44.31		LINR	-11.4	
1,2-Dibromoethane	0.718	0.701	50.00	48.83		AVRG	-2.3	
1,2-Dichlorobenzene	1.422	1.385	50.00	48.71		AVRG	-2.6	
1,3-Dichlorobenzene	1.542	1.457	50.00	47.08		LINR	-5.8	
1,4-Dichlorobenzene	1.644	1.518	50.00	47.75		LINR	-4.5	
Dichlorodifluoromethane	0.361	0.442	50.00	61.12		AVRG	22.2	
1,1-Dichloroethane	0.666	0.608	50.00	52.26	0.100	LINR	4.5	
1,2-Dichloroethane	0.463	0.486	50.00	52.48		AVRG	5.0	
1,1-Dichloroethene	0.278	0.288	50.00	51.68		AVRG	3.4	20.0
cis-1,2-Dichloroethene	0.344	0.328	50.00	47.58		AVRG	-4.8	
1,2-Dichloropropane	0.309	0.302	50.00	48.77		AVRG	-2.5	20.0
cis-1,3-Dichloropropene	0.487	0.460	50.00	47.19		AVRG	-5.6	
trans-1,3-Dichloropropene	0.950	0.930	50.00	48.96		AVRG	-2.1	
Ethylbenzene	3.113	2.868	50.00	46.91		2ORDR	-6.2	20.0
2-Hexanone	0.436	0.426	100.0	97.54		AVRG	-2.5	
Isopropylbenzene	2.510	2.360	50.00	48.78		2ORDR	-2.4	
Methyl acetate	0.251	0.269	50.00	53.46		AVRG	6.9	
Methyl cyclohexane	0.304	0.287	50.00	47.15		AVRG	-5.7	
Methylene chloride	0.748	0.392	50.00	52.76		LINR	5.5	
Methyl tert-butyl ether	0.778	0.806	50.00	51.85		AVRG	3.7	
4-Methyl-2-pentanone	0.274	0.278	100.0	101.4		AVRG	1.4	
Styrene	2.047	1.916	50.00	54.31		LINR	8.6	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Instrument ID: VOA4 Calibration Date: 09/04/08 Time: 0010
 Lab File ID: V4CCV01E Init. Calib. Date(s): 03/05/08 09/03/08
 Heated Purge: (Y/N) N Init. Calib. Times: 0908 0017
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,1,2,2-Tetrachloroethane	0.800	0.748	50.00	46.71	0.300	AVRG	-6.6	
Tetrachloroethene	0.694	0.609	50.00	53.09		LINR	6.2	
Toluene	1.631	1.488	50.00	54.06		LINR	8.1	20.0
1,2,3-Trichlorobenzene	1.066	0.722	50.00	48.84		LINR	-2.3	
1,2,4-Trichlorobenzene	0.829	0.785	50.00	48.53		LINR	-2.9	
1,1,1-Trichloroethane	0.437	0.458	50.00	54.32		LINR	8.6	
1,1,2-Trichloroethane	0.516	0.500	50.00	48.48		AVRG	-3.0	
Trichloroethene	0.321	0.303	50.00	50.83		LINR	1.7	
Trichlorotrifluoroethane	0.276	0.284	50.00	51.40		AVRG	2.8	
Trichlorofluoromethane	0.514	0.570	50.00	55.45		AVRG	10.9	
Vinyl chloride	0.445	0.454	50.00	55.52		LINR	11.0	20.0
Xylene (total)	2.590	2.352	150.0	168.1		2ORDR	12.1	
Dibromofluoromethane	0.320	0.330	30.00	30.88		AVRG	2.9	
1,2-Dichloroethane-d4	0.064	0.065	30.00	30.88		AVRG	2.9	
Toluene-d8	2.097	1.931	30.00	27.62		AVRG	-7.9	
Bromofluorobenzene	0.949	0.953	30.00	30.13		AVRG	0.4	

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Lab File ID (Standard): V4CCV01 Date Analyzed: 09/03/08
 Instrument ID: VOA4 Time Analyzed: 1155
 GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	777724	13.29	335310	16.62	344169	18.58
UPPER LIMIT	1555448	13.79	670620	17.12	688338	19.08
LOWER LIMIT	388862	12.79	167655	16.12	172085	18.08
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4BLK0903LCS	749104	13.29	325642	16.63	332086	18.58
02 V4BLK0903	662741	13.28	281526	16.62	260005	18.58
03 01TB082608	650302	13.29	274791	16.62	255753	18.58
04 01TB082808	613190	13.29	272874	16.62	248853	18.58
05 01GW0701	614528	13.28	259926	16.63	236627	18.58
06 01GW0701D	609752	13.28	260379	16.63	229021	18.59
07 01GW0801	579661	13.29	248655	16.62	229751	18.58
08 01GW1201	547802	13.28	249619	16.63	216951	18.58
09 01GW1301	552548	13.28	237721	16.63	226555	18.59
10 01GW1101	552480	13.29	235725	16.62	216513	18.58
11 01GW1501	562753	13.29	245259	16.62	213860	18.58
12 01GW1401	541982	13.29	240463	16.62	213056	18.58
13 01GW1001	528237	13.29	244543	16.62	221694	18.58
14 01GW0601	548457	13.28	233872	16.63	211817	18.59
15 01GW0901	535895	13.29	243929	16.63	214210	18.59
16 01GW1701	561892	13.29	242956	16.63	219778	18.59
17 01GW1601	549733	13.30	242853	16.63	226872	18.59
18 01GW1601D	559402	13.29	241722	16.62	215871	18.58
19 V4BLK0903LCS	592363	13.29	273308	16.63	267166	18.58
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH GULFPORT
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT010
 Lab File ID (Standard): V4CCV01E Date Analyzed: 09/04/08
 Instrument ID: VOA4 Time Analyzed: 0010
 GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB)		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	669018	13.29	303970	16.63	287061	18.59
UPPER LIMIT	1338036	13.79	607940	17.13	574122	19.09
LOWER LIMIT	334509	12.79	151985	16.13	143531	18.09
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4BLK0903ELC	719258	13.29	324641	16.63	305902	18.59
02 V4BLK0903E	623099	13.30	270501	16.63	247247	18.59
03 01GW1801	572421	13.30	253151	16.63	221537	18.59
04 01GW1901	572034	13.29	248516	16.63	217725	18.59
05 01GW2101	555892	13.29	247253	16.63	214656	18.59
06 01GW2001	546062	13.30	250852	16.63	220029	18.59
07						
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16						
17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

Empirical Laboratories, LLC

Data file : \\ELABNSH04\DD\chem\voa4.i\090308V4.b\0825303.D
 Lab Smp Id: 0808253-03 Client Smp ID: 01GW0701D
 Inj Date : 03-SEP-2008 16:48 MS Autotune Date: 22-JUL-2008 08:58
 Operator : ADM Inst ID: voa4.i
 Smp Info : 0808253-03;;; vial1
 Misc Info : tet.v08253;0;;;gm-all.sub;#5517
 Comment :
 Method : \\ELABNSH04\DD\chem\voa4.i\090308V4.b\VWATER4.m
 Meth Date : 04-Sep-2008 09:23 dlynch Quant Type: ISTD
 Cal Date : 02-APR-2008 16:49 Cal File: V4ASTD09.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: gm-all.sub
 Target Version: 4.04
 Processing Host: TARGET09_VM

Concentration Formula: Amt * DF * 5*Uf/Vo

DL 9/4/08

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	unit correction factor
Vo	5.000	Volume of sample purged (mL)

9-4-08
 (8)

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
* 64 Fluorobenzene	96	13.283	13.288	(1.000)	609752	30.0000	
16 Acetone	43	6.356	6.351	(0.479)	3963	1.55321	1.553(a)
\$ 52 Dibromofluoromethane	111	11.344	11.350	(0.854)	201775	30.9818	30.98
\$ 55 1,2-Dichloroethane-d4	102	12.132	12.137	(0.913)	37135	28.7373	28.74(Q)
* 81 Toluene-d8	98	15.339	15.345	(0.922)	562909	30.9271	30.93
* 91 Chlorobenzene-d5	82	16.628	16.624	(1.000)	260379	30.0000	(Q)
\$ 103 Bromofluorobenzene	95	17.563	17.568	(1.056)	244763	29.7124	29.71
* 113 1,4-Dichlorobenzene-d4	152	18.586	18.582	(1.000)	229021	30.0000	(Q)

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

$$\text{Concentration} = \frac{A_x}{A_i} \times \frac{I_s}{RRF}$$

$$\frac{3963}{609752} \times \frac{30}{0.12553386} = 1.55321$$

A_x = Area of analyte
 A_i = Area of internal standard
 I_s = Concentration of internal standard
 RRF = Initial calibration relative response factor

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549

Instrument ID: VOA4 Calibration Date(s): 09/02/08 09/03/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 1952 0017

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Acetone	AVRG		0.12553386	RRF	10.2
Acrolein	AVRG		3.799e-002		10.3
Acrylonitrile	AVRG		0.11425188		5.1
Benzene	LINR	0.00000000	1.04977071		0.998
Bromobenzene	LINR	0.00000000	0.84778004		1.000
Bromochloromethane	AVRG		0.17685453		12.7
Bromodichloromethane	AVRG		0.46408871		14.7
Bromoform	AVRG		0.51838246		6.1
Bromomethane	LINR	0.00000000	0.33335542		0.999
2-Butanone	LINR	0.00000000	0.13972669		0.997
n-Butylbenzene	LINR	0.00000000	1.86369334		1.000
sec-Butylbenzene	LINR	0.00000000	2.51686125		1.000
tert-Butylbenzene	LINR	0.00000000	1.78064038		1.000
Carbon disulfide	LINR	0.00000000	0.93854315		1.000
Carbon tetrachloride	AVRG		0.38816401		9.3
Chlorobenzene	2ORDR	0.00000000	0.51813741	1.602e-002	1.000
Chloroethane	LINR	0.00000000	0.26098951		0.999
2-Chloroethyl vinyl ether	AVRG		0.16450213		7.5
Chloroform	AVRG		0.57778386		13.6
1-Chlorohexane	LINR	0.00000000	0.69480033		0.996
Chloromethane	LINR	0.00000000	0.45756488		0.997
2-Chlorotoluene	LINR	0.00000000	2.15032356		1.000
4-Chlorotoluene	LINR	0.00000000	2.40235746		0.997
Cyclohexane	AVRG		0.38667715		7.3
Dibromochloromethane	AVRG		0.79681386		7.5
1,2-Dibromo-3-chloropropane	LINR	0.00000000	0.17283896		0.998
1,2-Dibromoethane	AVRG		0.71789354		9.4
Dibromomethane	AVRG		0.22048287		7.3
1,2-Dichlorobenzene	AVRG		1.42184187		10.5
1,3-Dichlorobenzene	LINR	0.00000000	1.54769168		0.999
1,4-Dichlorobenzene	LINR	0.00000000	1.59009646		0.998
Dichlorodifluoromethane	AVRG		0.36135388		10.3
1,1-Dichloroethane	LINR	0.00000000	0.58198845		0.999
1,2-Dichloroethane	AVRG		0.46334606		8.5
1,1-Dichloroethene	AVRG		0.27860648		10.6
cis-1,2-Dichloroethene	AVRG		0.34443484		13.9
trans-1,2-Dichloroethene	LINR	0.00000000	0.30869506		0.999

Sequence Name: C:\HPCHEM\1\SEQUENCE\090208V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090208V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8992

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Ma/2/8

Line Type	Vial	DataFile	Method	Sample Name
1 Blank	100	BLANK01	VWATER4	V4BLK;;;;;
2 Blank	100	BLANK02	VWATER4	V4BLK;;;;;
3 BFB	50	V4BFB01	V4BFB	V4BFB50NG;;;;; 15.23, 9/2
4 DailyCal	1	V4CCV01	VWATER4	V4STD50ppb;;;;;
5 Spike	2	V4LCS01	VWATER4	V4BLK0902LCS;;;;;
6 Spike	3	V4RL01	VWATER4	V4r11ppb;;;;;
7 Blank	100	BLANK	VWATER4	V4BLK;;;;;
8 Blank	100	V4BLK01	VWATER4	V4BLK0902;;;;;
9 Sample	4	0824609D	VWATER4	0808246-09;;;;; vial 2 4x
10 Calibration	5	V4STD09A	VWATER4	V4STD200ppb;;;;;
11 BFB	50	V4BFB01E	V4BFB	V4BFB50NG;;;;;
12 Calibration	6	V4STD01	VWATER4	V4STD0.25ppb;;;;;
13 Calibration	7	V4STD02	VWATER4	V4STD0.5ppb;;;;;
14 Calibration	8	V4STD03	VWATER4	V4STD1ppb;;;;;
15 Calibration	9	V4STD04	VWATER4	V4STD2ppb;;;;;
16 Calibration	10	V4STD05	VWATER4	V4STD10ppb;;;;;
17 Calibration	11	V4STD06	VWATER4	V4STD20ppb;;;;;
18 Calibration	12	V4STD07	VWATER4	V4STD50ppb;;;;;
19 Spike	13	V4ICV01	VWATER4	V4BLK0902LCS;;;;;
20 Calibration	14	V4STD08	VWATER4	V4STD100ppb;;;;;
21 Calibration	15	V4STD09	VWATER4	V4STD200ppb;;;;;
22 Spike	16	V4LCS01E	VWATER4	V4BLK0902ELCS;;;;;
23 Blank	100	BLANK01E	VWATER4	V4BLK;;;;;
24 Blank	100	V4BLK01E	VWATER4	V4BLK0902E;;;;;
25 BFB	100	V4BFB	V4BFB	V4BFB50NG;;;;;

Sequence Name: C:\HPCHEM\1\SEQUENCE\090208V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090208V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8993

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info	
1	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK01.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
2	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK02.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;gm-all.sub;#5546 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
3	Type: BFB Vial: 50 Meth: V4BFB.M Data: V4BFB01.D Area% Report Quant Report CR Database	V4BFB50NG;;;;; ;3;;;all.sub;#5473 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
4	Type: DailyCal Vial: 1 Meth: VWATER4.M Data: V4CCV01.D Area% Report Quant Report CR Database	V4STD50ppb;;;;; ;2;;;gm-all.sub;#5546,5544 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
5	Type: Spike Vial: 2 Meth: VWATER4.M Data: V4LCS01.D Area% Report Quant Report CR Database	V4BLK0902LCS;;;;; ;3;LCS;;;gm-all.sub;#5546,5545 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
6	Type: Spike Vial: 3 Meth: VWATER4.M Data: V4RL01.D Area% Report Quant Report CR Database	V4r1l1ppb;;;;; ;3;;;gm-all.sub;#5546,5544 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
7	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;gm-all.sub;#5546 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method

8994

-
- 8 Type: Blank V4BLK0902;;;;;
 - Vial: 100 ;3;BLANK;;;;gm-all.sub;#5546
 - Meth: VWATER4.M Barcode:
 - Data: V4BLK01.D Samp Amt: 0 Multiplr: 1
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 9 Type: Sample 0808246-09;;;;; vial 2 4x
 - Vial: 4 ch2.v08246;0;;;;gm-all.sub;#5517
 - Meth: VWATER4.M Barcode:
 - Data: 0824609D.D Samp Amt: 0 Multiplr: 4
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 10 Type: Calibration V4STD200ppb;;;;;
 - Vial: 5 ;1;;;;9;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD09A.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 11 Type: BFB V4BFB50NG;;;;;
 - Vial: 50 ;3;;;;all.sub;#5473
 - Meth: V4BFB.M Barcode:
 - Data: V4BFB01E.D Samp Amt: 0 Multiplr: 1
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 12 Type: Calibration V4STD0.25ppb;;;;;
 - Vial: 6 ;1;;;;1;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 13 Type: Calibration V4STD0.5ppb;;;;;
 - Vial: 7 ;1;;;;2;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD02.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 14 Type: Calibration V4STD1ppb;;;;;
 - Vial: 8 ;1;;;;3;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD03.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 15 Type: Calibration V4STD2ppb;;;;;
 - Vial: 9 ;1;;;;4;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD04.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 - Area% Report :per Method Lib. Search Rep :per Method
 - Quant Report :per Method Post-Quant Macro:per Method
 - CR Database :per Method CR Spreadsheet :per Method
-
- 16 Type: Calibration V4STD10ppb;;;;;
 - Vial: 10 ;1;;;;5;gm-all.sub;#5546, 5544
 - Meth: VWATER4.M Barcode:
 - Data: V4STD05.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd

Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

8995

17 Type: Calibration V4STD20ppb;;;;;
 Vial: 11 ;1;;;6;gm-all.sub;#5546, 5544
 Meth: VWATER4.M Barcode:
 Data: V4STD06.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

18 Type: Calibration V4STD50ppb;;;;;
 Vial: 12 ;1;;;7;gm-all.sub;#5546, 5544
 Meth: VWATER4.M Barcode:
 Data: V4STD07.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

19 Type: Spike V4BLK0902LCS;;;;;
 Vial: 13 ;3;LCS;;;gm-all.sub;#5546,5545
 Meth: VWATER4.M Barcode:
 Data: V4ICV01.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

20 Type: Calibration V4STD100ppb;;;;;
 Vial: 14 ;1;;;8;gm-all.sub;#5546, 5544
 Meth: VWATER4.M Barcode:
 Data: V4STD08.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

21 Type: Calibration V4STD200ppb;;;;;
 Vial: 15 ;1;;;9;gm-all.sub;#5546, 5544
 Meth: VWATER4.M Barcode:
 Data: V4STD09.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

22 Type: Spike V4BLK0902ELCS;;;;;
 Vial: 16 ;3;LCS;;;gm-all.sub;#5546,5545
 Meth: VWATER4.M Barcode:
 Data: V4LCS01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

23 Type: Blank V4BLK;;;;;
 Vial: 100 ;3;BLANK;;;gm-all.sub;#5546
 Meth: VWATER4.M Barcode:
 Data: BLANK01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

24 Type: Blank V4BLK0902E;;;;;
 Vial: 100 ;3;BLANK;;;gm-all.sub;#5546
 Meth: VWATER4.M Barcode:
 Data: V4BLK01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

25 Type: BFB V4BFB50NG;;;;;

Vial: 100 ;3;;;all.sub;#5473
Meth: V4BFB.M Barcode:
Data: V4BFB.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

8996

Sequence Name: C:\HPCHEM\1\SEQUENCE\090308V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090308V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8997

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Tue 1

Line Type	Vial	DataFile	Method	Sample Name
1 Blank	100	BLANK01	VWATER4	V4BLK;;;;;
2 BFB	50	V4BFB01	V4BFB	V4BFB50NG;;;;; 11:26 9-3-09 DL
3 DailyCal	1	V4CCV01	VWATER4	V4STD50ppb;;;;;
4 Spike	2	V4LCS01	VWATER4	V4BLK0903LCS;;;;;
5 Spike	3	V4RL01	VWATER4	V4RL1ppb;;;;;
6 Blank	100	BLANK	VWATER4	V4BLK;;;;;
7 Blank	100	V4BLK01	VWATER4	V4BLK0903;;;;;
8 Sample	4	0825301	VWATER4	0808253-01;;;;; tb/vial1
9 Sample	5	0827202	VWATER4	0808272-02;;;;; tb/vial1
10 Sample	6	0826801	VWATER4	0808268-01;;;;; tb/vial1
11 Sample	7	0827201	VWATER4	0808272-01;;;;; er/vial1
12 Sample	8	0825302	VWATER4	0808253-02;;;;; vial1
13 Sample	8	0825303	VWATER4	0808253-03;;;;; vial1
14 Sample	10	0825304	VWATER4	0808253-04;;;;; vial1
15 Sample	11	0825305	VWATER4	0808253-05;;;;; vial1
16 Sample	12	0825306	VWATER4	0808253-06;;;;; vial1
17 Sample	13	0825307	VWATER4	0808253-07;;;;; vial1
18 Sample	14	0825308	VWATER4	0808253-08;;;;; vial1
19 Sample	15	0825309	VWATER4	0808253-09;;;;; vial1
20 Sample	16	0825310	VWATER4	0808253-10;;;;; vial1
21 Sample	17	0826802	VWATER4	0808268-02;;;;; vial1
22 Sample	18	0826803	VWATER4	0808268-03;;;;; vial1
23 Sample	19	0826804	VWATER4	0808268-04;;;;; vial1
24 Sample	20	0826805	VWATER4	0808268-05;;;;; vial1
25 Sample	21	0826806	VWATER4	0808268-06;;;;; vial1
26 Spike	22	V4LCSD01	VWATER4	V4BLK0903LCSD;;;;; 7:23:12 9-3-09
27 BFB	50	V4BFB01E	V4BFB	V4BFB50NG;;;;;
28 Sample	23	V4CCV01E	VWATER4	V4STD50ppb;;;;;
29 Spike	24	V4LCS01E	VWATER4	V4BLK0903ELCS;;;;;
30 Spike	25	V4RL01E	VWATER4	V4RL1ppb;;;;;
31 Blank	100	BLANK01E	VWATER4	V4BLK;;;;;
32 Blank	100	V4BLK01E	VWATER4	V4BLK0903E;;;;;
33 Sample	26	0827105	VWATER4	0808271-05;;;;; tb/vial1
34 Sample	27	0826807	VWATER4	0808268-07;;;;; vial1
35 Sample	28	0826808	VWATER4	0808268-08;;;;; vial1
36 Sample	29	0826809	VWATER4	0808268-09;;;;; vial1
37 Sample	30	0826810	VWATER4	0808268-10;;;;; vial1
38 Sample	31	0827101	VWATER4	0808271-01;;;;; vial1
39 Sample	32	0827102	VWATER4	0808271-02;;;;; vial1
40 Sample	33	0827103	VWATER4	0808271-03;;;;; vial1
41 Sample	34	0827104	VWATER4	0808271-04;;;;; vial1
42 Sample	35	0827101M	VWATER4	0808271-01;;;;; vial1 MS
43 Sample	36	0827101S	VWATER4	0808271-01;;;;; vial1 MSD

Sequence Name: C:\HPCHEM\1\SEQUENCE\090308V4.S

8998

Line Type	Vial	DataFile	Method	Sample Name
44 BFB	100 V4BFB	V4BFB	V4BFB	V4BFB50NG; ; ; ;

Sequence Name: C:\HPCHEM\1\SEQUENCE\090308V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090308V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8999

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info	
1	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK01.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
2	Type: BFB Vial: 50 Meth: V4BFB.M Data: V4BFB01.D Area% Report Quant Report CR Database	V4BFB50NG;;;;; ;3;;;;all.sub;#5473 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
3	Type: DailyCal Vial: 1 Meth: VWATER4.M Data: V4CCV01.D Area% Report Quant Report CR Database	V4STD50ppb;;;;; ;2;;;;gm-all.sub;#5546,5544 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
4	Type: Spike Vial: 2 Meth: VWATER4.M Data: V4LCS01.D Area% Report Quant Report CR Database	V4BLK0903LCS;;;;; ;3;LCS;;;;gm-all.sub;#5546,5545 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
5	Type: Spike Vial: 3 Meth: VWATER4.M Data: V4RL01.D Area% Report Quant Report CR Database	V4RL1ppb;;;;; ;3;;;;gm-all.sub;#5546,5544 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
6	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;;gm-all.sub;#5546 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
7	Type: Blank Vial: 100 Meth: VWATER4.M Data: V4BLK01.D Area% Report Quant Report CR Database	V4BLK0903;;;;; ;3;BLANK;;;;gm-all.sub;#5546 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method

1000

pH < 2

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-----
8  Type: Sample      0808253-01;;;;; tb/vial1
   Vial: 4          tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825301.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
9  Type: Sample      0808272-02;;;;; tb/vial1
   Vial: 5          sha.v08272;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0827202.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
10 Type: Sample      0808268-01;;;;; tb/vial1
   Vial: 6          tet.v08268;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0826801.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
11 Type: Sample      0808272-01;;;;; er/vial1
   Vial: 7          sha.v08272;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0827201.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
12 Type: Sample      0808253-02;;;;; vial1
   Vial: 8          tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825302.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
13 Type: Sample      0808253-03;;;;; vial1
   Vial: 8          tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825303.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
14 Type: Sample      0808253-04;;;;; vial1
   Vial: 10         tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825304.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
15 Type: Sample      0808253-05;;;;; vial1
   Vial: 11         tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825305.D  Samp Amt: 0          Multiplr: 1
   Area% Report    :per Method      Lib. Search Rep :per Method
   Quant Report    :per Method      Post-Quant Macro:per Method
   CR Database     :per Method      CR Spreadsheet  :per Method
-----
16 Type: Sample      0808253-06;;;;; vial1
   Vial: 12         tet.v08253;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M  Barcode:
   Data: 0825306.D  Samp Amt: 0          Multiplr: 1

```

Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

pH < 2 9001

17 Type: Sample 0808253-07;;;;; vial1
Vial: 13 tet.v08253;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0825307.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

18 Type: Sample 0808253-08;;;;; vial1
Vial: 14 tet.v08253;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0825308.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

19 Type: Sample 0808253-09;;;;; vial1
Vial: 15 tet.v08253;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0825309.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

20 Type: Sample 0808253-10;;;;; vial1
Vial: 16 tet.v08253;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0825310.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

21 Type: Sample 0808268-02;;;;; vial1
Vial: 17 tet.v08268;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0826802.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

22 Type: Sample 0808268-03;;;;; vial1
Vial: 18 tet.v08268;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0826803.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

23 Type: Sample 0808268-04;;;;; vial1
Vial: 19 tet.v08268;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0826804.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

24 Type: Sample 0808268-05;;;;; vial1
Vial: 20 tet.v08268;0;;;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0826805.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

25 Type: Sample 0808268-06;;;;; vial1

9002

Vial: 21 tet.v08268;0;;;gm-all.sub;#5517
 Meth: VWATER4.M Barcode:
 Data: 0826806.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

26 Type: Spike V4BLK0903LCSD; ; ; ;
 Vial: 22 ;3;LCSD; ; ; ;gm-all.sub;#5546,5545
 Meth: VWATER4.M Barcode:
 Data: V4LCSD01.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

27 Type: BFB V4BFB50NG; ; ; ;
 Vial: 50 ;3; ; ; ;all.sub;#5473
 Meth: V4BFB.M Barcode:
 Data: V4BFB01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

28 Type: Sample V4STD50ppb; ; ; ;
 Vial: 23 ; ; ; ;gm-all.sub;#5546,5544
 Meth: VWATER4.M Barcode:
 Data: V4CCV01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

29 Type: Spike V4BLK0903ELCS; ; ; ;
 Vial: 24 ;3;LCS; ; ; ;gm-all.sub;#5546,5545
 Meth: VWATER4.M Barcode:
 Data: V4LCS01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

30 Type: Spike V4RL1ppb; ; ; ;
 Vial: 25 ;3; ; ; ;gm-all.sub;#5546,5544
 Meth: VWATER4.M Barcode:
 Data: V4RL01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

31 Type: Blank V4BLK; ; ; ;
 Vial: 100 ;3;BLANK; ; ; ;gm-all.sub;#5546
 Meth: VWATER4.M Barcode:
 Data: BLANK01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

32 Type: Blank V4BLK0903E; ; ; ;
 Vial: 100 ;3;BLANK; ; ; ;gm-all.sub;#5546
 Meth: VWATER4.M Barcode:
 Data: V4BLK01E.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

33 Type: Sample 0808271-05; ; ; ; ; tb/vial1
 Vial: 26 ch2.v08271;0;;;gm-all.sub;#5517
 Meth: VWATER4.M Barcode:
 Data: 0827105.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method

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PH 2 9003

	CR Database	:per Method	CR Spreadsheet	:per Method
34	Type: Sample	0808268-07;;;;; vial1		
	Vial: 27	tet.v08268;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0826807.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
35	Type: Sample	0808268-08;;;;; vial1		
	Vial: 28	tet.v08268;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0826808.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
36	Type: Sample	0808268-09;;;;; vial1		
	Vial: 29	tet.v08268;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0826809.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
37	Type: Sample	0808268-10;;;;; vial1		
	Vial: 30	tet.v08268;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0826810.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
38	Type: Sample	0808271-01;;;;; vial1		
	Vial: 31	ch2.v08271;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0827101.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
39	Type: Sample	0808271-02;;;;; vial1		
	Vial: 32	ch2.v08271;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0827102.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
40	Type: Sample	0808271-03;;;;; vial1		
	Vial: 33	ch2.v08271;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0827103.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
41	Type: Sample	0808271-04;;;;; vial1		
	Vial: 34	ch2.v08271;0;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		
	Data: 0827104.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:per Method	Lib. Search Rep	:per Method
	Quant Report	:per Method	Post-Quant Macro	:per Method
	CR Database	:per Method	CR Spreadsheet	:per Method
42	Type: Sample	0808271-01;;;;; vial1 MS		
	Vial: 35	ch2.v08271;3;MS;;;;;gm-all.sub;#5517		
	Meth: VWATER4.M	Barcode:		

Data: 0827101M.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

PH 22 9004
↓

43 Type: Sample 0808271-01;;;; vial1 MSD
Vial: 36 ch2.v08271;3;MSD;;;gm-all.sub;#5517
Meth: VWATER4.M Barcode:
Data: 0827101S.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

44 Type: BFB V4BFB50NG;;;;;
Vial: 100 ;3;;;;all.sub;#5473
Meth: V4BFB.M Barcode:
Data: V4BFB.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method



Empirical Laboratories
 Empirical Laboratories, LLC
 LABORATORY SAMPLE CUSTODY FORM
 HOBART REFRIGERATOR

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/ Comments	Task Performed
8223 (1-9)	152 pm / 8/26/08 / DL	204 pm / 8/26-8 / DL	screens	VAD
8212 (03 pm)	107 pm / 9/29/08 / DL			VAD
8216 (2-3)				↓
8223 (1-9)	↓			↓
8237 (01)				
8226	130 pm / 8/27/08 / DL	250 pm / 8/27/08 / DL	screens	VAD
8242 (1-2)	1041 - / 8/28/08 / DL	1236 pm / 8/28/08	screens	VAD
8246 (1-16)				
8223-01	↓			VAD
8226 (1-8)				
8215-01	1055 am / 9/29 / DL			VAD
8226 (2,4)				
8242 (1-2)	↓			↓
8246 (1-16)				
8251 (2-3)				
8251 (1-4)				
8253 (1-10)	↓	140 pm / 8/29/08 / DL	screens	↓
8183 - 2, 3, 4	12:30 AM	3:20 AM 8/2/08		MSE
8197 - 1, 3, 4	8/2/08			
8253 (1-10)	2:30 pm 9/2/08 DL			VAD
8268 (1-10)	2:51 pm 9/2/08 DL	307 pm / 9/2/08 / DL	screens	VAD
8270 (1-5)				
8246-09	3:56 pm 9/2/08 DL			VAD

Semi-Volatile Section

FORM 2
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK0902BW1	32	22	66	69	80	96			0
02	SBLK0902BW1L	28	20	64	70	77	90			0
03	01GW0701	26	17	61	72	80	92			0
04	01GW0701D	28	18	72	71	83	94			0
05	01GW0801	28	19	70	77	89	94			0
06	01GW1201	27	19	64	67	92	96			0
07	01GW1301	27	17	61	74	86	101			0
08	01GW1101	26	22	26*	26*	36*	38*			4
09	01GW1501	29	22	65	81	88	96			0
10	01GW1401	30	19	66	72	87	93			0
11	01GW1001	27	19	65	72	85	99			0
12	SBLK0904BW1	32	23	69	78	82	93			0
13	SBLK0904BW1L	34	24	77	79	89	94			0
14	SBLK0904BW1L	33	23	67	77	92	87			0
15	01GW0601	32	20	64	67	78	76			0
16	01GW1701	32	20	71	76	91	88			0
17	01GW1601	28	18	58	68	76	83			0
18	01GW1601D	25	18	61	70	84	85			0
19	01GW1801	28	18	64	69	79	74			0
20	01GW1901	28	18	67	74	87	78			0
21	01GW2101	21	15	53	65	76	79			0
22	01GW2001	29	20	68	69	92	80			0
01	SBLK0909BW1	33	23	76	75	88	89			0
02	SBLK0909BW1L	37	26	78	79	105	104			0
03	SBLK0909BW1L	36	24	82	80	88	94			0
04	01GW0901	29	22	64	73	89	76			0
27										
28										
29										
30										

	EL QC LIMITS	SPIKE CONC (UG/L)
S1 (2FP) = 2-Fluorophenol	(15-110)	100
S2 (PHL) = Phenol-d6	(15-110)	100
S3 (NBZ) = Nitrobenzene-d5	(30-110)	50
S4 (FBP) = 2-Fluorobiphenyl	(35-110)	50
S5 (TBP) = 2,4,6-Tribromophenol	(45-125)	100
S6 (TPH) = Terphenyl-d14	(55-125)	50

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate results reported from a diluted analysis

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0902BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00	0.0000	39.10	78	45-110
Acenaphthylene	50.00	0.0000	45.45	91	50-105
Acetophenone	50.00	0.0000	34.69	69	50-110
Atrazine	50.00	0.0000	41.92	84	70-115
Anthracene	50.00	0.0000	42.81	86	55-110
Benzaldehyde	50.00	0.0000	60.74	121	10-180
Benzo (a) anthracene	50.00	0.0000	48.55	97	55-110
Benzo (b) fluoranthene	50.00	0.0000	47.73	95	45-120
Benzo (k) fluoranthene	50.00	0.0000	45.22	90	45-125
Benzo (g, h, i) perylene	50.00	0.0000	37.24	74	40-125
Benzo (a) pyrene	50.00	0.0000	46.07	92	55-110
1,1'-Biphenyl	50.00	0.0000	36.32	73	50-110
bis (2-Chloroethoxy) meth	50.00	0.0000	36.56	73	45-105
bis (2-Chloroethyl) ether	50.00	0.0000	34.01	68	35-110
bis (2-Chloroisopropyl) e	50.00	0.0000	35.94	72	25-130
Bis (2-ethylhexyl) phthal	50.00	2.339	53.64	103	40-125
4-Bromophenyl-phenyleth	50.00	0.0000	29.16	58	50-115
Butylbenzylphthalate	50.00	0.0000	50.41	101	45-115
Caprolactam	50.00	0.0000	8.235	16*	20-110
4-Chloroaniline	50.00	0.0000	27.76	56	15-110
4-Chloro-3-methylphenol	50.00	0.0000	40.68	81	45-110
2-Chloronaphthalene	50.00	0.0000	38.86	78	50-105
2-Chlorophenol	50.00	0.0000	34.67	69	35-105
4-Chlorophenyl-phenylet	50.00	0.0000	40.32	81	50-110
Chrysene	50.00	0.0000	45.44	91	55-110
Dibenz (a, h) anthracene	50.00	0.0000	39.03	78	40-125
Dibenzofuran	50.00	0.0000	41.91	84	55-105
3,3'-Dichlorobenzidine	50.00	0.0000	31.75	64	20-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0902BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
2,4-Dichlorophenol	50.00	0.0000	36.03	72	50-105
Diethylphthalate	50.00	0.0000	42.06	84	40-120
2,4-Dimethylphenol	50.00	0.0000	47.55	95	30-110
Dimethylphthalate	50.00	0.0000	39.28	78	25-125
Di-n-butylphthalate	50.00	0.0000	40.79	82	55-115
4,6-Dinitro-2-methylphe	50.00	0.0000	46.52	93	40-130
2,4-Dinitrophenol	50.00	0.0000	47.28	94	15-140
2,4-Dinitrotoluene	50.00	0.0000	44.24	88	50-120
2,6-Dinitrotoluene	50.00	0.0000	42.31	85	50-115
Di-n-octylphthalate	50.00	0.0000	46.52	93	35-135
Fluoranthene	50.00	0.0000	43.94	88	55-115
Fluorene	50.00	0.0000	40.83	82	50-110
Hexachlorobenzene	50.00	0.0000	41.12	82	50-110
Hexachlorobutadiene	50.00	0.0000	32.24	64	25-105
Hexachlorocyclopentadie	50.00	0.0000	39.14	78	10-110
Hexachloroethane	50.00	0.0000	32.11	64	30- 95
Indeno(1,2,3-cd)pyrene	50.00	0.0000	39.96	80	45-125
Isophorone	50.00	0.0000	35.94	72	50-110
2-Methylnaphthalene	50.00	0.0000	39.90	80	45-105
Naphthalene	50.00	0.0000	36.86	74	40-100
2-Methylphenol	50.00	0.0000	30.46	61	40-110
4-Methylphenol	50.00	0.0000	27.42	55	30-110
2-Nitroaniline	50.00	0.0000	40.13	80	50-115
3-Nitroaniline	50.00	0.0000	36.54	73	20-125
4-Nitroaniline	50.00	0.0000	40.16	80	35-120
Nitrobenzene	50.00	0.0000	32.57	65	45-110
2-Nitrophenol	50.00	0.0000	37.30	75	40-115
4-Nitrophenol	50.00	0.0000	12.35	25	0-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0902BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
N-Nitrosodiphenylamine	50.00	0.0000	36.15	72	50-110
N-Nitroso-di-n-prop. (1)	50.00	0.0000	35.88	72	35-130
Pentachlorophenol	50.00	0.0000	39.96	80	40-115
Phenanthrene	50.00	0.0000	39.10	78	50-115
Phenol	50.00	0.0000	11.84	24	0-115
Pyrene	50.00	0.0000	48.70	97	50-130
1,2,4,5-Tetrachlorobenz	50.00	0.0000	36.46	73	50-125
2,4,5-Trichlorophenol	50.00	0.0000	40.19	80	50-110
2,4,6-Trichlorophenol	50.00	0.0000	39.19	78	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits
Spike Recovery: 1 out of 65 outside limits

COMMENTS: _____

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0902BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0902BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0902

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 07:45

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			Q
		MDL	(ug/L or ug/Kg) RL	UG/L CONC	
83-32-9-----	Acenaphthene	0.63	10		U
208-96-8-----	Acenaphthylene	0.47	10		U
98-86-2-----	Acetophenone	0.75	10		U
1912-24-9-----	Atrazine	0.69	10		U
120-12-7-----	Anthracene	0.77	10		U
100-52-7-----	Benzaldehyde	0.57	10		U
56-55-3-----	Benzo (a) anthracene	0.91	10		U
205-99-2-----	Benzo (b) fluoranthene	0.71	10		U
207-08-9-----	Benzo (k) fluoranthene	0.50	10		U
191-24-2-----	Benzo (g, h, i) perylene	1.5	10		U
50-32-8-----	Benzo (a) pyrene	0.60	10		U
92-52-4-----	1,1'-Biphenyl	0.39	10		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4-----	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.3	5.0	2.3	J
101-55-3-----	4-Bromophenyl-phenylether	0.57	10		U
85-68-7-----	Butylbenzylphthalate	0.82	10		U
105-60-2-----	Caprolactam	0.36	10		U
106-47-8-----	4-Chloroaniline	0.95	10		U
59-50-7-----	4-Chloro-3-methylphenol	0.58	10		U
91-58-7-----	2-Chloronaphthalene	0.58	10		U
95-57-8-----	2-Chlorophenol	0.59	10		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9-----	Chrysene	1.0	10		U
53-70-3-----	Dibenz (a, h) anthracene	1.7	10		U
132-64-9-----	Dibenzofuran	0.65	10		U
91-94-1-----	3,3'-Dichlorobenzidine	0.89	10		U
120-83-2-----	2,4-Dichlorophenol	0.44	10		U
84-66-2-----	Diethylphthalate	1.0	10		U
105-67-9-----	2,4-Dimethylphenol	0.71	10		U
131-11-3-----	Dimethylphthalate	0.74	10		U
84-74-2-----	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0902BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0902BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0902

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/03/08 07:45

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

534-52-1-----	4,6-Dinitro-2-methylphenol	0.74	25		U
51-28-5-----	2,4-Dinitrophenol	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene	0.66	10		U
117-84-0-----	Di-n-octylphthalate	0.33	10		U
206-44-0-----	Fluoranthene	0.70	10		U
86-73-7-----	Fluorene	0.55	10		U
118-74-1-----	Hexachlorobenzene	0.47	10		U
87-68-3-----	Hexachlorobutadiene	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene	0.89	10		U
67-72-1-----	Hexachloroethane	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	10		U
78-59-1-----	Isophorone	0.55	10		U
91-57-6-----	2-Methylnaphthalene	0.68	10		U
91-20-3-----	Naphthalene	0.45	10		U
95-48-7-----	2-Methylphenol	0.83	10		U
106-44-5-----	4-Methylphenol	0.77	10		U
88-74-4-----	2-Nitroaniline	1.2	25		U
99-09-2-----	3-Nitroaniline	1.0	25		U
100-01-6-----	4-Nitroaniline	2.0	25		U
98-95-3-----	Nitrobenzene	0.62	10		U
88-75-5-----	2-Nitrophenol	0.74	10		U
100-02-7-----	4-Nitrophenol	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.90	10		U
87-86-5-----	Pentachlorophenol	1.0	25		U
85-01-8-----	Phenanthrene	0.77	10		U
108-95-2-----	Phenol	0.46	10		U
129-00-0-----	Pyrene	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK0902BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: S1BW0902 Lab Sample ID: SBLK0902BW1

Instrument ID: BNA1 Date Extracted: 09/02/08

Matrix: (soil/water) WATER Date Analyzed: 09/03/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 0745

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK0902BW1L	SBLK0902BW1LCS	S1LW0902	09/03/08
02	01GW0701	0808253-02	0825302	09/03/08
03	01GW0701D	0808253-03	0825303	09/03/08
04	01GW0801	0808253-04	0825304	09/03/08
05	01GW1201	0808253-05	0825305	09/03/08
06	01GW1301	0808253-06	0825306	09/03/08
07	01GW1101	0808253-07	0825307	09/03/08
08	01GW1501	0808253-08	0825308	09/03/08
09	01GW1401	0808253-09	0825309	09/03/08
10	01GW1001	0808253-10	0825310	09/03/08
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COMMENTS:

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00	0.0000	46.42	93	45-110
Acenaphthylene	50.00	0.0000	53.43	107*	50-105
Acetophenone	50.00	0.0000	40.11	80	50-110
Atrazine	50.00	0.0000	45.93	92	70-115
Anthracene	50.00	0.0000	45.28	90	55-110
Benzaldehyde	50.00	0.0000	71.81	144	10-180
Benzo (a) anthracene	50.00	0.0000	51.16	102	55-110
Benzo (b) fluoranthene	50.00	0.0000	47.82	96	45-120
Benzo (k) fluoranthene	50.00	0.0000	45.99	92	45-125
Benzo (g, h, i) perylene	50.00	0.0000	45.39	91	40-125
Benzo (a) pyrene	50.00	0.0000	49.91	100	55-110
1,1'-Biphenyl	50.00	0.0000	39.16	78	50-110
bis(2-Chloroethoxy)meth	50.00	0.0000	42.54	85	45-105
bis(2-Chloroethyl) ether	50.00	0.0000	37.81	76	35-110
bis(2-Chloroisopropyl) e	50.00	0.0000	38.51	77	25-130
Bis(2-ethylhexyl)phthal	50.00	1.486	51.95	101	40-125
4-Bromophenyl-phenyleth	50.00	0.0000	33.58	67	50-115
Butylbenzylphthalate	50.00	0.0000	51.31	103	45-115
Caprolactam	50.00	0.0000	9.508	19*	20-110
4-Chloroaniline	50.00	0.0000	38.03	76	15-110
4-Chloro-3-methylphenol	50.00	0.0000	46.63	93	45-110
2-Chloronaphthalene	50.00	0.0000	42.82	86	50-105
2-Chlorophenol	50.00	0.0000	37.77	76	35-105
4-Chlorophenyl-phenylet	50.00	0.0000	45.40	91	50-110
Chrysene	50.00	0.0000	46.86	94	55-110
Dibenz (a, h) anthracene	50.00	0.0000	50.41	101	40-125
Dibenzofuran	50.00	0.0000	48.13	96	55-105
3,3'-Dichlorobenzidine	50.00	0.0000	45.98	92	20-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
2,4-Dichlorophenol	50.00	0.0000	45.65	91	50-105
Diethylphthalate	50.00	0.0000	46.98	94	40-120
2,4-Dimethylphenol	50.00	0.0000	52.96	106	30-110
Dimethylphthalate	50.00	0.0000	44.32	89	25-125
Di-n-butylphthalate	50.00	0.0000	46.57	93	55-115
4,6-Dinitro-2-methylphe	50.00	0.0000	50.63	101	40-130
2,4-Dinitrophenol	50.00	0.0000	48.82	98	15-140
2,4-Dinitrotoluene	50.00	0.0000	49.58	99	50-120
2,6-Dinitrotoluene	50.00	0.0000	49.07	98	50-115
Di-n-octylphthalate	50.00	0.0000	45.44	91	35-135
Fluoranthene	50.00	0.0000	45.13	90	55-115
Fluorene	50.00	0.0000	47.40	95	50-110
Hexachlorobenzene	50.00	0.0000	46.18	92	50-110
Hexachlorobutadiene	50.00	0.0000	40.54	81	25-105
Hexachlorocyclopentadie	50.00	0.0000	44.96	90	10-110
Hexachloroethane	50.00	0.0000	35.46	71	30- 95
Indeno(1,2,3-cd)pyrene	50.00	0.0000	48.83	98	45-125
Isophorone	50.00	0.0000	43.80	88	50-110
2-Methylnaphthalene	50.00	0.0000	49.84	100	45-105
Naphthalene	50.00	0.0000	40.74	81	40-100
2-Methylphenol	50.00	0.0000	34.29	68	40-110
4-Methylphenol	50.00	0.0000	31.68	63	30-110
2-Nitroaniline	50.00	0.0000	42.83	86	50-115
3-Nitroaniline	50.00	0.0000	39.59	79	20-125
4-Nitroaniline	50.00	0.0000	45.00	90	35-120
Nitrobenzene	50.00	0.0000	38.37	77	45-110
2-Nitrophenol	50.00	0.0000	42.63	85	40-115
4-Nitrophenol	50.00	0.0000	11.01	22	0-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
N-Nitrosodiphenylamine	50.00	0.0000	40.08	80	50-110
N-Nitroso-di-n-prop. (1)	50.00	0.0000	39.32	79	35-130
Pentachlorophenol	50.00	0.0000	41.12	82	40-115
Phenanthrene	50.00	0.0000	45.75	92	50-115
Phenol	50.00	0.0000	14.65	29	0-115
Pyrene	50.00	0.0000	50.09	100	50-130
1,2,4,5-Tetrachlorobenz	50.00	0.0000	42.95	86	50-125
2,4,5-Trichlorophenol	50.00	0.0000	47.43	95	50-110
2,4,6-Trichlorophenol	50.00	0.0000	42.10	84	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	LCS D CONCENTRATION (UG/L)	LCS D	% RPD #	QC LIMITS	
			% REC #		RPD	REC.
Acenaphthene	50.00	43.59	87	6	30	45-110
Acenaphthylene	50.00	53.17	106*	0	30	50-105
Acetophenone	50.00	37.02	74	8	30	50-110
Atrazine	50.00	52.11	104	13	30	70-115
Anthracene	50.00	48.98	98	8	30	55-110
Benzaldehyde	50.00	67.67	135	6	30	10-180
Benzo (a) anthracene	50.00	47.65	95	7	30	55-110
Benzo (b) fluoranthene	50.00	46.72	93	2	30	45-120
Benzo (k) fluoranthene	50.00	44.73	89	3	30	45-125
Benzo (g, h, i) perylene	50.00	52.36	105	14	30	40-125
Benzo (a) pyrene	50.00	46.76	94	6	30	55-110
1,1'-Biphenyl	50.00	38.34	77	2	30	50-110
bis (2-Chloroethoxy) meth	50.00	38.94	78	9	30	45-105
bis (2-Chloroethyl) ether	50.00	36.92	74	2	30	35-110
bis (2-Chloroisopropyl) e	50.00	37.10	74	4	30	25-130
Bis (2-ethylhexyl) pthal	50.00	52.64	102	1	30	40-125
4-Bromophenyl-phenyleth	50.00	34.70	69	3	30	50-115
Butylbenzylphthalate	50.00	52.59	105	2	30	45-115
Caprolactam	50.00	8.494	17*	11	30	20-110
4-Chloroaniline	50.00	35.22	70	8	30	15-110
4-Chloro-3-methylphenol	50.00	41.63	83	11	30	45-110
2-Chloronaphthalene	50.00	41.72	83	3	30	50-105
2-Chlorophenol	50.00	35.46	71	6	30	35-105
4-Chlorophenyl-phenylet	50.00	44.41	89	2	30	50-110
Chrysene	50.00	48.80	98	4	30	55-110
Dibenz (a, h) anthracene	50.00	53.87	108	7	30	40-125
Dibenzofuran	50.00	43.85	88	9	30	55-105
3,3'-Dichlorobenzidine	50.00	45.33	91	1	30	20-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-Dichlorophenol	50.00	39.91	80	13	30	50-105
Diethylphthalate	50.00	43.70	87	7	30	40-120
2,4-Dimethylphenol	50.00	46.68	93	13	30	30-110
Dimethylphthalate	50.00	42.64	85	4	30	25-125
Di-n-butylphthalate	50.00	48.21	96	3	30	55-115
4,6-Dinitro-2-methylphe	50.00	52.36	105	3	30	40-130
2,4-Dinitrophenol	50.00	46.92	94	4	30	15-140
2,4-Dinitrotoluene	50.00	45.42	91	9	30	50-120
2,6-Dinitrotoluene	50.00	45.50	91	8	30	50-115
Di-n-octylphthalate	50.00	43.68	87	4	30	35-135
Fluoranthene	50.00	45.26	90	0	30	55-115
Fluorene	50.00	46.25	92	2	30	50-110
Hexachlorobenzene	50.00	47.67	95	3	30	50-110
Hexachlorobutadiene	50.00	35.95	72	12	30	25-105
Hexachlorocyclopentadie	50.00	43.70	87	3	30	10-110
Hexachloroethane	50.00	32.84	66	8	30	30- 95
Indeno(1,2,3-cd)pyrene	50.00	53.61	107	9	30	45-125
Isophorone	50.00	36.95	74	17	30	50-110
2-Methylnaphthalene	50.00	43.85	88	13	30	45-105
Naphthalene	50.00	40.78	82	0	30	40-100
2-Methylphenol	50.00	30.46	61	12	30	40-110
4-Methylphenol	50.00	27.95	56	12	30	30-110
2-Nitroaniline	50.00	42.79	86	0	30	50-115
3-Nitroaniline	50.00	35.44	71	11	30	20-125
4-Nitroaniline	50.00	41.55	83	8	30	35-120
Nitrobenzene	50.00	32.90	66	15	30	45-110
2-Nitrophenol	50.00	41.88	84	2	30	40-115
4-Nitrophenol	50.00	10.74	21	2	30	0-125

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0904BW1

COMPOUND	SPIKE ADDED (UG/L)	LCSD CONCENTRATION (UG/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
N-Nitrosodiphenylamine	50.00	41.59	83	4	30	50-110
N-Nitroso-di-n-prop. (1)	50.00	36.24	72	8	30	35-130
Pentachlorophenol	50.00	45.18	90	9	30	40-115
Phenanthrene	50.00	45.58	91	0	30	50-115
Phenol	50.00	14.20	28	3	30	0-115
Pyrene	50.00	46.46	93	8	30	50-130
1,2,4,5-Tetrachlorobenz	50.00	40.02	80	7	30	50-125
2,4,5-Trichlorophenol	50.00	42.47	85	11	30	50-110
2,4,6-Trichlorophenol	50.00	41.42	83	2	30	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 65 outside limits
Spike Recovery: 4 out of 130 outside limits

COMMENTS: _____

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0904BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0904BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0904

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 07:35

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	0.63	10		U
208-96-8	Acenaphthylene	0.47	10		U
98-86-2	Acetophenone	0.75	10		U
1912-24-9	Atrazine	0.69	10		U
120-12-7	Anthracene	0.77	10		U
100-52-7	Benzaldehyde	0.57	10		U
56-55-3	Benzo (a) anthracene	0.91	10		U
205-99-2	Benzo (b) fluoranthene	0.71	10		U
207-08-9	Benzo (k) fluoranthene	0.50	10		U
191-24-2	Benzo (g, h, i) perylene	1.5	10		U
50-32-8	Benzo (a) pyrene	0.60	10		U
92-52-4	1,1'-Biphenyl	0.39	10		U
111-91-1	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7	Bis (2-ethylhexyl) phthalate	1.3	5.0	1.5	J
101-55-3	4-Bromophenyl-phenylether	0.57	10		U
85-68-7	Butylbenzylphthalate	0.82	10		U
105-60-2	Caprolactam	0.36	10		U
106-47-8	4-Chloroaniline	0.95	10		U
59-50-7	4-Chloro-3-methylphenol	0.58	10		U
91-58-7	2-Chloronaphthalene	0.58	10		U
95-57-8	2-Chlorophenol	0.59	10		U
7005-72-3	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9	Chrysene	1.0	10		U
53-70-3	Dibenz (a, h) anthracene	1.7	10		U
132-64-9	Dibenzofuran	0.65	10		U
91-94-1	3,3'-Dichlorobenzidine	0.89	10		U
120-83-2	2,4-Dichlorophenol	0.44	10		U
84-66-2	Diethylphthalate	1.0	10		U
105-67-9	2,4-Dimethylphenol	0.71	10		U
131-11-3	Dimethylphthalate	0.74	10		U
84-74-2	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0904BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0904BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0904

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/05/08 07:35

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/L Q
		MDL	(ug/L or ug/Kg) RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.74	25		U
51-28-5-----	2,4-Dinitrophenol	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene	0.66	10		U
117-84-0-----	Di-n-octylphthalate	0.33	10		U
206-44-0-----	Fluoranthene	0.70	10		U
86-73-7-----	Fluorene	0.55	10		U
118-74-1-----	Hexachlorobenzene	0.47	10		U
87-68-3-----	Hexachlorobutadiene	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene	0.89	10		U
67-72-1-----	Hexachloroethane	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	10		U
78-59-1-----	Isophorone	0.55	10		U
91-57-6-----	2-Methylnaphthalene	0.68	10		U
91-20-3-----	Naphthalene	0.45	10		U
95-48-7-----	2-Methylphenol	0.83	10		U
106-44-5-----	4-Methylphenol	0.77	10		U
88-74-4-----	2-Nitroaniline	1.2	25		U
99-09-2-----	3-Nitroaniline	1.0	25		U
100-01-6-----	4-Nitroaniline	2.0	25		U
98-95-3-----	Nitrobenzene	0.62	10		U
88-75-5-----	2-Nitrophenol	0.74	10		U
100-02-7-----	4-Nitrophenol	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.90	10		U
87-86-5-----	Pentachlorophenol	1.0	25		U
85-01-8-----	Phenanthrene	0.77	10		U
108-95-2-----	Phenol	0.46	10		U
129-00-0-----	Pyrene	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK0904BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: S1BW0904 Lab Sample ID: SBLK0904BW1

Instrument ID: BNA1 Date Extracted: 09/04/08

Matrix: (soil/water) WATER Date Analyzed: 09/05/08

Level:(low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 0735

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK0904BW1L	SBLK0904BW1LCS	S1LW0904	09/05/08
02	SBLK0904BW1L	SBLK0904BW1LCS	S1DW0904	09/05/08
03	01GW0601	0808268-02	0826802	09/05/08
04	01GW1701	0808268-04	0826804	09/05/08
05	01GW1601	0808268-05	0826805	09/05/08
06	01GW1601D	0808268-06	0826806	09/05/08
07	01GW1801	0808268-07	0826807	09/05/08
08	01GW1901	0808268-08	0826808	09/05/08
09	01GW2101	0808268-09	0826809	09/05/08
10	01GW2001	0808268-10	0826810	09/05/08
11				
12				
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COMMENTS:

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	50.00	0.0000	48.44	97	45-110
Acenaphthylene	50.00	0.0000	56.47	113*	50-105
Acetophenone	50.00	0.0000	41.43	83	50-110
Atrazine	50.00	0.0000	50.91	102	70-115
Anthracene	50.00	0.0000	52.77	106	55-110
Benzaldehyde	50.00	0.0000	68.79	138	10-180
Benzo (a) anthracene	50.00	0.0000	55.96	112*	55-110
Benzo (b) fluoranthene	50.00	0.0000	54.33	109	45-120
Benzo (k) fluoranthene	50.00	0.0000	51.64	103	45-125
Benzo (g, h, i) perylene	50.00	0.0000	42.80	86	40-125
Benzo (a) pyrene	50.00	0.0000	56.36	113*	55-110
1,1'-Biphenyl	50.00	0.0000	40.67	81	50-110
bis (2-Chloroethoxy) meth	50.00	0.0000	46.18	92	45-105
bis (2-Chloroethyl) ether	50.00	0.0000	39.35	79	35-110
bis (2-Chloroisopropyl) e	50.00	0.0000	41.33	83	25-130
Bis (2-ethylhexyl) phthal	50.00	6.219	95.26	178*	40-125
4-Bromophenyl-phenyleth	50.00	0.0000	39.21	78	50-115
Butylbenzylphthalate	50.00	0.0000	58.11	116*	45-115
Caprolactam	50.00	0.0000	10.32	21	20-110
4-Chloroaniline	50.00	0.0000	39.14	78	15-110
4-Chloro-3-methylphenol	50.00	0.0000	48.74	97	45-110
2-Chloronaphthalene	50.00	0.0000	44.63	89	50-105
2-Chlorophenol	50.00	0.0000	39.90	80	35-105
4-Chlorophenyl-phenylet	50.00	0.0000	45.42	91	50-110
Chrysene	50.00	0.0000	51.39	103	55-110
Dibenz (a, h) anthracene	50.00	0.0000	43.76	88	40-125
Dibenzofuran	50.00	0.0000	48.97	98	55-105
3,3'-Dichlorobenzidine	50.00	0.0000	45.31	91	20-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
2,4-Dichlorophenol	50.00	0.0000	47.03	94	50-105
Diethylphthalate	50.00	0.0000	45.72	91	40-120
2,4-Dimethylphenol	50.00	0.0000	56.30	113*	30-110
Dimethylphthalate	50.00	0.0000	43.54	87	25-125
Di-n-butylphthalate	50.00	0.0000	51.60	103	55-115
4,6-Dinitro-2-methylphe	50.00	0.0000	57.43	115	40-130
2,4-Dinitrophenol	50.00	0.0000	57.23	114	15-140
2,4-Dinitrotoluene	50.00	0.0000	50.75	102	50-120
2,6-Dinitrotoluene	50.00	0.0000	52.11	104	50-115
Di-n-octylphthalate	50.00	0.0000	57.08	114	35-135
Fluoranthene	50.00	0.0000	53.53	107	55-115
Fluorene	50.00	0.0000	48.67	97	50-110
Hexachlorobenzene	50.00	0.0000	51.73	103	50-110
Hexachlorobutadiene	50.00	0.0000	42.27	84	25-105
Hexachlorocyclopentadie	50.00	0.0000	48.45	97	10-110
Hexachloroethane	50.00	0.0000	38.43	77	30- 95
Indeno(1,2,3-cd)pyrene	50.00	0.0000	45.72	91	45-125
Isophorone	50.00	0.0000	44.01	88	50-110
2-Methylnaphthalene	50.00	0.0000	51.18	102	45-105
Naphthalene	50.00	0.0000	43.54	87	40-100
2-Methylphenol	50.00	0.0000	34.95	70	40-110
4-Methylphenol	50.00	0.0000	30.97	62	30-110
2-Nitroaniline	50.00	0.0000	47.14	94	50-115
3-Nitroaniline	50.00	0.0000	41.39	83	20-125
4-Nitroaniline	50.00	0.0000	45.73	91	35-120
Nitrobenzene	50.00	0.0000	39.13	78	45-110
2-Nitrophenol	50.00	0.0000	47.11	94	40-115
4-Nitrophenol	50.00	0.0000	14.74	29	0-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	QC. LIMITS REC.
N-Nitrosodiphenylamine	50.00	0.0000	45.40	91	50-110
N-Nitroso-di-n-prop. (1)	50.00	0.0000	40.18	80	35-130
Pentachlorophenol	50.00	0.0000	51.73	103	40-115
Phenanthrene	50.00	0.0000	48.00	96	50-115
Phenol	50.00	0.0000	16.71	33	0-115
Pyrene	50.00	0.0000	54.76	110	50-130
1,2,4,5-Tetrachlorobenz	50.00	0.0000	44.51	89	50-125
2,4,5-Trichlorophenol	50.00	0.0000	47.97	96	50-110
2,4,6-Trichlorophenol	50.00	0.0000	45.86	92	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	LCSD CONCENTRATION (UG/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	50.00	44.73	89	8	30	45-110
Acenaphthylene	50.00	54.31	109*	4	30	50-105
Acetophenone	50.00	41.27	82	0	30	50-110
Atrazine	50.00	47.20	94	8	30	70-115
Anthracene	50.00	46.32	93	13	30	55-110
Benzaldehyde	50.00	64.53	129	6	30	10-180
Benzo (a) anthracene	50.00	51.04	102	9	30	55-110
Benzo (b) fluoranthene	50.00	51.38	103	6	30	45-120
Benzo (k) fluoranthene	50.00	47.96	96	7	30	45-125
Benzo (g, h, i) perylene	50.00	49.72	99	15	30	40-125
Benzo (a) pyrene	50.00	50.49	101	11	30	55-110
1,1'-Biphenyl	50.00	39.00	78	4	30	50-110
bis (2-Chloroethoxy) meth	50.00	43.21	86	7	30	45-105
bis (2-Chloroethyl) ether	50.00	38.77	78	1	30	35-110
bis (2-Chloroisopropyl) e	50.00	38.68	77	7	30	25-130
Bis (2-ethylhexyl) phthal	50.00	53.35	94	56*	30	40-125
4-Bromophenyl-phenyleth	50.00	32.85	66	18	30	50-115
Butylbenzylphthalate	50.00	53.22	106	9	30	45-115
Caprolactam	50.00	10.01	20	3	30	20-110
4-Chloroaniline	50.00	35.36	71	10	30	15-110
4-Chloro-3-methylphenol	50.00	47.23	94	3	30	45-110
2-Chloronaphthalene	50.00	44.69	89	0	30	50-105
2-Chlorophenol	50.00	38.58	77	3	30	35-105
4-Chlorophenyl-phenylet	50.00	45.70	91	1	30	50-110
Chrysene	50.00	50.76	102	1	30	55-110
Dibenz (a, h) anthracene	50.00	48.64	97	10	30	40-125
Dibenzofuran	50.00	47.16	94	4	30	55-105
3,3'-Dichlorobenzidine	50.00	42.55	85	6	30	20-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	LCS CONCENTRATION (UG/L)	LCS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-Dichlorophenol	50.00	44.28	88	6	30	50-105
Diethylphthalate	50.00	44.34	89	3	30	40-120
2,4-Dimethylphenol	50.00	52.71	105	6	30	30-110
Dimethylphthalate	50.00	39.75	80	9	30	25-125
Di-n-butylphthalate	50.00	44.71	89	14	30	55-115
4,6-Dinitro-2-methylphe	50.00	52.16	104	10	30	40-130
2,4-Dinitrophenol	50.00	53.89	108	6	30	15-140
2,4-Dinitrotoluene	50.00	48.70	97	4	30	50-120
2,6-Dinitrotoluene	50.00	46.12	92	12	30	50-115
Di-n-octylphthalate	50.00	45.41	91	23	30	35-135
Fluoranthene	50.00	45.67	91	16	30	55-115
Fluorene	50.00	46.61	93	4	30	50-110
Hexachlorobenzene	50.00	43.51	87	17	30	50-110
Hexachlorobutadiene	50.00	43.08	86	2	30	25-105
Hexachlorocyclopentadie	50.00	47.74	95	1	30	10-110
Hexachloroethane	50.00	35.99	72	6	30	30- 95
Indeno (1,2,3-cd) pyrene	50.00	49.74	99	8	30	45-125
Isophorone	50.00	43.97	88	0	30	50-110
2-Methylnaphthalene	50.00	49.72	99	3	30	45-105
Naphthalene	50.00	43.97	88	1	30	40-100
2-Methylphenol	50.00	33.57	67	4	30	40-110
4-Methylphenol	50.00	31.15	62	0	30	30-110
2-Nitroaniline	50.00	41.04	82	14	30	50-115
3-Nitroaniline	50.00	36.26	72	13	30	20-125
4-Nitroaniline	50.00	43.14	86	6	30	35-120
Nitrobenzene	50.00	40.90	82	4	30	45-110
2-Nitrophenol	50.00	46.65	93	1	30	40-115
4-Nitrophenol	50.00	13.70	27	7	30	0-125

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: SBLK0909BW1

COMPOUND	SPIKE ADDED (UG/L)	LCSD CONCENTRATION (UG/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
N-Nitrosodiphenylamine	50.00	39.33	79	14	30	50-110
N-Nitroso-di-n-prop. (1)	50.00	39.71	79	1	30	35-130
Pentachlorophenol	50.00	45.32	91	13	30	40-115
Phenanthrene	50.00	43.62	87	10	30	50-115
Phenol	50.00	14.21	28	16	30	0-115
Pyrene	50.00	48.91	98	11	30	50-130
1,2,4,5-Tetrachlorobenz	50.00	46.07	92	3	30	50-125
2,4,5-Trichlorophenol	50.00	44.32	89	8	30	50-110
2,4,6-Trichlorophenol	50.00	45.38	91	1	30	50-115

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 65 outside limits
Spike Recovery: 7 out of 130 outside limits

COMMENTS: _____

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0909BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0909BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0909

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/09/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/09/08 15:56

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

83-32-9-----	Acenaphthene	0.63	10		U
208-96-8-----	Acenaphthylene	0.47	10		U
98-86-2-----	Acetophenone	0.75	10		U
1912-24-9-----	Atrazine	0.69	10		U
120-12-7-----	Anthracene	0.77	10		U
100-52-7-----	Benzaldehyde	0.57	10		U
56-55-3-----	Benzo (a) anthracene	0.91	10		U
205-99-2-----	Benzo (b) fluoranthene	0.71	10		U
207-08-9-----	Benzo (k) fluoranthene	0.50	10		U
191-24-2-----	Benzo (g, h, i) perylene	1.5	10		U
50-32-8-----	Benzo (a) pyrene	0.60	10		U
92-52-4-----	1, 1'-Biphenyl	0.39	10		U
111-91-1-----	bis (2-Chloroethoxy) methane	0.52	10		U
111-44-4-----	bis (2-Chloroethyl) ether	0.45	10		U
108-60-1-----	bis (2-Chloroisopropyl) ether	0.85	10		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	1.3	5.0	6.2	U
101-55-3-----	4-Bromophenyl-phenylether	0.57	10		U
85-68-7-----	Butylbenzylphthalate	0.82	10		U
105-60-2-----	Caprolactam	0.36	10		U
106-47-8-----	4-Chloroaniline	0.95	10		U
59-50-7-----	4-Chloro-3-methylphenol	0.58	10		U
91-58-7-----	2-Chloronaphthalene	0.58	10		U
95-57-8-----	2-Chlorophenol	0.59	10		U
7005-72-3-----	4-Chlorophenyl-phenylether	0.89	10		U
218-01-9-----	Chrysene	1.0	10		U
53-70-3-----	Dibenz (a, h) anthracene	1.7	10		U
132-64-9-----	Dibenzofuran	0.65	10		U
91-94-1-----	3, 3'-Dichlorobenzidine	0.89	10		U
120-83-2-----	2, 4-Dichlorophenol	0.44	10		U
84-66-2-----	Diethylphthalate	1.0	10		U
105-67-9-----	2, 4-Dimethylphenol	0.71	10		U
131-11-3-----	Dimethylphthalate	0.74	10		U
84-74-2-----	Di-n-butylphthalate	1.3	10		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0909BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: SBLK0909BW1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S1BW0909

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/09/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/09/08 15:56

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L Q
		MDL	RL	CONC	
534-52-1-----	4,6-Dinitro-2-methylphenol	0.74	25		U
51-28-5-----	2,4-Dinitrophenol	0.85	25		U
121-14-2-----	2,4-Dinitrotoluene	0.49	10		U
606-20-2-----	2,6-Dinitrotoluene	0.66	10		U
117-84-0-----	Di-n-octylphthalate	0.33	10		U
206-44-0-----	Fluoranthene	0.70	10		U
86-73-7-----	Fluorene	0.55	10		U
118-74-1-----	Hexachlorobenzene	0.47	10		U
87-68-3-----	Hexachlorobutadiene	0.93	10		U
77-47-4-----	Hexachlorocyclopentadiene	0.89	10		U
67-72-1-----	Hexachloroethane	0.46	10		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	1.4	10		U
78-59-1-----	Isophorone	0.55	10		U
91-57-6-----	2-Methylnaphthalene	0.68	10		U
91-20-3-----	Naphthalene	0.45	10		U
95-48-7-----	2-Methylphenol	0.83	10		U
106-44-5-----	4-Methylphenol	0.77	10		U
88-74-4-----	2-Nitroaniline	1.2	25		U
99-09-2-----	3-Nitroaniline	1.0	25		U
100-01-6-----	4-Nitroaniline	2.0	25		U
98-95-3-----	Nitrobenzene	0.62	10		U
88-75-5-----	2-Nitrophenol	0.74	10		U
100-02-7-----	4-Nitrophenol	0.83	25		U
86-30-6-----	N-Nitrosodiphenylamine (1)	0.46	10		U
621-64-7-----	N-Nitroso-di-n-propylamine	0.90	10		U
87-86-5-----	Pentachlorophenol	1.0	25		U
85-01-8-----	Phenanthrene	0.77	10		U
108-95-2-----	Phenol	0.46	10		U
129-00-0-----	Pyrene	0.65	10		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	3.0	10		U
95-95-4-----	2,4,5-Trichlorophenol	0.50	25		U
88-06-2-----	2,4,6-Trichlorophenol	0.73	10		U

(1) - Cannot be separated from Diphenylamine

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK0909BW1

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: S1BW0909 Lab Sample ID: SBLK0909BW1

Instrument ID: BNA1 Date Extracted: 09/09/08

Matrix: (soil/water) WATER Date Analyzed: 09/09/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 1556

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK0909BW1L	SBLK0909BW1LCS	S1LW0909	09/09/08
02	SBLK0909BW1L	SBLK0909BW1LCS	S1DW0909	09/09/08
03	01GW0901	0808268-03	826803RE	09/09/08
04				
05				
06				
07				
08				
09				
10				
11				
12				
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COMMENTS:

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B1 DFTPP Injection Date: 07/24/08

Instrument ID: BNA1 DFTPP Injection Time: 1025

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	40.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	19.9
365	Greater than 1.0% of mass 198	1.88
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	66.4
443	17.0 - 23.0% of mass 442	12.7 (19.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL001PPM	BNACAL001PPM	CAL001	07/24/08	1046
02	BNACAL005PPM	BNACAL005PPM	CAL005	07/24/08	1158
03	BNACAL010PPM	BNACAL010PPM	CAL010	07/24/08	1234
04	BNACAL020PPM	BNACAL020PPM	CAL020	07/24/08	1310
05	BNACAL040PPM	BNACAL040PPM	CAL040	07/24/08	1422
06	BNACAL050PPM	BNACAL050PPM	CAL050	07/24/08	1458
07	BNACAL060PPM	BNACAL060PPM	CAL060	07/24/08	1534
08	BNACAL070PPM	BNACAL070PPM	CAL070	07/24/08	1610
09	BNACAL080PPM	BNACAL080PPM	CAL080	07/24/08	1646
10	BNACAL090PPM	BNACAL090PPM	CAL090	07/24/08	1721
11	BNACAL100PPM	BNACAL100PPM	CAL100	07/24/08	1757
12	BNACAL001PPM	BNACAL001PPM	CALB001	07/24/08	1833
13	BNACAL002PPM	BNACAL002PPM	CALB002	07/24/08	1909
14	BNACAL005PPM	BNACAL005PPM	CALB005	07/24/08	1945
15	BNACAL010PPM	BNACAL010PPM	CALB010	07/24/08	2021
16	BNACAL020PPM	BNACAL020PPM	CALB020	07/24/08	2057
17	BNACAL050PPM	BNACAL050PPM	CALB050	07/24/08	2133
18	BNACAL070PPM	BNACAL070PPM	CALB070	07/24/08	2209
19					
20					
21					
22					

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Acenaphthene	AVRG		1.09139170		9.0
Acenaphthylene	AVRG		1.53182455		10.6
Acetophenone	2ORDR	0.00000000	0.64936256	0.10790983	0.995
Aniline	AVRG		1.65682728		12.6
Anthracene	AVRG		1.06648172		7.2
Benzoic acid	2ORDR	0.00000000	3.98005908	-1.0444470	0.995
Benzo(a)anthracene	AVRG		1.03077121		2.8
Benzo(b)fluoranthene	AVRG		1.05722188		6.6
Benzo(k)fluoranthene	AVRG		1.10885119		5.7
Benzo(g,h,i)perylene	AVRG		0.78210443		10.5
Benzo(a)pyrene	AVRG		0.93455939		9.1
Benzyl alcohol	AVRG		0.83895015		4.4
bis(2-Chloroethoxy)methane	AVRG		0.49345373		14.5
1,1'-Biphenyl	AVRG		1.47806094		14.3
bis(2-Chloroethyl)ether	LINR	0.00000000	1.45848833		0.996
bis(2-Chloroisopropyl)ether	AVRG		2.25983627		14.3
Bis(2-ethylhexyl)phthalate	AVRG		1.04861488		10.8
4-Bromophenyl-phenylether	AVRG		0.27331114		10.9
Butylbenzylphthalate	AVRG		0.81176373		9.4
Carbazole	AVRG		1.08597457		9.1
4-Chloroaniline	AVRG		0.42040722		6.8
Caprolactam	2ORDR	0.00000000	9.51295377	-1.7864253	0.990
4-Chloro-3-methylphenol	AVRG		0.27799591		5.0
2-Chloronaphthalene	AVRG		1.14444890		12.7
2-Chlorophenol	2ORDR	0.00000000	0.81163348	6.617e-002	0.995
4-Chlorophenyl-phenylether	AVRG		0.56066559		9.4
Chrysene	AVRG		0.97560077		5.1
Dibenz(a,h)anthracene	AVRG		0.73731945		10.8
Dibenzofuran	AVRG		1.49129502		13.8
1,4-Dichlorobenzene	AVRG		1.38341996		14.6
1,2-Dichlorobenzene	2ORDR	0.00000000	0.61311311	0.12904362	0.998
1,3-Dichlorobenzene	2ORDR	0.00000000	0.56974861	7.529e-002	0.999
2,4-Dichlorophenol	AVRG		0.31114275		7.7
Diethylphthalate	AVRG		1.39912579		8.8
2,4-Dimethylphenol	AVRG		0.27674878		10.6
Dimethylphthalate	AVRG		1.48965062		7.7
Di-n-butylphthalate	AVRG		1.67222367		8.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4,6-Trichlorophenol	AVRG		0.38204520		5.5
2-Fluorophenol	2ORDR	0.00000000	0.56691538	7.38e-002	0.996
Phenol-d6	2ORDR	0.00000000	0.52282494	4.688e-002	0.997
Nitrobenzene-d5	AVRG		0.43773029		9.9
2-Fluorobiphenyl	AVRG		1.37616048		14.6
2,4,6-Tribromophenol	AVRG		0.13495814		6.3
Terphenyl-d14	AVRG		0.86401658		5.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: *1XBN.m*
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969
 Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08
 Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
 RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Acenaphthene	1.194		1.269	1.212	1.148
Acenaphthylene	1.751		1.783	1.767	1.526
Acetophenone	1.655		1.564	1.476	1.337
Aniline	1.837		2.013	1.932	1.830
Anthracene	1.188		1.167	1.161	1.038
Benzoic acid	0.081		0.179	0.173	0.231
Benzo(a)anthracene	1.023		1.048	1.056	1.052
Benzo(b)fluoranthene	0.869		1.001	1.115	1.093
Benzo(k)fluoranthene	0.974		1.052	1.201	1.102
Benzo(g,h,i)perylene	0.580		0.807	0.857	0.842
Benzo(a)pyrene	0.696		0.898	1.008	0.968
Benzyl alcohol	0.768		0.844	0.858	0.896
bis(2-Chloroethoxy)methane	0.593		0.572	0.570	0.570
1,1'-Biphenyl	1.794		1.776	1.680	1.556
bis(2-Chloroethyl) ether	2.009		1.984	1.905	1.731
bis(2-Chloroisopropyl) ether	2.598		2.615	2.528	2.473
Bis(2-ethylhexyl)phthalate	0.734		1.012	1.063	1.116
4-Bromophenyl-phenylether	0.349		0.250	0.294	0.279
Butylbenzylphthalate	0.597		0.826	0.836	0.824
Carbazole	1.316		1.212	1.122	1.047
4-Chloroaniline	0.424		0.452	0.443	0.459
Caprolactam	0.095		0.074	0.094	0.109
4-Chloro-3-methylphenol	0.284		0.298	0.281	0.288
2-Chloronaphthalene	1.370		1.397	1.240	1.221
2-Chlorophenol	1.501		1.480	1.375	1.384
4-Chlorophenyl-phenylether	0.668		0.639	0.601	0.559
Chrysene	1.015		1.063	1.022	0.976
Dibenz(a,h)anthracene	0.524		0.784	0.758	0.729
Dibenzofuran	1.872		1.776	1.689	1.540
1,4-Dichlorobenzene	1.659		1.626	1.641	1.554
1,2-Dichlorobenzene	1.607		1.655	1.586	1.520
1,3-Dichlorobenzene	1.888		1.812	1.870	1.689
2,4-Dichlorophenol	0.296		0.350	0.340	0.335
Diethylphthalate	1.474		1.592	1.609	1.467
2,4-Dimethylphenol	0.317		0.331	0.290	0.281
Dimethylphthalate	1.581		1.678	1.649	1.555
Di-n-butylphthalate	1.716		1.889	1.846	1.742

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
4,6-Dinitro-2-methylphenol	0.034		0.095	0.110	0.135
2,4-Dinitrophenol	0.045		0.085	0.088	0.125
2,4-Dinitrotoluene	0.257		0.418	0.419	0.444
2,6-Dinitrotoluene	0.244		0.359	0.352	0.373
Di-n-octylphthalate	0.846		1.553	1.722	1.939
1,2-Diphenylhydrazine	1.358		1.212	1.223	1.135
Fluoranthene	1.192		1.154	1.159	1.133
Fluorene	1.238		1.433	1.268	1.196
Hexachlorobenzene	0.344		0.262	0.279	0.262
Hexachlorobutadiene	0.201		0.214	0.221	0.212
Hexachlorocyclopentadiene	0.257		0.296	0.285	0.286
Hexachloroethane	0.685		0.701	0.717	0.722
Indeno(1,2,3-cd)pyrene	0.468		0.693	0.758	0.782
Isophorone	0.876		0.905	0.892	0.940
2-Methylnaphthalene	0.542		0.672	0.574	0.538
1-Methylnaphthalene	0.553		0.590	0.538	0.505
4-Methylphenol	1.161		1.236	1.161	1.151
2-Methylphenol	1.174		1.199	1.141	1.187
Naphthalene	1.077		1.093	1.009	1.034
3-Methylphenol	1.168		1.236	1.161	1.151
2-Nitroaniline	0.349		0.360	0.388	0.418
3-Nitroaniline	0.238		0.361	0.388	0.412
4-Nitroaniline	0.241		0.240	0.225	0.272
Nitrobenzene	0.524		0.473	0.494	0.488
2-Nitrophenol	0.243		0.279	0.257	0.279
4-Nitrophenol	0.143		0.200	0.204	0.228
N-Nitroso-di-methylamine	0.568		0.647	0.727	0.772
N-Nitrosodiphenylamine	0.780		0.718	0.724	0.680
N-Nitroso-di-n-propylamine	1.005		1.050	1.027	0.937
Pentachlorophenol	0.110		0.135	0.159	0.169
Phenanthrene	1.436		1.169	1.177	1.056
Phenol	1.991		1.855	1.861	1.825
Pyrene	1.297		1.295	1.228	1.215
Pyridine	1.715		1.839	1.955	1.984
1,2,4,5-Tetrachlorobenzene	0.299		0.315	0.263	0.263
1,2,4-Trichlorobenzene	0.414		0.409	0.396	0.390
2,4,5-Trichlorophenol	0.338		0.416	0.428	0.416

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
=====	=====	=====	=====	=====	=====
2,4,6-Trichlorophenol	0.389		0.409	0.408	0.406
=====	=====	=====	=====	=====	=====
2-Fluorophenol	1.592		1.686	1.679	1.617
Phenol-d6	1.880		1.948	1.949	1.842
Nitrobenzene-d5	0.490		0.468	0.497	0.484
2-Fluorobiphenyl	1.706		1.583	1.686	1.467
2,4,6-Tribromophenol	0.114		0.127	0.135	0.136
Terphenyl-d14	0.924		0.921	0.833	0.868

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
4,6-Dinitro-2-methylphenol		0.181	0.174	0.191	0.196
2,4-Dinitrophenol		0.171	0.212	0.214	0.212
2,4-Dinitrotoluene		0.402	0.460	0.421	0.456
2,6-Dinitrotoluene		0.370	0.389	0.393	0.393
Di-n-octylphthalate		2.166	2.117	2.197	2.059
1,2-Diphenylhydrazine		1.206	1.043	0.997	1.026
Fluoranthene		1.151	1.052	0.990	0.998
Fluorene		1.105	1.238	1.134	1.146
Hexachlorobenzene		0.267	0.242	0.242	0.258
Hexachlorobutadiene		0.196	0.174	0.187	0.180
Hexachlorocyclopentadiene		0.281	0.296	0.281	0.297
Hexachloroethane		0.607	0.626	0.575	0.601
Indeno(1,2,3-cd)pyrene		0.688	0.753	0.757	0.836
Isophorone		0.861	0.749	0.811	0.816
2-Methylnaphthalene		0.513	0.472	0.520	0.513
1-Methylnaphthalene		0.512	0.444	0.495	0.490
4-Methylphenol		1.108	1.082	1.036	1.096
2-Methylphenol		1.087	1.092	1.056	1.168
Naphthalene		0.910	0.812	0.852	0.785
3-Methylphenol		1.108	1.082	1.036	1.096
2-Nitroaniline		0.360	0.395	0.384	0.406
3-Nitroaniline		0.431	0.443	0.416	0.444
4-Nitroaniline		0.321	0.394	0.364	0.395
Nitrobenzene		0.450	0.401	0.399	0.398
2-Nitrophenol		0.272	0.234	0.272	0.269
4-Nitrophenol		0.228	0.236	0.249	0.256
N-Nitroso-di-methylamine		0.674	0.671	0.675	0.647
N-Nitrosodiphenylamine		0.766	0.656	0.654	0.634
N-Nitroso-di-n-propylamine		0.870	0.874	0.810	0.860
Pentachlorophenol		0.194	0.185	0.196	0.205
Phenanthrene		1.151	1.034	1.015	1.040
Phenol		1.524	1.463	1.428	1.439
Pyrene		1.216	1.250	1.240	1.184
Pyridine		1.759	1.786	1.764	1.769
1,2,4,5-Tetrachlorobenzene		0.278	0.243	0.262	0.252
1,2,4-Trichlorobenzene		0.354	0.328	0.343	0.324
2,4,5-Trichlorophenol		0.369	0.411	0.416	0.419

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
=====	=====	=====	=====	=====	=====
2,4,6-Trichlorophenol		0.370	0.395	0.369	0.384
=====	=====	=====	=====	=====	=====
2-Fluorophenol		1.275	1.290	1.134	1.190
Phenol-d6		1.483	1.427	1.370	1.376
Nitrobenzene-d5		0.432	0.365	0.446	0.414
2-Fluorobiphenyl		1.277	1.288	1.279	1.278
2,4,6-Tribromophenol		0.146	0.138	0.134	0.137
Terphenyl-d14		0.793	0.924	0.913	0.849

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
Acenaphthene	1.017	1.002	0.987
Acenaphthylene	1.426	1.322	1.353
Acetophenone	1.097	1.090	1.050
Aniline	1.472	1.413	1.498
Anthracene	1.038	0.994	0.985
Benzoic acid	0.289	0.298	
Benzo(a)anthracene	1.028	0.978	0.985
Benzo(b)fluoranthene	1.110	1.092	1.086
Benzo(k)fluoranthene	1.114	1.156	1.150
Benzo(g,h,i)perylene	0.810	0.702	0.812
Benzo(a)pyrene	0.977	0.968	0.958
Benzyl alcohol	0.798	0.857	0.834
bis(2-Chloroethoxy)methane	0.440	0.406	0.398
1,1'-Biphenyl	1.253	1.202	
bis(2-Chloroethyl) ether	1.443		
bis(2-Chloroisopropyl) ether			
Bis(2-ethylhexyl)phthalate	1.054	1.028	1.053
4-Bromophenyl-phenylether	0.269	0.269	0.254
Butylbenzylphthalate	0.807	0.820	0.818
Carbazole	1.036	0.998	1.009
4-Chloroaniline	0.402	0.367	0.386
Caprolactam	0.114	0.102	0.110
4-Chloro-3-methylphenol	0.267	0.251	0.270
2-Chloronaphthalene	0.996	0.982	0.998
2-Chlorophenol	1.022	1.044	1.024
4-Chlorophenyl-phenylether	0.529	0.520	0.519
Chrysene	0.911	0.959	0.904
Dibenz(a,h)anthracene	0.780	0.705	0.768
Dibenzofuran	1.369	1.241	1.292
1,4-Dichlorobenzene	1.217	1.146	1.139
1,2-Dichlorobenzene	1.114	1.066	1.058
1,3-Dichlorobenzene	1.284	1.276	1.248
2,4-Dichlorophenol	0.310	0.282	0.274
Diethylphthalate	1.296	1.256	1.294
2,4-Dimethylphenol	0.260	0.255	0.243
Dimethylphthalate	1.427	1.310	1.380
Di-n-butylphthalate	1.640	1.483	1.492

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
4,6-Dinitro-2-methylphenol	0.186	0.210	0.202
2,4-Dinitrophenol	0.213	0.233	0.243
2,4-Dinitrotoluene	0.440	0.408	0.446
2,6-Dinitrotoluene	0.365	0.386	0.402
Di-n-octylphthalate	2.232		
1,2-Diphenylhydrazine	1.061	0.912	0.990
Fluoranthene	1.085	1.014	1.016
Fluorene	1.159	1.114	1.122
Hexachlorobenzene	0.252	0.247	0.244
Hexachlorobutadiene	0.179	0.154	0.161
Hexachlorocyclopentadiene	0.286	0.273	0.292
Hexachloroethane	0.564	0.587	0.564
Indeno(1,2,3-cd)pyrene	0.782	0.705	0.754
Isophorone	0.787	0.767	0.778
2-Methylnaphthalene	0.467	0.423	0.422
1-Methylnaphthalene	0.409	0.388	0.414
4-Methylphenol	1.003	0.989	0.988
2-Methylphenol	1.075	1.078	1.115
Naphthalene	0.780		
3-Methylphenol	1.003	0.989	0.991
2-Nitroaniline	0.381	0.374	0.381
3-Nitroaniline	0.406	0.400	0.438
4-Nitroaniline	0.375	0.378	0.390
Nitrobenzene	0.398	0.360	0.356
2-Nitrophenol	0.267	0.245	0.246
4-Nitrophenol	0.235	0.232	0.256
N-Nitroso-di-methylamine	0.653	0.646	0.639
N-Nitrosodiphenylamine	0.678	0.646	0.642
N-Nitroso-di-n-propylamine	0.775	0.836	0.805
Pentachlorophenol	0.204	0.196	0.202
Phenanthrene	1.012	0.982	0.982
Phenol	1.368		
Pyrene	1.109	1.141	1.104
Pyridine	1.682	1.759	1.755
1,2,4,5-Tetrachlorobenzene	0.235	0.209	0.232
1,2,4-Trichlorobenzene	0.312	0.295	0.288
2,4,5-Trichlorophenol	0.377	0.390	0.386

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
=====	=====	=====	=====
2,4,6-Trichlorophenol	0.361	0.361	0.349
=====	=====	=====	=====
2-Fluorophenol	1.128	1.056	1.055
Phenol-d6	1.311	1.217	1.254
Nitrobenzene-d5	0.416	0.389	0.415
2-Fluorobiphenyl	1.277	1.144	1.153
2,4,6-Tribromophenol	0.145	0.136	0.136
Terphenyl-d14	0.826	0.833	0.821

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF1: CALB001 RF2: CALB002 RF5: CALB005
RF10: CALB010 RF20: CALB020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Atrazine	0.184	0.191	0.200	0.236	0.214
Benzaldehyde	1.154	1.185	1.280	1.324	1.156
Benzidine	0.359	0.481	0.590	0.761	0.705
3,3'-Dichlorobenzidine	0.247	0.299	0.343	0.373	0.357
2,3,4,6-Tetrachlorophenol	0.150	0.186	0.186	0.233	0.232

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF30: RF40: RF50: CALB050
RF60: RF70: CALB070

COMPOUND	RF30	RF40	RF50	RF60	RF70
Atrazine			0.191		0.190
Benzaldehyde			0.946		0.895
Benzidine			0.679		0.684
3,3'-Dichlorobenzidine			0.344		0.358
2,3,4,6-Tetrachlorophenol			0.232		0.238

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF80: CALB080 RF90: RF100: CALB100

COMPOUND	RF80	RF90	RF100
Atrazine	0.199		0.194
Benzaldehyde			
Benzidine			
3,3'-Dichlorobenzidine	0.415		
2,3,4,6-Tetrachlorophenol	0.258		0.243

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF1: CALB001 RF2: CALB002 RF5: CALB005
RF10: CALB010 RF20: CALB020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Atrazine	0.184	0.191	0.200	0.236	0.214
Benzaldehyde	1.154	1.185	1.280	1.324	1.156
Benzidine	0.359	0.481	0.590	0.761	0.705
3,3'-Dichlorobenzidine	0.247	0.299	0.343	0.373	0.357
2,3,4,6-Tetrachlorophenol	0.150	0.186	0.186	0.233	0.232

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF80: CALB080 RF90: RF100: CALB100

COMPOUND	RF80	RF90	RF100
Atrazine	0.199		0.194
Benzaldehyde			
Benzidine			
3,3'-Dichlorobenzidine	0.415		
2,3,4,6-Tetrachlorophenol	0.258		0.243

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B2 DFTPP Injection Date: 07/24/08

Instrument ID: ENA1 DFTPP Injection Time: 2241

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.8
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	42.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.0% of mass 198	1.59
441	Present, but less than mass 443	9.1
442	Greater than 40.0% of mass 198	55.6
443	17.0 - 23.0% of mass 442	11.5 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL080PPM	BNACAL080PPM	CALB080	07/24/08	2302
02	BNACAL100PPM	BNACAL100PPM	CALB100	07/24/08	2338
03	BNAICV050PPM	BNAICV050PPM	ICVEX	07/25/08	0014
04	BNAICV050PPM	BNAICV050PPM	ICVMAN	07/25/08	0050
05	BNAICV050PPM	BNAICV050PPM	ICV02	07/25/08	0126
06	BNAICV050PPM	BNAICV050PPM	ICV03	07/25/08	0202
07	CALAP9C001PP	CALAP9C001PPM	CAP9C001	07/25/08	0238
08	CALAP9C002PP	CALAP9C002PPM	CAP9C002	07/25/08	0314
09	CALAP9C005PP	CALAP9C005PPM	CAP9C005	07/25/08	0349
10	CALAP9C010PP	CALAP9C010PPM	CAP9C010	07/25/08	0425
11	CALAP9C020PP	CALAP9C020PPM	CAP9C020	07/25/08	0501
12	CALAP9C030PP	CALAP9C030PPM	CAP9C030	07/25/08	0537
13	CALAP9C050PP	CALAP9C050PPM	CAP9C050	07/25/08	0612
14	CALAP9C070PP	CALAP9C070PPM	CAP9C070	07/25/08	0648
15	CALAP9C100PP	CALAP9C100PPM	CAP9C100	07/25/08	0724
16	CALAP9A001PP	CALAP9A001PPM	CAP9A001	07/25/08	0800
17	CALAP9A002PP	CALAP9A002PPM	CAP9A002	07/25/08	0836
18	CALAP9A005PP	CALAP9A005PPM	CAP9A005	07/25/08	0912
19	CALAP9A010PP	CALAP9A010PPM	CAP9A010	07/25/08	0948
20	BNAICV050PPM	BNAICV050PPM	ICVEX1	07/25/08	1024
21					
22					

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.121	50.00	51.34		AVRG	2.7	25.0
Acenaphthylene	1.532	1.727	50.00	56.37		AVRG	12.7	25.0
Aniline	1.657	1.765	50.00	53.28		AVRG	6.6	25.0
Anthracene	1.066	1.183	50.00	55.46		AVRG	10.9	25.0
Atrazine	0.200	0.191	50.00	0.0000		AVRG	-4.5	25.0
Benzaldehyde	1.134	0.946	50.00	0.0000		AVRG	-16.6	25.0
Benzoic acid	0.239	0.252	50.00	45.95		2ORDR	-8.1	25.0
Benzo (a) anthracene	1.031	1.150	50.00	55.78		AVRG	11.6	25.0
Benzo (b) fluoranthene	1.057	1.102	50.00	52.09		AVRG	4.2	25.0
Benzo (k) fluoranthene	1.109	1.163	50.00	52.43		AVRG	4.9	25.0
Benzo (g,h,i) perylene	0.782	0.829	50.00	52.98		AVRG	6.0	25.0
Benzo (a) pyrene	0.935	1.038	50.00	55.52		AVRG	11.0	25.0
Benzyl alcohol	0.839	0.810	50.00	48.26		AVRG	-3.5	25.0
1,1'-Biphenyl	1.478	1.402	50.00	0.0000		AVRG	-5.1	25.0
bis (2-Chloroethoxy) methane	0.493	0.481	50.00	48.78		AVRG	-2.4	25.0
bis (2-Chloroethyl) ether	1.652	1.326	50.00	45.46		LINR	-9.1	25.0
bis (2-Chloroisopropyl) ether	2.260	2.091	50.00	46.27		AVRG	-7.5	25.0
Bis (2-ethylhexyl) phthalate	1.048	1.134	50.00	54.05		AVRG	8.1	25.0
4-Bromophenyl-phenylether	0.273	0.243	50.00	44.49		AVRG	-11.0	25.0
Butylbenzylphthalate	0.812	0.912	50.00	56.20		AVRG	12.4	25.0
4-Chloroaniline	0.420	0.447	50.00	53.18		AVRG	6.4	25.0
4-Chloro-3-methylphenol	0.278	0.292	50.00	52.45		AVRG	4.9	25.0
2-Chloronaphthalene	1.144	1.234	50.00	53.94		AVRG	7.9	25.0
2-Chlorophenol	1.197	1.251	50.00	57.25		2ORDR	14.5	25.0
4-Chlorophenyl-phenylether	0.561	0.561	50.00	50.04		AVRG	0.1	25.0
Chrysene	0.976	1.112	50.00	57.00		AVRG	14.0	25.0
Dibenz (a,h) anthracene	0.737	0.775	50.00	52.58		AVRG	5.2	25.0
Dibenzofuran	1.491	1.439	50.00	48.25		AVRG	-3.5	25.0
1,2-Dichlorobenzene	1.313	1.313	50.00	54.16		2ORDR	8.3	25.0
1,4-Dichlorobenzene	1.383	1.274	50.00	46.06		AVRG	-7.9	25.0
1,3-Dichlorobenzene	1.513	1.396	50.00	48.94		2ORDR	-2.1	25.0
2,4-Dichlorophenol	0.311	0.304	50.00	48.78		AVRG	-2.4	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969
 Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050
 Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08
 Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.247	50.00	44.55		AVRG	-10.9	25.0
2,4-Dimethylphenol	0.277	0.331	50.00	59.78		AVRG	19.6	25.0
Dimethylphthalate	1.490	1.386	50.00	46.54		AVRG	-6.9	25.0
Di-n-butylphthalate	1.672	1.620	50.00	48.44		AVRG	-3.1	25.0
4,6-Dinitro-2-methylphenol	0.156	0.200	50.00	55.35		2ORDR	10.7	25.0
2,4-Dinitrophenol	0.167	0.200	50.00	51.09	0.050	2ORDR	2.2	25.0
2,4-Dinitrotoluene	0.416	0.387	50.00	46.57		AVRG	-6.8	25.0
2,6-Dinitrotoluene	0.366	0.372	50.00	50.76		AVRG	1.5	25.0
Di-n-octylphthalate	1.870	2.025	50.00	46.98		LINR	-6.0	25.0
1,2-Diphenylhydrazine	1.106	1.109	50.00	50.13		AVRG	0.3	25.0
Fluoranthene	1.086	1.166	50.00	53.69		AVRG	7.4	25.0
Fluorene	1.196	1.174	50.00	49.08		AVRG	-1.8	25.0
Hexachlorobenzene	0.264	0.271	50.00	51.38		AVRG	2.8	25.0
Hexachlorobutadiene	0.189	0.185	50.00	48.92		AVRG	-2.2	25.0
Hexachlorocyclopentadiene	0.284	0.298	50.00	52.34	0.050	AVRG	4.7	25.0
Hexachloroethane	0.632	0.578	50.00	45.72		AVRG	-8.6	25.0
Indeno(1,2,3-cd)pyrene	0.725	0.760	50.00	52.43		AVRG	4.9	25.0
Isophorone	0.835	0.779	50.00	46.69		AVRG	-6.6	25.0
1-Methylnaphthalene	0.485	0.478	50.00	49.29		AVRG	-1.4	25.0
2-Methylnaphthalene	0.514	0.512	50.00	49.76		AVRG	-0.5	25.0
Naphthalene	0.928	0.939	50.00	50.61		AVRG	1.2	25.0
4-Methylphenol	1.092	1.161	50.00	53.17		AVRG	6.3	25.0
3-Methylphenol	1.093	1.161	50.00	53.13		AVRG	6.2	25.0
2-Methylphenol	1.125	1.075	50.00	47.79		AVRG	-4.4	25.0
2-Nitroaniline	0.381	0.394	50.00	51.59		AVRG	3.2	25.0
3-Nitroaniline	0.398	0.368	50.00	46.28		AVRG	-7.4	25.0
4-Nitroaniline	0.327	0.314	50.00	44.05		2ORDR	-11.9	25.0
Nitrobenzene	0.431	0.441	50.00	51.21		AVRG	2.4	25.0
2-Nitrophenol	0.260	0.262	50.00	50.29		AVRG	0.6	25.0
4-Nitrophenol	0.224	0.232	50.00	51.60	0.050	AVRG	3.2	25.0
N-Nitroso-di-methylamine	0.665	0.562	50.00	42.23		AVRG	-15.5	25.0
N-Nitrosodiphenylamine (1)	0.689	0.636	50.00	46.12		AVRG	-7.8	25.0
N-Nitroso-di-n-propylamine	0.895	0.841	50.00	46.95	0.050	AVRG	-6.1	25.0
Pentachlorophenol	0.178	0.211	50.00	52.84		LINR	5.7	25.0
Phenanthrene	1.096	1.143	50.00	52.15		AVRG	4.3	25.0
Phenol	1.639	1.684	50.00	51.35		AVRG	2.7	25.0

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.342	50.00	55.57		AVRG	11.1	25.0
Pyridine	1.797	1.712	50.00	47.63		AVRG	-4.7	25.0
1,2,4-Trichlorobenzene	0.350	0.300	50.00	42.76		AVRG	-14.5	25.0
2,4,5-Trichlorophenol	0.397	0.419	50.00	52.74		AVRG	5.5	25.0
2,4,6-Trichlorophenol	0.382	0.390	50.00	51.00		AVRG	2.0	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0014

Lab File ID: ICVEX Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzidine	0.608	0.902	50.00	65.92		LINR	31.8	25.0
3,3'-Dichlorobenzidine	0.342	0.458	50.00	66.98		AVRG	34.0	25.0

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: DF0903B1 DFTPP Injection Date: 09/03/08

Instrument ID: BNA1 DFTPP Injection Time: 0645

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 1.0% of mass 198	1.62
441	Present, but less than mass 443	9.8
442	Greater than 40.0% of mass 198	63.9
443	17.0 - 23.0% of mass 442	12.6 (19.6)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050	09/03/08	0708
02	SBLK0902BW1	SBLK0902BW1	S1BW0902	09/03/08	0745
03	SBLK0902BW1L	SBLK0902BW1LCS	S1LW0902	09/03/08	0821
04	01GW0701	0808253-02	0825302	09/03/08	1352
05	01GW0701D	0808253-03	0825303	09/03/08	1429
06	01GW0801	0808253-04	0825304	09/03/08	1505
07	01GW1201	0808253-05	0825305	09/03/08	1542
08	01GW1301	0808253-06	0825306	09/03/08	1620
09	01GW1101	0808253-07	0825307	09/03/08	1656
10	01GW1501	0808253-08	0825308	09/03/08	1733
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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/03/08 Time: 0708

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.349	50.00	55.88		AVRG	11.8	
Pyridine	1.797	1.654	50.00	46.03		AVRG	-7.9	
1,2,4,5-Tetrachlorobenzene	0.259	0.280	50.00	53.94		AVRG	7.9	
2,3,4,6-Tetrachlorophenol	0.218	0.290	50.00	59.26		LINR	18.5	
1,2,4-Trichlorobenzene	0.350	0.338	50.00	48.23		AVRG	-3.5	
2,4,5-Trichlorophenol	0.397	0.399	50.00	50.26		AVRG	0.5	
2,4,6-Trichlorophenol	0.382	0.380	50.00	49.76		AVRG	-0.5	20.0
2-Fluorophenol	1.336	1.348	100.0	109.9		2ORDR	9.9	
Phenol-d6	1.551	1.440	100.0	99.60		2ORDR	-0.4	
Nitrobenzene-d5	0.438	0.408	50.00	46.66		AVRG	-6.7	
2-Fluorobiphenyl	1.376	1.303	50.00	47.34		AVRG	-5.3	
2,4,6-Tribromophenol	0.135	0.131	100.0	96.97		AVRG	-3.0	
Terphenyl-d14	0.864	1.023	50.00	59.19		AVRG	18.4	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: DF0903B2 DFTPP Injection Date: 09/03/08

Instrument ID: BNA1 DFTPP Injection Time: 1956

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.4
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	44.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	18.4
365	Greater than 1.0% of mass 198	1.95
441	Present, but less than mass 443	7.7
442	Greater than 40.0% of mass 198	48.0
443	17.0 - 23.0% of mass 442	9.7 (20.3)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050E	09/03/08	2018
02	01GW1401	0808253-09	0825309	09/03/08	2054
03	01GW1001	0808253-10	0825310	09/03/08	2131
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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/03/08 Time: 2018

Lab File ID: CCV050E Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.099	50.00	50.35		AVRG	0.7	20.0
Acenaphthylene	1.532	1.594	50.00	52.02		AVRG	4.0	
Acetophenone	1.286	1.243	50.00	50.78		2ORDR	1.6	
Aniline	1.657	1.484	50.00	44.77		AVRG	-10.4	
Anthracene	1.066	0.968	50.00	45.40		AVRG	-9.2	
Atrazine	0.200	0.150	50.00	37.40		AVRG	-25.2	
Benzaldehyde	1.134	0.974	50.00	42.95		AVRG	-14.1	
Benzidine	0.608	0.051	50.00	3.732		LINR	-92.5	
Benzoic acid	0.239	0.253	50.00	46.14		2ORDR	-7.7	
Benzo (a) anthracene	1.031	1.075	50.00	52.15		AVRG	4.3	
Benzo (b) fluoranthene	1.057	1.174	50.00	55.53		AVRG	11.0	
Benzo (k) fluoranthene	1.109	1.180	50.00	53.23		AVRG	6.5	
Benzo (g, h, i) perylene	0.782	0.687	50.00	43.91		AVRG	-12.2	
Benzo (a) pyrene	0.935	0.998	50.00	53.41		AVRG	6.8	20.0
Benzyl alcohol	0.839	0.851	50.00	50.74		AVRG	1.5	
1, 1'-Biphenyl	1.478	1.396	50.00	47.22		AVRG	-5.6	
bis (2-Chloroethoxy) methane	0.493	0.441	50.00	44.68		AVRG	-10.6	
bis (2-Chloroethyl) ether	1.652	1.527	50.00	52.36		LINR	4.7	
bis (2-Chloroisopropyl) ether	2.260	1.933	50.00	42.76		AVRG	-14.5	
Bis (2-ethylhexyl) phthalate	1.048	1.218	50.00	58.09		AVRG	16.2	
4-Bromophenyl-phenylether	0.273	0.246	50.00	45.02		AVRG	-10.0	
Butylbenzylphthalate	0.812	0.986	50.00	60.74		AVRG	21.5	
Caprolactam	0.103	0.121	50.00	55.98		2ORDR	12.0	
Carbazole	1.086	1.020	50.00	46.94		AVRG	-6.1	
4-Chloroaniline	0.420	0.438	50.00	52.16		AVRG	4.3	
4-Chloro-3-methylphenol	0.278	0.303	50.00	54.52		AVRG	9.0	20.0
2-Chloronaphthalene	1.144	1.109	50.00	48.47		AVRG	-3.1	
2-Chlorophenol	1.197	1.170	50.00	53.12		2ORDR	6.2	
4-Chlorophenyl-phenylether	0.561	0.580	50.00	51.70		AVRG	3.4	
Chrysene	0.976	0.978	50.00	50.12		AVRG	0.2	
Dibenz (a, h) anthracene	0.737	0.690	50.00	46.79		AVRG	-6.4	
Dibenzofuran	1.491	1.456	50.00	48.80		AVRG	-2.4	
1, 2-Dichlorobenzene	1.313	1.267	50.00	51.78		2ORDR	3.6	
1, 4-Dichlorobenzene	1.383	1.332	50.00	48.16		AVRG	-3.7	20.0
1, 3-Dichlorobenzene	1.513	1.447	50.00	51.09		2ORDR	2.2	
3, 3'-Dichlorobenzidine	0.342	0.304	50.00	44.40		AVRG	-11.2	
2, 4-Dichlorophenol	0.311	0.315	50.00	50.60		AVRG	1.2	20.0

NTCC

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/03/08 Time: 2018

Lab File ID: CCV050E Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.504	50.00	53.75		AVRG	7.5	
2,4-Dimethylphenol	0.277	0.256	50.00	46.34		AVRG	-7.3	
Dimethylphthalate	1.490	1.515	50.00	50.85		AVRG	1.7	
Di-n-butylphthalate	1.672	1.665	50.00	49.79		AVRG	-0.4	
4,6-Dinitro-2-methylphenol	0.156	0.146	50.00	41.61		2ORDR	-16.8	
2,4-Dinitrophenol	0.167	0.158	50.00	41.42	0.050	2ORDR	-17.2	
2,4-Dinitrotoluene	0.416	0.458	50.00	55.05		AVRG	10.1	
2,6-Dinitrotoluene	0.366	0.398	50.00	54.39		AVRG	8.8	
1,2-Diphenylhydrazine	1.106	0.934	50.00	42.26		AVRG	-15.5	
Di-n-octylphthalate	1.870	2.914	50.00	67.57		LINR	35.1	20.0 <
Fluoranthene	1.086	0.965	50.00	44.46		AVRG	-11.1	20.0
Fluorene	1.196	1.226	50.00	51.29		AVRG	2.6	
Hexachlorobenzene	0.264	0.250	50.00	47.31		AVRG	-5.4	
Hexachlorobutadiene	0.189	0.173	50.00	45.69		AVRG	-8.6	20.0
Hexachlorocyclopentadiene	0.284	0.229	50.00	40.20	0.050	AVRG	-19.6	
Hexachloroethane	0.632	0.620	50.00	49.03		AVRG	-1.9	
Indeno (1, 2, 3-cd) pyrene	0.725	0.667	50.00	45.99		AVRG	-8.0	
Isophorone	0.835	0.819	50.00	49.05		AVRG	-1.9	
1-Methylnaphthalene	0.485	0.496	50.00	51.08		AVRG	2.2	
2-Methylnaphthalene	0.514	0.526	50.00	51.12		AVRG	2.2	
3-Methylphenol	1.093	1.100	50.00	50.33		AVRG	0.7	
4-Methylphenol	1.092	1.100	50.00	50.37		AVRG	0.7	
2-Methylphenol	1.125	1.141	50.00	50.74		AVRG	1.5	
Naphthalene	0.928	0.852	50.00	45.88		AVRG	-8.2	
2-Nitroaniline	0.381	0.380	50.00	49.81		AVRG	-0.4	
3-Nitroaniline	0.398	0.430	50.00	54.09		AVRG	8.2	
4-Nitroaniline	0.327	0.375	50.00	51.92		2ORDR	3.8	
Nitrobenzene	0.431	0.390	50.00	45.26		AVRG	-9.5	
2-Nitrophenol	0.260	0.262	50.00	50.37		AVRG	0.7	20.0
4-Nitrophenol	0.224	0.184	50.00	41.11	0.050	AVRG	-17.8	
N-Nitroso-di-methylamine	0.665	0.567	50.00	42.63		AVRG	-14.7	
N-Nitrosodiphenylamine (1)	0.689	0.582	50.00	42.21		AVRG	-15.6	20.0
N-Nitroso-di-n-propylamine	0.895	0.849	50.00	47.40	0.050	AVRG	-5.2	
Pentachlorophenol	0.178	0.170	50.00	42.74		LINR	-14.5	20.0
Phenanthrene	1.096	1.030	50.00	47.00		AVRG	-6.0	
Phenol	1.639	1.584	50.00	48.31		AVRG	-3.4	20.0

(1) Cannot be separated from Diphenylamine

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/03/08 Time: 2018

Lab File ID: CCV050E Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.381	50.00	57.21		AVRG	14.4	
Pyridine	1.797	1.534	50.00	42.66		AVRG	-14.7	
1,2,4,5-Tetrachlorobenzene	0.259	0.256	50.00	49.48		AVRG	-1.0	
2,3,4,6-Tetrachlorophenol	0.218	0.305	50.00	62.32		LINR	24.6	
1,2,4-Trichlorobenzene	0.350	0.340	50.00	48.55		AVRG	-2.9	
2,4,5-Trichlorophenol	0.397	0.417	50.00	52.47		AVRG	4.9	
2,4,6-Trichlorophenol	0.382	0.392	50.00	51.28		AVRG	2.6	20.0
2-Fluorophenol	1.336	1.281	100.0	102.9		2ORDR	2.9	
Phenol-d6	1.551	1.517	100.0	106.3		2ORDR	-6.3	
Nitrobenzene-d5	0.438	0.407	50.00	46.44		AVRG	-7.1	
2-Fluorobiphenyl	1.376	1.233	50.00	44.81		AVRG	-10.4	
2,4,6-Tribromophenol	0.135	0.124	100.0	91.88		AVRG	-8.1	
Terphenyl-d14	0.864	1.006	50.00	58.21		AVRG	16.4	

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: DF0905B1 DFTPP Injection Date: 09/05/08

Instrument ID: BNA1 DFTPP Injection Time: 0601

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.6
68	Less than 2.0% of mass 69	0.1 (0.1)1
69	Mass 69 relative abundance	57.1
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	44.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	19.1
365	Greater than 1.0% of mass 198	1.83
441	Present, but less than mass 443	6.4
442	Greater than 40.0% of mass 198	55.9
443	17.0 - 23.0% of mass 442	11.2 (20.0)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050	09/05/08	0622
02	SBLK0904BW1	SBLK0904BW1	S1BW0904	09/05/08	0735
03	SBLK0904BW1L	SBLK0904BW1LCS	S1LW0904	09/05/08	0812
04	SBLK0904BW1L	SBLK0904BW1LCS	S1DW0904	09/05/08	0848
05	01GW0601	0808268-02	0826802	09/05/08	0925
06	01GW1701	0808268-04	0826804	09/05/08	1038
07	01GW1601	0808268-05	0826805	09/05/08	1115
08	01GW1601D	0808268-06	0826806	09/05/08	1151
09	01GW1801	0808268-07	0826807	09/05/08	1228
10	01GW1901	0808268-08	0826808	09/05/08	1305
11	01GW2101	0808268-09	0826809	09/05/08	1341
12	01GW2001	0808268-10	0826810	09/05/08	1418
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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/05/08 Time: 0622

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.109	50.00	50.82		AVRG	1.6	20.0
Acenaphthylene	1.532	1.500	50.00	48.96		AVRG	-2.1	
Acetophenone	1.286	1.346	50.00	55.90		2ORDR	11.8	
Aniline	1.657	1.414	50.00	42.67		AVRG	-14.6	
Anthracene	1.066	1.020	50.00	47.80		AVRG	-4.4	
Atrazine	0.200	0.148	50.00	37.06		AVRG	-25.9	
Benzaldehyde	1.134	0.876	50.00	38.59		AVRG	-22.8	
Benzidine	0.608	0.057	50.00	4.182		LINR	-91.6	NTC
Benzoic acid	0.239	0.265	50.00	48.17		2ORDR	-3.7	
Benzo(a)anthracene	1.031	1.040	50.00	50.43		AVRG	0.8	
Benzo(b)fluoranthene	1.057	1.081	50.00	51.13		AVRG	2.3	
Benzo(k)fluoranthene	1.109	1.122	50.00	50.59		AVRG	1.2	
Benzo(g,h,i)perylene	0.782	0.732	50.00	46.78		AVRG	-6.4	
Benzo(a)pyrene	0.935	0.978	50.00	52.32		AVRG	4.6	20.0
Benzyl alcohol	0.839	0.872	50.00	51.96		AVRG	3.9	
1,1'-Biphenyl	1.478	1.384	50.00	46.80		AVRG	-6.4	
bis(2-Chloroethoxy)methane	0.493	0.456	50.00	46.26		AVRG	-7.5	
bis(2-Chloroethyl) ether	1.652	1.634	50.00	56.02		LINR	12.0	
bis(2-Chloroisopropyl) ether	2.260	2.174	50.00	48.09		AVRG	-3.8	
Bis(2-ethylhexyl) phthalate	1.048	1.195	50.00	56.97		AVRG	13.9	
4-Bromophenyl-phenylether	0.273	0.265	50.00	48.56		AVRG	-2.9	
Butylbenzylphthalate	0.812	1.028	50.00	63.34		AVRG	26.7	
Caprolactam	0.103	0.137	50.00	63.26		2ORDR	26.5	
Carbazole	1.086	1.050	50.00	48.37		AVRG	-3.3	
4-Chloroaniline	0.420	0.446	50.00	52.99		AVRG	6.0	
4-Chloro-3-methylphenol	0.278	0.297	50.00	53.43		AVRG	6.9	20.0
2-Chloronaphthalene	1.144	1.131	50.00	49.41		AVRG	-1.2	
2-Chlorophenol	1.197	1.204	50.00	54.85		2ORDR	9.7	
4-Chlorophenyl-phenylether	0.561	0.545	50.00	48.64		AVRG	-2.7	
Chrysene	0.976	1.027	50.00	52.62		AVRG	5.2	
Dibenz(a,h)anthracene	0.737	0.769	50.00	52.12		AVRG	4.2	
Dibenzofuran	1.491	1.483	50.00	49.71		AVRG	-0.6	
1,2-Dichlorobenzene	1.313	1.324	50.00	54.74		2ORDR	9.5	
1,4-Dichlorobenzene	1.383	1.433	50.00	51.78		AVRG	3.6	20.0
1,3-Dichlorobenzene	1.513	1.549	50.00	55.41		2ORDR	10.8	
3,3'-Dichlorobenzidine	0.342	0.329	50.00	48.12		AVRG	-3.7	
2,4-Dichlorophenol	0.311	0.310	50.00	49.82		AVRG	-0.4	20.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/05/08 Time: 0622

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.468	50.00	52.45		AVRG	4.9	
2,4-Dimethylphenol	0.277	0.259	50.00	46.75		AVRG	-6.5	
Dimethylphthalate	1.490	1.502	50.00	50.42		AVRG	0.8	
Di-n-butylphthalate	1.672	1.844	50.00	55.14		AVRG	10.3	
4,6-Dinitro-2-methylphenol	0.156	0.189	50.00	52.50		2ORDR	5.0	
2,4-Dinitrophenol	0.167	0.219	50.00	55.08	0.050	2ORDR	10.2	
2,4-Dinitrotoluene	0.416	0.460	50.00	55.34		AVRG	10.7	
2,6-Dinitrotoluene	0.366	0.409	50.00	55.89		AVRG	11.8	
1,2-Diphenylhydrazine	1.106	1.030	50.00	46.58		AVRG	-6.8	
Di-n-octylphthalate	1.870	2.319	50.00	53.78		LINR	7.6	20.0
Fluoranthene	1.086	1.088	50.00	50.13		AVRG	0.2	20.0
Fluorene	1.196	1.186	50.00	49.61		AVRG	-0.8	
Hexachlorobenzene	0.264	0.268	50.00	50.91		AVRG	1.8	
Hexachlorobutadiene	0.189	0.176	50.00	46.46		AVRG	-7.1	20.0
Hexachlorocyclopentadiene	0.284	0.275	50.00	48.35	0.050	AVRG	-3.3	
Hexachloroethane	0.632	0.638	50.00	50.49		AVRG	1.0	
Indeno(1,2,3-cd)pyrene	0.725	0.747	50.00	51.53		AVRG	3.1	
Isophorone	0.835	0.789	50.00	47.24		AVRG	-5.5	
1-Methylnaphthalene	0.485	0.509	50.00	52.43		AVRG	4.9	
2-Methylnaphthalene	0.514	0.552	50.00	53.69		AVRG	7.4	
3-Methylphenol	1.093	1.167	50.00	53.38		AVRG	6.8	
4-Methylphenol	1.092	1.167	50.00	53.43		AVRG	6.8	
2-Methylphenol	1.125	1.192	50.00	52.99		AVRG	6.0	
Naphthalene	0.928	0.882	50.00	47.52		AVRG	-5.0	
2-Nitroaniline	0.381	0.383	50.00	50.26		AVRG	0.5	
3-Nitroaniline	0.398	0.430	50.00	53.98		AVRG	8.0	
4-Nitroaniline	0.327	0.360	50.00	49.93		2ORDR	-0.1	
Nitrobenzene	0.431	0.400	50.00	46.46		AVRG	-7.1	
2-Nitrophenol	0.260	0.268	50.00	51.57		AVRG	3.1	20.0
4-Nitrophenol	0.224	0.219	50.00	48.77	0.050	AVRG	-2.5	
N-Nitroso-di-methylamine	0.665	0.621	50.00	46.67		AVRG	-6.7	
N-Nitrosodiphenylamine (1)	0.689	0.676	50.00	49.06		AVRG	-1.9	20.0
N-Nitroso-di-n-propylamine	0.895	0.914	50.00	51.02	0.050	AVRG	2.0	
Pentachlorophenol	0.178	0.204	50.00	51.14		LINR	2.3	20.0
Phenanthrene	1.096	1.046	50.00	47.71		AVRG	-4.6	
Phenol	1.639	1.613	50.00	49.20		AVRG	-1.6	20.0

(1) Cannot be separated from Diphenylamine

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Lab File ID: DF0909B1 DFTPP Injection Date: 09/09/08

Instrument ID: BNA1 DFTPP Injection Time: 1421

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.4
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	57.4
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	43.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	17.5
365	Greater than 1.0% of mass 198	1.39
441	Present, but less than mass 443	8.0
442	Greater than 40.0% of mass 198	49.9
443	17.0 - 23.0% of mass 442	10.3 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050	09/09/08	1443
02	SBLK0909BW1	SBLK0909BW1	S1BW0909	09/09/08	1556
03	SBLK0909BW1L	SBLK0909BW1LCS	S1LW0909	09/09/08	1632
04	SBLK0909BW1L	SBLK0909BW1LCS	S1DW0909	09/09/08	1709
05	01GW0901	0808268-03	826803RE	09/09/08	1745
06					
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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/09/08 Time: 1443

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.073	50.00	49.18		AVRG	-1.6	20.0
Acenaphthylene	1.532	1.522	50.00	49.68		AVRG	-0.6	
Acetophenone	1.286	1.190	50.00	48.18		2ORDR	-3.6	
Aniline	1.657	1.384	50.00	41.76		AVRG	-16.5	
Anthracene	1.066	1.016	50.00	47.65		AVRG	-4.7	
Atrazine	0.200	0.125	50.00	31.29		AVRG	-37.4	
Benzaldehyde	1.134	0.787	50.00	34.69		AVRG	-30.6	
Benzidine	0.608		50.00	0.0000		LINR	-99.9	
Benzoic acid	0.239	0.283	50.00	51.07		2ORDR	2.1	
Benzo (a) anthracene	1.031	1.047	50.00	50.78		AVRG	1.6	
Benzo (b) fluoranthene	1.057	1.169	50.00	55.30		AVRG	10.6	
Benzo (k) fluoranthene	1.109	1.079	50.00	48.65		AVRG	-2.7	
Benzo (g, h, i) perylene	0.782	0.657	50.00	41.98		AVRG	-16.0	
Benzo (a) pyrene	0.935	0.969	50.00	51.84		AVRG	3.7	20.0
Benzyl alcohol	0.839	0.882	50.00	52.55		AVRG	5.1	
1,1'-Biphenyl	1.478	1.362	50.00	46.07		AVRG	-7.9	
bis (2-Chloroethoxy) methane	0.493	0.459	50.00	46.54		AVRG	-6.9	
bis (2-Chloroethyl) ether	1.652	1.571	50.00	53.87		LINR	7.7	
bis (2-Chloroisopropyl) ether	2.260	2.043	50.00	45.21		AVRG	-9.6	
Bis (2-ethylhexyl) phthalate	1.048	1.159	50.00	55.28		AVRG	10.6	
4-Bromophenyl-phenylether	0.273	0.253	50.00	46.31		AVRG	-7.4	
Butylbenzylphthalate	0.812	0.895	50.00	55.12		AVRG	10.2	
Caprolactam	0.103	0.125	50.00	57.66		2ORDR	15.3	
Carbazole	1.086	1.029	50.00	47.40		AVRG	-5.2	
4-Chloroaniline	0.420	0.426	50.00	50.68		AVRG	1.4	
4-Chloro-3-methylphenol	0.278	0.293	50.00	52.73		AVRG	5.4	20.0
2-Chloronaphthalene	1.144	1.109	50.00	48.47		AVRG	-3.0	
2-Chlorophenol	1.197	1.159	50.00	52.61		2ORDR	5.2	
4-Chlorophenyl-phenylether	0.561	0.580	50.00	51.69		AVRG	3.4	
Chrysene	0.976	0.966	50.00	49.50		AVRG	-1.0	
Dibenz (a, h) anthracene	0.737	0.684	50.00	46.36		AVRG	-7.3	
Dibenzofuran	1.491	1.446	50.00	48.48		AVRG	-3.0	
1,2-Dichlorobenzene	1.313	1.297	50.00	53.33		2ORDR	6.7	
1,4-Dichlorobenzene	1.383	1.365	50.00	49.32		AVRG	-1.4	20.0
1,3-Dichlorobenzene	1.513	1.457	50.00	51.49		2ORDR	3.0	
3,3'-Dichlorobenzidine	0.342	0.328	50.00	47.95		AVRG	-4.1	
2,4-Dichlorophenol	0.311	0.308	50.00	49.51		AVRG	-1.0	20.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/09/08 Time: 1443

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.481	50.00	52.93		AVRG	5.8	
2,4-Dimethylphenol	0.277	0.266	50.00	48.04		AVRG	-3.9	
Dimethylphthalate	1.490	1.534	50.00	51.50		AVRG	3.0	
Di-n-butylphthalate	1.672	1.702	50.00	50.91		AVRG	1.8	
4,6-Dinitro-2-methylphenol	0.156	0.191	50.00	53.01		2ORDR	6.0	
2,4-Dinitrophenol	0.167	0.224	50.00	56.13	0.050	2ORDR	12.3	
2,4-Dinitrotoluene	0.416	0.458	50.00	55.10		AVRG	10.2	
2,6-Dinitrotoluene	0.366	0.394	50.00	53.84		AVRG	7.7	
1,2-Diphenylhydrazine	1.106	0.985	50.00	44.56		AVRG	-10.9	
Di-n-octylphthalate	1.870	2.362	50.00	54.77		LINR	9.5	20.0
Fluoranthene	1.086	1.031	50.00	47.50		AVRG	-5.0	20.0
Fluorene	1.196	1.233	50.00	51.56		AVRG	3.1	
Hexachlorobenzene	0.264	0.262	50.00	49.75		AVRG	-0.5	
Hexachlorobutadiene	0.189	0.171	50.00	45.32		AVRG	-9.4	20.0
Hexachlorocyclopentadiene	0.284	0.251	50.00	44.04	0.050	AVRG	-11.9	
Hexachloroethane	0.632	0.613	50.00	48.52		AVRG	-2.9	
Indeno(1,2,3-cd)pyrene	0.725	0.666	50.00	45.89		AVRG	-8.2	
Isophorone	0.835	0.779	50.00	46.67		AVRG	-6.6	
1-Methylnaphthalene	0.485	0.509	50.00	52.44		AVRG	4.9	
2-Methylnaphthalene	0.514	0.528	50.00	51.39		AVRG	2.8	
3-Methylphenol	1.093	1.076	50.00	49.22		AVRG	-1.6	
4-Methylphenol	1.092	1.076	50.00	49.26		AVRG	-1.5	
2-Methylphenol	1.125	1.165	50.00	51.79		AVRG	3.6	
Naphthalene	0.928	0.863	50.00	46.50		AVRG	-7.0	
2-Nitroaniline	0.381	0.364	50.00	47.69		AVRG	-4.6	
3-Nitroaniline	0.398	0.429	50.00	53.86		AVRG	7.7	
4-Nitroaniline	0.327	0.349	50.00	48.58		2ORDR	-2.8	
Nitrobenzene	0.431	0.387	50.00	44.94		AVRG	-10.1	
2-Nitrophenol	0.260	0.268	50.00	51.52		AVRG	3.0	20.0
4-Nitrophenol	0.224	0.214	50.00	47.82	0.050	AVRG	-4.4	
N-Nitroso-di-methylamine	0.665	0.677	50.00	50.85		AVRG	1.7	
N-Nitrosodiphenylamine (1)	0.689	0.645	50.00	46.77		AVRG	-6.4	20.0
N-Nitroso-di-n-propylamine	0.895	0.835	50.00	46.62	0.050	AVRG	-6.8	
Pentachlorophenol	0.178	0.185	50.00	46.45		LINR	-7.1	20.0
Phenanthrene	1.096	1.044	50.00	47.63		AVRG	-4.7	
Phenol	1.639	1.555	50.00	47.44		AVRG	-5.1	20.0

(1) Cannot be separated from Diphenylamine

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Instrument ID: BNA1 Calibration Date: 09/09/08 Time: 1443

Lab File ID: CCV050 Init. Calib. Date(s): 07/24/08 08/29/08

Init. Calib. Times: 1046 1459

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.217	50.00	50.40		AVRG	0.8	
Pyridine	1.797	1.656	50.00	46.06		AVRG	-7.9	
1,2,4,5-Tetrachlorobenzene	0.259	0.276	50.00	53.17		AVRG	6.3	
2,3,4,6-Tetrachlorophenol	0.218	0.302	50.00	61.68		LINR	23.4	
1,2,4-Trichlorobenzene	0.350	0.318	50.00	45.48		AVRG	-9.0	
2,4,5-Trichlorophenol	0.397	0.417	50.00	52.47		AVRG	4.9	
2,4,6-Trichlorophenol	0.382	0.372	50.00	48.66		AVRG	-2.7	20.0
2-Fluorophenol	1.336	1.335	100.0	108.6		2ORDR	8.6	
Phenol-d6	1.551	1.480	100.0	103.0		2ORDR	3.0	
Nitrobenzene-d5	0.438	0.393	50.00	44.86		AVRG	-10.3	
2-Fluorobiphenyl	1.376	1.229	50.00	44.65		AVRG	-10.7	
2,4,6-Tribromophenol	0.135	0.136	100.0	100.9		AVRG	0.9	
Terphenyl-d14	0.864	0.918	50.00	53.11		AVRG	6.2	

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050 Date Analyzed: 09/03/08

Instrument ID: BNA1 Time Analyzed: 0708

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	867359	5.36	2737502	6.66	1455212	9.72
UPPER LIMIT	1734718	5.86	5475004	7.16	2910424	10.22
LOWER LIMIT	433680	4.86	1368751	6.16	727606	9.22
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0902BW1	971168	5.35	3202115	6.66	1788644	9.70
02 SBLK0902BW1L	1063464	5.36	3341385	6.66	1758000	9.71
03 01GW0701	952704	5.36	3112859	6.67	1541942	9.71
04 01GW0701D	977298	5.35	3098624	6.66	1703905	9.71
05 01GW0801	1026188	5.35	3295524	6.67	1739627	9.71
06 01GW1201	1132656	5.36	3447498	6.67	1800888	9.71
07 01GW1301	1027075	5.36	3460923	6.67	1712779	9.71
08 01GW1101	1028246	5.36	3267672	6.66	1743676	9.72
09 01GW1501	962584	5.36	3414298	6.67	1639695	9.72
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050 Date Analyzed: 09/03/08

Instrument ID: BNA1 Time Analyzed: 0708

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	2145907	13.43	1570692	21.01	1211275	25.09
UPPER LIMIT	4291814	13.93	3141384	21.51	2422550	25.59
LOWER LIMIT	1072954	12.93	785346	20.51	605638	24.59
CLIENT SAMPLE NO.						
01 SBLK0902BW1	2599727	13.42	1960331	21.00	1615595	25.09
02 SBLK0902BWL	2743390	13.43	2137031	21.02	1797389	25.10
03 01GW0701	2283999	13.42	1771715	21.00	1196876	25.09
04 01GW0701D	2317981	13.43	1949801	21.01	1484653	25.10
05 01GW0801	2439136	13.43	1940562	21.01	1355641	25.10
06 01GW1201	2408799	13.43	2002914	21.01	1438205	25.10
07 01GW1301	2398648	13.43	1925802	21.01	1400374	25.09
08 01GW1101	2303779	13.43	1688126	21.00	1196000	25.09
09 01GW1501	2325985	13.43	1874323	21.00	1291933	25.10
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050E Date Analyzed: 09/03/08

Instrument ID: BNA1 Time Analyzed: 2018

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	970755	5.36	3120677	6.67	1609006	9.72
UPPER LIMIT	1941510	5.86	6241354	7.17	3218012	10.22
LOWER LIMIT	485378	4.86	1560339	6.17	804503	9.22
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 01GW1401	1062940	5.36	3522967	6.67	1890829	9.72
02 01GW1001	1093317	5.36	3510851	6.66	1762483	9.72
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050E Date Analyzed: 09/03/08

Instrument ID: BNA1 Time Analyzed: 2018

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2557182	13.44	1891399	21.02	1351899	25.10
UPPER LIMIT	5114364	13.94	3782798	21.52	2703798	25.60
LOWER LIMIT	1278591	12.94	945700	20.52	675950	24.60
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 01GW1401	2633235	13.43	2179813	21.00	1626397	25.09
02 01GW1001	2566707	13.43	1924898	21.00	1458959	25.09
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050 Date Analyzed: 09/05/08

Instrument ID: BNA1 Time Analyzed: 0622

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	965789	5.33	3210132	6.63	1622454	9.67
UPPER LIMIT	1931578	5.83	6420264	7.13	3244908	10.17
LOWER LIMIT	482895	4.83	1605066	6.13	811227	9.17
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0904BW1	1110315	5.32	3435427	6.63	1809972	9.66
02 SBLK0904BW1L	1120696	5.33	3396404	6.63	1817407	9.67
03 SBLK0904BW1L	1098862	5.33	3475611	6.62	1794253	9.66
04 01GW0601	1063359	5.32	3551715	6.62	1788889	9.66
05 01GW1701	1047255	5.32	3374342	6.63	1786528	9.65
06 01GW1601	1133682	5.32	3730351	6.62	1851203	9.65
07 01GW1601D	1120681	5.32	3532523	6.63	1793837	9.65
08 01GW1801	1065730	5.32	3369648	6.62	1831877	9.65
09 01GW1901	1082051	5.32	3433534	6.62	1814255	9.66
10 01GW2101	1091818	5.32	3427312	6.63	1814170	9.65
11 01GW2001	1191360	5.32	3706708	6.63	2039862	9.65
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS INC.

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050 Date Analyzed: 09/05/08

Instrument ID: BNA1 Time Analyzed: 0622

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2354492	13.36	1986799	20.96	1857250	25.05
UPPER LIMIT	4708984	13.86	3973598	21.46	3714500	25.55
LOWER LIMIT	1177246	12.86	993400	20.46	928625	24.55
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0904BW1	2475126	13.36	2070724	20.93	1917088	25.04
02 SBLK0904BW1L	2705211	13.37	2189498	20.95	1953923	25.04
03 SBLK0904BW1L	2474417	13.37	2162244	20.95	2051223	25.05
04 01GW0601	2491138	13.35	2010098	20.93	1962272	25.04
05 01GW1701	2326203	13.35	1964496	20.93	1825962	25.04
06 01GW1601	2617088	13.36	2209911	20.93	1977765	25.04
07 01GW1601D	2439986	13.36	2051685	20.93	2077168	25.04
08 01GW1801	2593363	13.36	2066541	20.93	1812527	25.04
09 01GW1901	2364360	13.35	2167966	20.93	2116927	25.04
10 01GW2101	2415129	13.35	2081884	20.94	1900468	25.04
11 01GW2001	2571750	13.35	2187052	20.93	1979574	25.04
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IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010

Lab File ID (Standard): CCV050 Date Analyzed: 09/09/08

Instrument ID: BNA1 Time Analyzed: 1443

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	1118255	5.30	3628738	6.59	1911834	9.61
UPPER LIMIT	2236510	5.80	7257476	7.09	3823668	10.11
LOWER LIMIT	559128	4.80	1814369	6.09	955917	9.11
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0909BW1	1179315	5.29	3411879	6.58	1896885	9.60
02 SBLK0909BW1L	1198594	5.30	3561623	6.59	1918363	9.61
03 SBLK0909BW1L	1218213	5.30	3519388	6.59	1908231	9.61
04 01GW0901	1221437	5.29	3749325	6.59	1922770	9.60
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IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH NUS
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-010
 Lab File ID (Standard): CCV050 Date Analyzed: 09/09/08
 Instrument ID: BNA1 Time Analyzed: 1443

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2776567	13.31	2383203	20.89	1968746	25.00
UPPER LIMIT	5553134	13.81	4766406	21.39	3937492	25.50
LOWER LIMIT	1388284	12.81	1191602	20.39	984373	24.50
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0909BW1	2593866	13.30	2326131	20.86	2157246	24.98
02 SBLK0909BW1L	2607653	13.31	2238518	20.89	1839477	24.99
03 SBLK0909BW1L	2860870	13.30	2350776	20.88	1988764	24.99
04 01GW0901	2693357	13.30	2453210	20.87	2220085	24.98
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IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\bna1.i\090308B1.b\0825302.D
 Lab Smp Id: 0808253-02 Client Smp ID: 01GW0701
 Inj Date : 03-SEP-2008 13:52 MS Autotune Date: 24-JUL-2008 08:11
 Operator : ADM Inst ID: bna1.i
 Smp Info : 0808253-02;1;1080;1000;1;UG/L;02-SEP-2008
 Misc Info : tet.b08253;0;;;090208BW1;ppbna.sub;4504
 Comment :
 Method : \\ELABNSH05\TARGET\chem\bna1.i\090308B1.b\IXBN1.m
 Meth Date : 03-Sep-2008 08:35 tmonteiro Quant Type: ISTD
 Cal Date : 29-AUG-2008 14:59 Cal File: DROCAL13.D
 Als bottle: 13
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ppbna.sub
 Target Version: 4.04
 Processing Host: TARGET02_VM

Concentration Formula: Amt * DF * Uf * Vt* Vi/(Amt * Vi)

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vi	0.500	Volume injected (uL)
Amt	1080.000	Volume of initial extraction

Ma/3/8

9-4-08
 (82)

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng/ul)	FINAL (UG/L)
* 1 1,4-Dichlorobenzene-d4	----	152	5.355	5.359	(1.000)	952704	40.0000	
\$ 2 2-Fluorophenol	----	112	4.359	4.359	(0.814)	958737	25.8097	23.90
\$ 3 Phenol-d6	----	99	5.055	5.060	(0.944)	719517	16.8639	15.61
* 32 Naphthalene-d8	----	136	6.665	6.664	(1.000)	3112859	40.0000	
\$ 33 Nitrobenzene-d5	----	82	5.850	5.855	(0.878)	1036067	30.4146	28.16
* 66 Acenaphthene-d10	----	164	9.712	9.716	(1.000)	1541942	40.0000	
\$ 71 2-Fluorobiphenyl	----	172	8.341	8.343	(0.859)	1913615	36.0726	33.40
* 99 Phenanthrene-d10	----	188	13.424	13.425	(1.000)	2283999	40.0000	
\$ 104 2,4,6-Tribromophenol	----	330	11.608	11.613	(0.865)	613088	79.5587	73.66
* 129 Chrysene-d12	----	240	21.000	21.010	(1.000)	1771715	40.0000	
\$ 132 Terphenyl-d14	----	244	18.098	18.095	(0.862)	1762834	46.0633	42.65
137 Bis(2-ethylhexyl)phthalate	----	149	21.512	21.521	(1.024)	95930	2.06540	1.912(a)
* 151 Perylene-d12	----	264	25.091	25.089	(1.000)	1196876	40.0000	

$$\text{Concentration} = \frac{A_x}{A_i} \times \frac{I_s}{\text{RRF}}$$

$$\frac{95930}{1771715} \times \frac{40}{1.048} = 2.06661$$

A_x = Area of analyte
 A_i = Area of internal standard
 I_s = Concentration of internal standard
 RRF = Initial Calibration Relative Response factor

Sequence Name: C:\HPCHEM\1\SEQUENCE\072408B1.S
 Comment: clp/8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\072408B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

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Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

M 7/24/8
 L 7/28/8

BNA / app 9 calibs.

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	BLANK	DFTPPBN1	
2	CCal	99	CCV050	IXBN1	BNACAL050PPM;;;;;SV4451
3	ICal	14	CHK100	IXBN1	BNACAL100PPM;;;;;SV4413-13
4	ICal	4	CHK005	IXBN1	BNACAL005PPM;;;;;SV4413-3
5	QC	1	DF0724B1	DFTPPBN1	DF0724B1;;;;;SV4405 10:25, 7/24
6	ICal	2	CAL001	IXBN1	BNACAL001PPM;;;;;SV4413-1
7	ICal	3	CAL002	IXBN1	BNACAL002PPM;;;;;SV4413-2
8	ICal	4	CAL005	IXBN1	BNACAL005PPM;;;;;SV4413-3
9	ICal	5	CAL010	IXBN1	BNACAL010PPM;;;;;SV4413-4
10	ICal	6	CAL020	IXBN1	BNACAL020PPM;;;;;SV4413-5
11	ICal	7	CAL030	IXBN1	BNACAL030PPM;;;;;SV4413-6
12	ICal	8	CAL040	IXBN1	BNACAL040PPM;;;;;SV4413-7
13	ICal	9	CAL050	IXBN1	BNACAL050PPM;;;;;SV4413-8
14	ICal	10	CAL060	IXBN1	BNACAL060PPM;;;;;SV4413-9
15	ICal	11	CAL070	IXBN1	BNACAL070PPM;;;;;SV4413-10
16	ICal	12	CAL080	IXBN1	BNACAL080PPM;;;;;SV4413-11
17	ICal	13	CAL090	IXBN1	BNACAL090PPM;;;;;SV4413-12
18	ICal	14	CAL100	IXBN1	BNACAL100PPM;;;;;SV4413-13
19	ICal	15	CALB001	IXBN1	BNACAL001PPM;;;;;SV4415-1
20	ICal	16	CALB002	IXBN1	BNACAL002PPM;;;;;SV4415-2
21	ICal	17	CALB005	IXBN1	BNACAL005PPM;;;;;SV4415-3
22	ICal	18	CALB010	IXBN1	BNACAL010PPM;;;;;SV4415-4
23	ICal	19	CALB020	IXBN1	BNACAL020PPM;;;;;SV4415-5
24	ICal	20	CALB050	IXBN1	BNACAL050PPM;;;;;SV4415-8
25	ICal	21	CALB070	IXBN1	BNACAL070PPM;;;;;SV4415-10
26	Sample	1	DF0724B2	DFTPPBN1	DF0724B2;;;;;SV4405 12:41, 7/24
27	ICal	22	CALB080	IXBN1	BNACAL080PPM;;;;;SV4415-11
28	ICal	23	CALB100	IXBN1	BNACAL100PPM;;;;;SV4415-13
29	QC	24	ICVEX	IXBN1	BNAICV050PPM;;;;;SV4304
30	QC	25	ICVMAN	IXBN1	BNAICV050PPM;;;;;SV4444-A(main)
31	QC	26	ICV02	IXBN1	BNAICV050PPM;;;;;SV4444-B
32	QC	27	ICV03	IXBN1	BNAICV050PPM;;;;;SV4445
33	Sample	28	CAP9C001	IXBN1	CALAP9C001PPM;;;;;SV4457-1
34	Sample	29	CAP9C002	IXBN1	CALAP9C002PPM;;;;;SV4457-2
35	Sample	30	CAP9C005	IXBN1	CALAP9C005PPM;;;;;SV4457-3
36	Sample	31	CAP9C010	IXBN1	CALAP9C010PPM;;;;;SV4457-4
37	Sample	32	CAP9C020	IXBN1	CALAP9C020PPM;;;;;SV4457-5
38	Sample	33	CAP9C030	IXBN1	CALAP9C030PPM;;;;;SV4457-6
39	Sample	34	CAP9C050	IXBN1	CALAP9C050PPM;;;;;SV4457-8
40	Sample	35	CAP9C070	IXBN1	CALAP9C070PPM;;;;;SV4457-10
41	Sample	36	CAP9C100	IXBN1	CALAP9C100PPM;;;;;SV4457-13
42	Sample	37	CAP9A001	IXBN1	CALAP9A001PPM;;;;;SV4455-1
43	Sample	38	CAP9A002	IXBN1	CALAP9A002PPM;;;;;SV4455-2

ppbna3
 Scomp
 ppbna
 appc
 appa

ppbna3, Scomp, appc,
 appa, pp9b. subs used
 1XBN1.m (H2O)
 1XSOX1.m (Soil)

Line	Type	Vial	DataFile	Method	Sample Name
44	Sample	39	CAP9A005	IXBN1	CALAP9A005PPM;;;;;SV4455-3
45	Sample	40	CAP9A010	IXBN1	CALAP9A010PPM;;;;;SV4455-4
46	QC	98	ICVEX1	IXBN1	BNAICV050PPM;;;;;SV4459
47	Sample	1	DF0724B3	DFTPPBN1	DF0724B3;;;;;SV4405 10:56, 7/25
48	Sample	41	CAP9A020	IXBN1	CALAP9A020PPM;;;;;SV4455-5
49	Sample	42	CAP9A030	IXBN1	CALAP9A030PPM;;;;;SV4455-6
50	Sample	43	CAP9A050	IXBN1	CALAP9A050PPM;;;;;SV4455-8
51	Sample	44	CAP9A070	IXBN1	CALAP9A070PPM;;;;;SV4455-10
52	Sample	45	CAP9A100	IXBN1	CALAP9A100PPM;;;;;SV4455-13
53	Sample	46	CAP9B001	IXBN1	CALAP9B001PPM;;;;;SV4456-1
54	Sample	47	CAP9B002	IXBN1	CALAP9B002PPM;;;;;SV4456-2
55	Sample	48	CAP9B005	IXBN1	CALAP9B005PPM;;;;;SV4456-3
56	Sample	49	CAP9B010	IXBN1	CALAP9B010PPM;;;;;SV4456-4
57	Sample	50	CAP9B020	IXBN1	CALAP9B020PPM;;;;;SV4456-5
58	Sample	51	CAP9B030	IXBN1	CALAP9B030PPM;;;;;SV4456-6
59	Sample	52	CAP9B050	IXBN1	CALAP9B050PPM;;;;;SV4456-8
60	Sample	53	CAP9B070	IXBN1	CALAP9B070PPM;;;;;SV4456-10
61	Sample	54	CAP9B100	IXBN1	CALAP9B100PPM;;;;;SV4456-13
62	Sample	100	BLANK	DFTPPBN1	
63	Sample	1	DF0728B1	DFTPPBN1	DF0728B1;;;;;SV4405 7/26, 9:48
64	Sample	55	CAP9C060	IXBN1	CALAP9C060PPM;;;;;SV4457-9 X
65	Sample	56	CAP9C070	IXBN1	CALAP9C070PPM;;;;;SV4457-10 X
66	Sample	57	CAP9C080	IXBN1	CALAP9C080PPM;;;;;SV4457-11 -OK
67	Sample	58	CAP9C090	IXBN1	CALAP9C090PPM;;;;;SV4457-12 X
68	Sample	59	CA9C100	IXBN1	CALAP9C100PPM;;;;;SV4457-13 X

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Sequence Name: C:\HPCHEM\1\SEQUENCE\072408B1.S
 Comment: clp/8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\072408B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

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Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: CCal BNACAL050PPM;;;;;SV4451 Vial: 99 ;2;;;;;ppbna.sub;4449 Meth: IXBN1.M Barcode: Data: CCV050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: ICal BNACAL100PPM;;;;;SV4413-13 Vial: 14 ;1;;;;13;;ppbna1.sub;4392 Meth: IXBN1.M Barcode: Data: CHK100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: ICal BNACAL005PPM;;;;;SV4413-3 Vial: 4 ;1;;;3;;ppbna1.sub;4392 Meth: IXBN1.M Barcode: Data: CHK005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: QC DF0724B1;;;;;SV4405 Vial: 1 ;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0724B1.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: ICal BNACAL001PPM;;;;;SV4413-1 Vial: 2 ;1;;;1;;ppbna3.sub;4392 Meth: IXBN1.M Barcode: Data: CAL001.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: ICal BNACAL002PPM;;;;;SV4413-2 Vial: 3 ;1;;;2;;ppbna3.sub;4392 Meth: IXBN1.M Barcode: Data: CAL002.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: ICal BNACAL005PPM;;;;;SV4413-3 Vial: 4 ;1;;;3;;ppbna3.sub;4392 Meth: IXBN1.M Barcode:

Data: CAL005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

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-
- 9 Type: ICaI BNACAL010PPM;;;;;SV4413-4
 Vial: 5 ;1;;;4;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL010.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 10 Type: ICaI BNACAL020PPM;;;;;SV4413-5
 Vial: 6 ;1;;;5;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL020.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 11 Type: ICaI BNACAL030PPM;;;;;SV4413-6
 Vial: 7 ;1;;;6;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL030.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 12 Type: ICaI BNACAL040PPM;;;;;SV4413-7
 Vial: 8 ;1;;;7;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL040.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 13 Type: ICaI BNACAL050PPM;;;;;SV4413-8
 Vial: 9 ;1;;;8;;ppbna3.sub;4352
 Meth: IXBN1.M Barcode:
 Data: CAL050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 14 Type: ICaI BNACAL060PPM;;;;;SV4413-9
 Vial: 10 ;1;;;9;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL060.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 15 Type: ICaI BNACAL070PPM;;;;;SV4413-10
 Vial: 11 ;1;;;10;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL070.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 16 Type: ICaI BNACAL080PPM;;;;;SV4413-11
 Vial: 12 ;1;;;11;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL080.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 17 Type: ICaI BNACAL090PPM;;;;;SV4413-12
 Vial: 13 ;1;;;12;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL090.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd

Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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18 Type: ICal BNACAL100PPM;;;;;SV4413-13
Vial: 14 ;1;;;13;;ppbna3.sub;4392
Meth: IXBN1.M Barcode:
Data: CAL100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

19 Type: ICal BNACAL001PPM;;;;;SV4415-1
Vial: 15 ;1;;;1;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB001.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

20 Type: ICal BNACAL002PPM;;;;;SV4415-2
Vial: 16 ;1;;;2;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB002.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

21 Type: ICal BNACAL005PPM;;;;;SV4415-3
Vial: 17 ;1;;;3;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

22 Type: ICal BNACAL010PPM;;;;;SV4415-4
Vial: 18 ;1;;;4;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB010.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

23 Type: ICal BNACAL020PPM;;;;;SV4415-5
Vial: 19 ;1;;;5;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB020.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

24 Type: ICal BNACAL050PPM;;;;;SV4415-8
Vial: 20 ;1;;;8;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

25 Type: ICal BNACAL070PPM;;;;;SV4415-10
Vial: 21 ;1;;;10;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB070.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

26 Type: Sample DF0724B2;;;;;SV4405
Vial: 1 ;;;;;;all.sub;
Meth: DFTPPBN1.M Barcode:
Data: DF0724B2.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default

Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

27 Type: ICal BNACAL080PPM;;;;;SV4415-11
Vial: 22 ;1;;;11;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB080.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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28 Type: ICal BNACAL100PPM;;;;;SV4415-13
Vial: 23 ;1;;;13;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

29 Type: QC BNAICV050PPM;;;;;SV4304
Vial: 24 ;3;;;;;ppbna.sub;4292
Meth: IXBN1.M Barcode:
Data: ICVEX.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

30 Type: QC BNAICV050PPM;;;;;SV4444-A(main)
Vial: 25 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICVMAIN.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

31 Type: QC BNAICV050PPM;;;;;SV4444-B
Vial: 26 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICV02.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

32 Type: QC BNAICV050PPM;;;;;SV4445
Vial: 27 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICV03.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

33 Type: Sample CALAP9C001PPM;;;;;SV4457-1
Vial: 28 ;;;;;;app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C001.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

34 Type: Sample CALAP9C002PPM;;;;;SV4457-2
Vial: 29 ;;;;;;app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C002.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

35 Type: Sample CALAP9C005PPM;;;;;SV4457-3
Vial: 30 ;;;;;;app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C005.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default

CR Database	:Default	CR Spreadsneet	:Default
36	Type: Sample Vial: 31 Meth: IXBN1.M Data: CAP9C010.D Area% Report Quant Report CR Database	CALAP9C010PPM;;;;;SV4457-4 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
37	Type: Sample Vial: 32 Meth: IXBN1.M Data: CAP9C020.D Area% Report Quant Report CR Database	CALAP9C020PPM;;;;;SV4457-5 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
38	Type: Sample Vial: 33 Meth: IXBN1.M Data: CAP9C030.D Area% Report Quant Report CR Database	CALAP9C030PPM;;;;;SV4457-6 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
39	Type: Sample Vial: 34 Meth: IXBN1.M Data: CAP9C050.D Area% Report Quant Report CR Database	CALAP9C050PPM;;;;;SV4457-8 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
40	Type: Sample Vial: 35 Meth: IXBN1.M Data: CAP9C070.D Area% Report Quant Report CR Database	CALAP9C070PPM;;;;;SV4457-10 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
41	Type: Sample Vial: 36 Meth: IXBN1.M Data: CAP9C100.D Area% Report Quant Report CR Database	CALAP9C100PPM;;;;;SV4457-13 ;;;;;app9c.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
42	Type: Sample Vial: 37 Meth: IXBN1.M Data: CAP9A001.D Area% Report Quant Report CR Database	CALAP9A001PPM;;;;;SV4455-1 ;;;;;app9a.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
43	Type: Sample Vial: 38 Meth: IXBN1.M Data: CAP9A002.D Area% Report Quant Report CR Database	CALAP9A002PPM;;;;;SV4455-2 ;;;;;app9a.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default
44	Type: Sample Vial: 39 Meth: IXBN1.M Data: CAP9A005.D Area% Report Quant Report CR Database	CALAP9A005PPM;;;;;SV4455-3 ;;;;;app9a.sub;4449 Barcode: Samp Amt: 0 :Default :Default :Default	Multiplr: 1 Lib. Search Rep.:Default Post-Quant Macro:Default CR Spreadsheet :Default

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45 Type: Sample CALAP9A010PPM;;;;;SV4455-4
Vial: 40 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A010.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

46 Type: QC BNAICV050PPM;;;;;SV4459
Vial: 98 ;3;;;;;ppbna.sub;4454A
Meth: IXBN1.M Barcode:
Data: ICVEX1.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

47 Type: Sample DF0724B3;;;;;SV4405
Vial: 1 ;;;;;;all.sub;
Meth: DFTPPBN1.M Barcode:
Data: DF0724B3.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

48 Type: Sample CALAP9A020PPM;;;;;SV4455-5
Vial: 41 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A020.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

49 Type: Sample CALAP9A030PPM;;;;;SV4455-6
Vial: 42 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A030.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

50 Type: Sample CALAP9A050PPM;;;;;SV4455-8
Vial: 43 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A050.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

51 Type: Sample CALAP9A070PPM;;;;;SV4455-10
Vial: 44 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A070.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

52 Type: Sample CALAP9A100PPM;;;;;SV4455-13
Vial: 45 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A100.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

53 Type: Sample CALAP9B001PPM;;;;;SV4456-1
Vial: 46 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B001.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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54 Type: Sample CALAP9B002PPM;;;;;SV4456-2
 Vial: 47 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B002.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

55 Type: Sample CALAP9B005PPM;;;;;SV4456-3
 Vial: 48 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B005.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

56 Type: Sample CALAP9B010PPM;;;;;SV4456-4
 Vial: 49 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B010.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

57 Type: Sample CALAP9B020PPM;;;;;SV4456-5
 Vial: 50 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B020.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

58 Type: Sample CALAP9B030PPM;;;;;SV4456-6
 Vial: 51 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B030.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

59 Type: Sample CALAP9B050PPM;;;;;SV4456-8
 Vial: 52 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B050.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

60 Type: Sample CALAP9B070PPM;;;;;SV4456-10
 Vial: 53 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B070.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

61 Type: Sample CALAP9B100PPM;;;;;SV4456-13
 Vial: 54 ;;;;;app9b.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9B100.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

62 Type: Sample
 Vial: 100
 Meth: DFTPPBN1.M Barcode:
 Data: BLANK.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

63 Type: Sample DF0728B1;;;;;SV4405

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Vial: 1 ;;;;;;all.sub;
 Meth: DFTPPBN1.M Barcode:
 Data: DF0728B1.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

64 Type: Sample CALAP9C060PPM;;;;;SV4457-9
 Vial: 55 ;;;;;;app9c.sub;4454A
 Meth: IXBN1.M Barcode:
 Data: CAP9C060.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

65 Type: Sample CALAP9C070PPM;;;;;SV4457-10
 Vial: 56 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C070R.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

66 Type: Sample CALAP9C080PPM;;;;;SV4457-11
 Vial: 57 ;;;;;;app9c.sub;4454A
 Meth: IXBN1.M Barcode:
 Data: CAP9C080.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

67 Type: Sample CALAP9C090PPM;;;;;SV4457-12
 Vial: 58 ;;;;;;app9c.sub;4454A
 Meth: IXBN1.M Barcode:
 Data: CAP9C090.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

68 Type: Sample CALAP9C100PPM;;;;;SV4457-13
 Vial: 59 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CA9C100R.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

	Lab Name: EMPIRICAL LABS												
	Instrument ID: BNA1			Calibration Date(s): 07/24/08 07/28/08 (PPBNA3.SUB)									
	Column: FUSED SILICA ID: 0.25 (mm) 30mt.												
COMPOUND	CAL001	CAL002	CAL005	CAL010	CAL020	CAL030	CAL040	CAL050	CAL060	CAL070	CAL080	CAL090	CAL100
Acenaphthene													
Acenaphthylene													
Anthracene													
Aniline													
Acetophenone													
Benzo(a)anthracene													
Benzo(b)fluoranthene													
Benzo(k)fluoranthene													
Benzo(g,h,i)perylene													
Benzo(a)pyrene													
Benzoic acid	A		A	A	A			A	A			A	A
Benzyl alcohol													
bis(2-Chloroethoxy)methane													
bis(2-Chloroethyl)ether													
bis(2-Chloroisopropyl)ether													
Bis(2-ethylhexyl)phthalate	A												
4-Bromophenyl-phenylether													
Butylbenzylphthalate													
4-Chloroaniline													
Carbazole													
4-Chloro-3-methylphenol													
2-Chloronaphthalene													
2-Chlorophenol													
4-Chlorophenyl-phenylether													
Chrysene													
Dibenz(a,h)anthracene													
Dibenzofuran													
1,2-Dichlorobenzene													
1,3-Dichlorobenzene													
1,4-Dichlorobenzene													
3,3'-Dichlorobenzidine													
2,4-Dichlorophenol													
1,2,4,5-Tetrachlorobenzene													
Caprolactam	E			C	C								
Diethylphthalate													
2,4-Dimethylphenol													
Dimethylphthalate	A												
Di-n-butylphthalate	A												
4,6-Dinitro-2-methylphenol	A												
2,4-Dinitrophenol	A												
2,4-Dinitrotoluene													
2,6-Dinitrotoluene													
Di-n-octylphthalate	A												
Fluoranthene													
Fluorene													
Hexachlorobenzene													
Hexachlorobutadiene													
Hexachlorocyclopentadiene	E												
Hexachloroethane													
Indeno(1,2,3-cd)pyrene	C												
Isophorone													
2-Methylnaphthalene													
1-Methylnaphthalene													
3-Methylphenol	D												D
4-Methylphenol	D												D
2-Methylphenol													
Naphthalene													
2-Nitroaniline													
3-Nitroaniline													
4-Nitroaniline	A												
1,1'-Biphenyl													
1,2-Diphenylhydrazine													
Nitrobenzene													
2-Nitrophenol													
4-Nitrophenol	A												
N-Nitrosodiphenylamine													
N-Nitroso-di-n-propylamine													
N-Nitroso-di-n-dimethylamine													
Pentachlorophenol	A												
Phenanthrene													
Phenol													
Pyrene													
Pyridine	E												
1,2,4-Trichlorobenzene													
2,4,5-Trichlorophenol	A												
2,4,6-Trichlorophenol													
2-Fluorophenol													
Phenol-d6													
Nitrobenzene-d5													C
2-Fluorobiphenyl													
2,4,6-Tribromophenol													
Terphenyl-d14													

A: The peak was manually integrated as it was not integrated in the original chromatogram.
B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
C: The peak was manually integrated to correct baseline from the original chromatogram.
D: The peak was manually integrated to identify the correct peak as the incorrect peak was identified in the original chromatogram.
E: The peak was manually integrated to include entire peak as the original chromatogram only integrated part of the peak.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA(BNA1)									
Lab Name: EMPIRICAL LABS									
Instrument ID: BNA1					Calibration Date(s): 07/24/08 07/28/08 (5COMP.SUB)				
Column: FUSED SILICA ID: 0.25 (mm) 30mt.									
COMPOUND	CALB001	CALB002	CALB005	CALB010	CALB020	CALB050	CALB070	CALB080	CALB100
Benzaldehyde									
2,3,4,6-Tetrachlorophenol	A								
Atrazine	A								
Benzidine	A								
3,3'-Dichlorobenzidine									
A: The peak was manually integrated as it was not integrated in the original chromatogram.									
B: The peak was manually integrated due to resolution or coelution issues in the original chromatogram.									
C: The peak was manually integrated to correct baseline from the original chromatogram.									
D: The peak was manually integrated to identify the correct peak as the incorrect peak was identified in the original chromatogram.									
E: The peak was manually integrated to include entire peak as the original chromatogram only integrated part of the peak.									

Sequence Name: C:\HPCHEM\1\SEQUENCE\090308B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090308B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

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 M9/3/8

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	BLANK	DFTPPBN1	
2 Sample	1	DF0903B1	DFTPPBN1	DF0903B1;;;;;SV4405 6:45/9/3
3 Sample	2	CCV050	IXBN1	CCV050PPM;;;;;SV4512
4 QC	3	S1BW0902	IXBN1	SBLK0902BW1;1;1000;1000;1;UG/L;02-SEP
5 QC	4	S1LW0902	IXBN1	SBLK0902BW1LCS;1;1000;1000;1;UG/L;02-
6 Sample	5	0825701	IXBN1	0808257-01;1;1080;1000;1;UG/L;02-SEP-
7 Sample	6	0825702	IXBN1	0808257-02;1;1080;1000;1;UG/L;02-SEP-
8 Sample	7	0825703	IXBN1	0808257-03;1;1080;1000;1;UG/L;02-SEP-
9 Sample	8	0826501	IXBN1	0808265-01;1;1080;1000;1;UG/L;02-SEP-
10 Sample	9	0826502	IXBN1	0808265-02;1;1080;1000;1;UG/L;02-SEP-
11 Sample	10	0826503	IXBN1	0808265-03;1;1080;1000;1;UG/L;02-SEP-
12 Sample	11	0826504	IXBN1	0808265-04;1;500;1000;1;UG/L;02-SEP-2
13 Sample	12	0824201	IXBN1	0808242-01;1;1080;1000;1;UG/L;02-SEP-
14 Sample	13	0825302	IXBN1	0808253-02;1;1080;1000;1;UG/L;02-SEP-
15 Sample	14	0825303	IXBN1	0808253-03;1;1080;1000;1;UG/L;02-SEP-
16 Sample	15	0825304	IXBN1	0808253-04;1;1080;1000;1;UG/L;02-SEP-
17 Sample	16	0825305	IXBN1	0808253-05;1;1000;1000;1;UG/L;02-SEP-
18 Sample	17	0825306	IXBN1	0808253-06;1;1080;1000;1;UG/L;02-SEP-
19 Sample	18	0825307	IXBN1	0808253-07;1;1080;1000;1;UG/L;02-SEP-
20 Sample	19	0825308	IXBN1	0808253-08;1;1000;1000;1;UG/L;02-SEP-
21 QC	20	0825702M	IXBN1	0808257-02;1;1080;1000;1;UG/L;02-SEP-
22 QC	21	0825702S	IXBN1	0808257-02;1;1080;1000;1;UG/L;02-SEP-
23 Sample	22	0825102	IXBN1 ⁶²⁵	0808251-02;1;1080;1000;1;MG/L;02-SEP-
24 Sample	1	DF0903B2	DFTPPBN1	DF0903B2;;;;;SV4405 19:56, 9/3
25 Sample	2	CCV050E	IXBN1	CCV050PPM;;;;;SV4512
26 Sample	23	0825309	IXBN1	0808253-09;1;1080;1000;1;UG/L;02-SEP-
27 Sample	24	0825310	IXBN1	0808253-10;1;1080;1000;1;UG/L;02-SEP-
28 Sample	25	0824301T	IXBN1	0808243-01;1;100;1000;1;MG/L;02-SEP-2
29 Sample	26	0823201T	IXBN1	0808232-01;1;100;1000;1;MG/L;02-SEP-2
30 QC	27	824301TM	IXBN1	0808243-01;1;100;1000;1;MG/L;02-SEP-2

Sequence Name: C:\HPCHEM\1\SEQUENCE\090308B1.S
Comment: 8270/625
Operator: ADM
Data Path: C:\HPCHEM\1\DATA\090308B1.b\
Pre-Seq Cmd:
Post-Seq Cmd:

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Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: Sample DF0903B1;;;;;SV4405 Vial: 1 ;;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0903B1.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: Sample CCV050PPM;;;;;SV4512 Vial: 2 ;;;;;;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: CCV050.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: QC SBLK0902BW1;1;1000;1000;1;UG/L;02-SEP-2008 Vial: 3 ;3;BLANK;;;090208BW1;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: S1BW0902.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: QC SBLK0902BW1LCS;1;1000;1000;1;UG/L;02-SEP-2008 Vial: 4 ;3;LCS;;;090208BW1;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: S1LW0902.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: Sample 0808257-01;1;1080;1000;1;UG/L;02-SEP-2008 Vial: 5 ch2.b08257;0;;;;;090208BW1;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: 0825701.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: Sample 0808257-02;1;1080;1000;1;UG/L;02-SEP-2008 Vial: 6 ch2.b08257;0;;;;;090208BW1;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: 0825702.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: Sample 0808257-03;1;1080;1000;1;UG/L;02-SEP-2008 Vial: 7 ch2.b08257;0;;;;;090208BW1;ppbna.sub;4504 Meth: IXBN1.M Barcode:

Data: 0825703.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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9 Type: Sample 0808265-01;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 8 ch2.b08265;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0826501.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

10 Type: Sample 0808265-02;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 9 ch2.b08265;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0826502.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

11 Type: Sample 0808265-03;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 10 ch2.b08265;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0826503.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

12 Type: Sample 0808265-04;1;500;1000;1;UG/L;02-SEP-2008
Vial: 11 ch2.b08265;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0826504.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

13 Type: Sample 0808242-01;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 12 sha.b08242;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0824201.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

14 Type: Sample 0808253-02;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 13 tet.b08253;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0825302.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

15 Type: Sample 0808253-03;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 14 tet.b08253;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0825303.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

16 Type: Sample 0808253-04;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 15 tet.b08253;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0825304.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

17 Type: Sample 0808253-05;1;1000;1000;1;UG/L;02-SEP-2008
Vial: 16 tet.b08253;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0825305.D Samp Amt: 0 Multiplr: 1

Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

18 Type: Sample 0808253-06;1;1080;1000;1;UG/L;02-SEP-2008
 Vial: 17 tet.b08253;0;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825306.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

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19 Type: Sample 0808253-07;1;1080;1000;1;UG/L;02-SEP-2008
 Vial: 18 tet.b08253;0;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825307.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

20 Type: Sample 0808253-08;1;1000;1000;1;UG/L;02-SEP-2008
 Vial: 19 tet.b08253;0;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825308.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

21 Type: QC 0808257-02;1;1080;1000;1;UG/L;02-SEP-2008
 Vial: 20 ch2.b08257;3;MS;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825702M.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

22 Type: QC 0808257-02;1;1080;1000;1;UG/L;02-SEP-2008
 Vial: 21 ch2.b08257;3;MSD;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825702S.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

23 Type: Sample 0808251-02;1;1080;1000;1;MG/L;02-SEP-2008
 Vial: 22 hop.b08251;0;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825102.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

24 Type: Sample DF0903B2;;;;;SV4405
 Vial: 1 ;;;;;all.sub;
 Meth: DFTPPBN1.M Barcode:
 Data: DF0903B2.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

25 Type: Sample CCV050PPM;;;;;SV4512
 Vial: 2 ;;;;;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: CCV050E.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

26 Type: Sample 0808253-09;1;1080;1000;1;UG/L;02-SEP-2008
 Vial: 23 tet.b08253;0;;;090208BW1;ppbna.sub;4504
 Meth: IXBN1.M Barcode:
 Data: 0825309.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default

Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

7065

27 Type: Sample 0808253-10;1;1080;1000;1;UG/L;02-SEP-2008
Vial: 24 tet.b08253;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0825310.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

28 Type: Sample 0808243-01;1;100;1000;1;MG/L;02-SEP-2008
Vial: 25 sha.b08243;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0824301T.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

29 Type: Sample 0808232-01;1;100;1000;1;MG/L;02-SEP-2008
Vial: 26 war.b08232;0;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 0823201T.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

30 Type: QC 0808243-01;1;100;1000;1;MG/L;02-SEP-2008
Vial: 27 sha.b08243;3;MS;;;090208BW1;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: 824301TM.D Lvlid: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

Sequence Name: C:\HPCHEM\1\SEQUENCE\090508B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090508B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7069

M9/07/8

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	BLANK	DFTPPBN1	
2 Sample	1	DF0905B1	DFTPPBN1	DF0905B1;;;;;SV44056:01,9)5
3 Sample	2	CCV050	IXBN1	CCV050PPM;;;;;SV4512
4 Sample	3	CCVAP9B	IXBN1	CCVap9b50PPM;;;;;SV4515
5 QC	4	S1BW0904	IXBN1	SBLK0904BW1;1;1000;1000;1;UG/L;04-SEP
6 QC	5	S1LW0904	IXBN1	SBLK0904BW1LCS;1;1000;1000;1;UG/L;04-
7 QC	6	S1DW0904	IXBN1	SBLK0904BW1LCS;1;1000;1000;1;UG/L;04-
8 Sample	7	0826802	IXBN1	0808268-02;1;1080;1000;1;UG/L;04-SEP-
9 Sample	8	0826803	IXBN1	0808268-03;1;1080;1000;1;UG/L;04-SEP- <i>to report</i>
10 Sample	9	0826804	IXBN1	0808268-04;1;1080;1000;1;UG/L;04-SEP-
11 Sample	10	0826805	IXBN1	0808268-05;1;1080;1000;1;UG/L;04-SEP-
12 Sample	11	0826806	IXBN1	0808268-06;1;1040;1000;1;UG/L;04-SEP-
13 Sample	12	0826807	IXBN1	0808268-07;1;1080;1000;1;UG/L;04-SEP-
14 Sample	13	0826808	IXBN1	0808268-08;1;1080;1000;1;UG/L;04-SEP-
15 Sample	14	0826809	IXBN1	0808268-09;1;1080;1000;1;UG/L;04-SEP-
16 Sample	15	0826810	IXBN1	0808268-10;1;1080;1000;1;UG/L;04-SEP-
17 Sample	16	0827201	IXBN1	0808272-01;1;1080;1000;1;UG/L;04-SEP-
18 Sample	17	0826601	IXBN1	0808266-01;1;1080;1000;1;UG/L;04-SEP-
19 Sample	18	0826602	IXBN1	0808266-02;1;1080;1000;1;UG/L;04-SEP- 16:08,9)5

Sequence Name: C:\HPCHEM\1\SEQUENCE\090508B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090508B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7070

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: Sample DF0905B1;;;;;SV4405 Vial: 1 ;;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0905B1.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: Sample CCV050PPM;;;;;SV4512 Vial: 2 ;;;;;;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: CCV050.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: Sample CCVap9b50PPM;;;;;SV4515 Vial: 3 ;;;;;;app9b.sub;4514 Meth: IXBN1.M Barcode: Data: CCVAP9B.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: QC SBLK0904BW1;1;1000;1000;1;UG/L;04-SEP-2008 Vial: 4 ;3;BLANK;;;090408BW1;all.sub;4514 Meth: IXBN1.M Barcode: Data: S1BW0904.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: QC SBLK0904BW1LCS;1;1000;1000;1;UG/L;04-SEP-2008 Vial: 5 ;3;LCS;;;090408BW1;all.sub;4514 Meth: IXBN1.M Barcode: Data: S1LW0904.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: QC SBLK0904BW1LCS;1;1000;1000;1;UG/L;04-SEP-2008 Vial: 6 ;3;LCSD;;;090408BW1;all.sub;4514 Meth: IXBN1.M Barcode: Data: S1DW0904.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: Sample 0808268-02;1;1080;1000;1;UG/L;04-SEP-2008 Vial: 7 0808268 .b08268;0;;;;;090408BW1;ppbna.sub;4514 Meth: IXBN1.M Barcode:

Data: 0826802.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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9 Type: Sample 0808268-03;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 8 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826803.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

10 Type: Sample 0808268-04;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 9 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826804.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

11 Type: Sample 0808268-05;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 10 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826805.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

12 Type: Sample 0808268-06;1;1040;1000;1;UG/L;04-SEP-2008
Vial: 11 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826806.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

13 Type: Sample 0808268-07;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 12 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826807.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

14 Type: Sample 0808268-08;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 13 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826808.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

15 Type: Sample 0808268-09;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 14 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826809.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

16 Type: Sample 0808268-10;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 15 ch2.b08268;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826810.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

17 Type: Sample 0808272-01;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 16 sha.b08272;0;;;090408BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0827201.D Samp Amt: 0 Multiplr: 1

Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

7072

18 Type: Sample 0808266-01;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 17 ame.b08266;0;;;090408BW1;all.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826601.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

19 Type: Sample 0808266-02;1;1080;1000;1;UG/L;04-SEP-2008
Vial: 18 ame.b08266;0;;;090408BW1;all.sub;4514
Meth: IXBN1.M Barcode:
Data: 0826602.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

Sequence Name: C:\HPCHEM\1\SEQUENCE\090908B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090908B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7078

Ma/9/7

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	BLANK	DFTPPBN1	
2 Sample	2	PRIMER	IXBN1	CCV050PPM;;;;;SV4512
3 Sample	1	DF0909B1	DFTPPBN1	DF0909B1;;;;;SV4405 <i>14:21, 9/9</i>
4 Sample	2	CCV050	IXBN1	CCV050PPM;;;;;SV4512
5 Sample	3	CCVDRO1	IXBN1	CCVDRO50PPM;;;;;SV4515
6 QC	4	S1BW0909	IXBN1	SBLK0909BW1;1;1000;1000;1;UG/L;09-SEP
7 QC	5	S1LW0909	IXBN1	SBLK0909BW1LCS;1;1000;1000;1;UG/L;09-
8 QC	6	S1DW0909	IXBN1	SBLK0909BW1LCS;1;1000;1000;1;UG/L;09-
9 Sample	7	826803RE	IXBN1	0808268-03;1;1080;1000;1;UG/L;09-SEP-
10 Sample	8	0901401	IXBN1	0809014-01;1;1080;1000;1;UG/L;09-SEP-
11 Sample	9	0901402	IXBN1	0809014-02;1;1080;1000;1;UG/L;09-SEP-
12 Sample	10	0901403	IXBN1	0809014-03;1;1080;1000;1;UG/L;09-SEP-
13 Sample	11	0901404	IXBN1	0809014-04;1;1080;1000;1;UG/L;09-SEP-
14 Sample	12	0901405	IXBN1	0809014-05;1;1080;1000;1;UG/L;09-SEP-
15 Sample	13	0902601	IXBN1	0809026-01;1;1080;1000;1;UG/L;09-SEP-
16 Sample	14	0903922	IXBN1	0809039-22;1;1080;1000;1;UG/L;09-SEP- <i>is 9067-01</i>
17 Sample	15	0904801	IXBN1	0809048-01;1;1080;1000;1;UG/L;09-SEP- <i>SX</i>
18 Sample	16	0904803	IXBN1	0809048-03;1;900;1000;1;UG/L;09-SEP-2
19 Sample	17	0904804	IXBN1	0809048-04;1;1080;1000;1;UG/L;09-SEP- <i>SX</i>
20 Sample	18	0904805	IXBN1	0809048-05;1;1080;1000;1;UG/L;09-SEP- <i>SX</i>
21 Sample	19	0904806	IXBN1	0809048-06;1;1080;1000;1;UG/L;09-SEP-
22 Sample	20	0904807	IXBN1	0809048-07;1;1080;1000;1;UG/L;09-SEP-
23 Sample	21	0905001	IXBN1	0809050-01;1;1080;1000;1;UG/L;09-SEP-2:14, 9/10
24 Sample	100	BLANK	DFTPPBN1	
25 Sample	1	DF0909B2	DFTPPBN1	DF0909B2;;;;;SV4405
26 Sample	2	CCV050E	IXBN1	CCV050PPM;;;;;SV4512 - <i>failed</i>
27 Sample	22	0904802	IXBN1	0809048-02;1;1080;1000;1;UG/L;09-SEP- <i>SX</i>

Sequence Name: C:\HPCHEM\1\SEQUENCE\090908B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\090908B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7079

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: Sample CCV050PPM;;;;;SV4512 Vial: 2 ;;;;;;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: PRIMER.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: Sample DF0909B1;;;;;SV4405 Vial: 1 ;;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0909B1.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: Sample CCV050PPM;;;;;SV4512 Vial: 2 ;;;;;;ppbna.sub;4504 Meth: IXBN1.M Barcode: Data: CCV050.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: Sample CCVDRO50PPM;;;;;SV4515 Vial: 3 ;;;;;;dro.sub;451 Meth: IXBN1.M Barcode: Data: CCVDRO1.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: QC SBLK0909BW1;1;1000;1000;1;UG/L;09-SEP-2008 Vial: 4 ;3;BLANK;;;090908BW1;ppbna.sub;4514 Meth: IXBN1.M Barcode: Data: S1BW0909.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: QC SBLK0909BW1LCS;1;1000;1000;1;UG/L;09-SEP-2008 Vial: 5 ;3;LCS;;;090908BW1;ppbna.sub;4514 Meth: IXBN1.M Barcode: Data: S1LW0909.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: QC SBLK0909BW1LCS;1;1000;1000;1;UG/L;09-SEP-2008 Vial: 6 ;3;LCSD;;;090908BW1;ppbna.sub;4514 Meth: IXBN1.M Barcode:

Data: S1DW0909.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

7080

9 Type: Sample 0808268-03;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 7 tet.b08268;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 826803RE.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

10 Type: Sample 0809014-01;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 8 ch2.b09014;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0901401.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

11 Type: Sample 0809014-02;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 9 ch2.b09014;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0901402.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

12 Type: Sample 0809014-03;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 10 ch2.b09014;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0901403.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

13 Type: Sample 0809014-04;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 11 ch2.b09014;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0901404.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

14 Type: Sample 0809014-05;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 12 ch2.b09014;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0901405.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

15 Type: Sample 0809026-01;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 13 ch2.b09026;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0902601.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

16 Type: Sample 0809039-22;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 14 ch2.b09026;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0903922.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

17 Type: Sample 0809048-01;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 15 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904801.D Samp Amt: 0 Multiplr: 1

Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

18 Type: Sample 0809048-03;1;900;1000;1;UG/L;09-SEP-2008
Vial: 16 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904803.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

7081

19 Type: Sample 0809048-04;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 17 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904804.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

20 Type: Sample 0809048-05;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 18 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904805.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

21 Type: Sample 0809048-06;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 19 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904806.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

22 Type: Sample 0809048-07;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 20 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904807.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

23 Type: Sample 0809050-01;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 21 tpm.b09050;0;;;090908BW1;tpm.sub;4514
Meth: IXBN1.M Barcode:
Data: 0905001.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

24 Type: Sample
Vial: 100
Meth: DFTPPBN1.M Barcode:
Data: BLANK.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

25 Type: Sample DF0909B2;;;;;SV4405
Vial: 1 ;;;;;;all.sub;
Meth: DFTPPBN1.M Barcode:
Data: DF0909B2.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

26 Type: Sample CCV050PPM;;;;;SV4512
Vial: 2 ;;;;;;ppbna.sub;4504
Meth: IXBN1.M Barcode:
Data: CCV050E.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default

Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

27 Type: Sample 0809048-02;1;1080;1000;1;UG/L;09-SEP-2008
Vial: 22 all.b09048;0;;;090908BW1;ppbna.sub;4514
Meth: IXBN1.M Barcode:
Data: 0904802.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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Empirical Laboratories
 EMPIRICAL LABORATORIES, LLC
 LABORATORY SAMPLE CUSTODY FORM
 WALK-IN REFRIGERATOR

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/Comments	Task Performed
8217-01 8217-49 8244-1-2 8232	JC 8/29/08 9:10 B-29-08 10:28	Used all RPS		exo d LL PAH TCLP
8251-01 8253-01-09 8206-01 8242-01 8244-01-02	KH 8/29/08 10:52	KH 8/29/08 12:55		Hg
8209-01-03 B 8224-01-02 8249-01 H 8251-02 C	JG 8/29/08 1:30	JG 8/29/08 2:40		CN
8233-01-03 B 8236-01 B 8183-01 A 8144-01 A 8227-01-02 A	JG 8/29/08 2:50	JG 8/28/08 4:55		NH ₃
8251-01 8253-02-10 8260-01-04	KH 9/2/08 8:00	KH 9/2/08 9:07		Metals
8266-07-08 8268-02 03, 04, 05	KH 9/2/08 9:35	KH 9/2/08 9:49		Metals
8242-01 8252-01 8258-2-10 8168-01 8178-01 8208-01	9:30 9/2/08 JC	Used all		P/PCB
8208-05-01 8230-01 8236-01 8251-01	AH 10:20 9/2/08	AH 9/2 14:30		NH ₃
8233-01-03 8236-01-03 8238-01 8252-01 8252-05 8259-03			Used all	079
8227-04-02 8244-13-05, 06 0408136; 0808148; 0808180 0808186; 0808212	10:50 KOG 9/2/08 11:20 9-2-08 RPS	15:23 KOG 9/2/08 16:32 9-2-08 RPS		Clay sol metals

Pesticides/PCB Section

FORM 2
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PW1BLK0902	103	98	100	113			0
02	PW1BLK0902LC	93	88	103	116			0
03	PW1BLK0902LC	92	87	97	110			0
04	PW1BLK0902LC	108	100	103	122			0
05	PW1BLK0902LC	107	105	100	117			0
06	01GW0701	107	104	99	111			0
07	01GW0701D	0*	0*	0*	0*			4
08	01GW0801	100	96	91	101			0
09	01GW1201	106	104	91	102			0
10	01GW1301	109	105	102	118			0
11	01GW1101	95	101	26	30			0
12	01GW1501	103	98	26	27			0
13	01GW1401	99	96	39	44			0
14	01GW1001	105	103	98	110			0
15	PW1BLK0904	97	95	67	77			0
16	PW1BLK0904LC	91	86	91	105			0
17	PW1BLK0904LC	97	90	98	113			0
18	PW1BLK0904LC	104	102	107	124			0
19	PW1BLK0904LC	99	97	87	102			0
20	01GW0601	93	88	83	97			0
21	01GW0901	87	83	88	99			0
22	01GW1701	105	100	100	110			0
23	01GW1601	103	102	105	125			0
24	01GW1601D	102	99	96	113			0
25	01GW1801	105	104	78	86			0
26	01GW1901	102	101	98	107			0
27	01GW2101	96	94	98	110			0
28	01GW2001	103	103	91	105			0
29								
30								

		EL	SPIKE
S1	= TCMX	QC LIMITS	CONC (ug/L)
S2	= DCB	(25-120)	0.50
		(25-130)	0.50

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: PW1BLK0902

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aldrin	1.000	0.0000	1.130	113	25-140
Alpha-BHC	1.000	0.0000	1.142	114	60-130
Alpha-Chlordane	1.000	0.0000	1.092	109	65-125
Beta-BHC	1.000	0.0000	1.167	117	65-125
4,4'-DDD	1.000	0.0000	1.375	138	25-150
4,4'-DDE	1.000	0.0000	1.209	121	35-140
4,4'-DDT	1.000	0.0000	1.104	110	45-140
Delta-BHC	1.000	0.0000	1.369	137*	45-135
Dieldrin	1.000	0.0000	1.133	113	60-130
Endosulfan I	1.000	0.0000	1.103	110	50-110
Endosulfan II	1.000	0.0000	1.091	109	30-130
Endosulfan Sulfate	1.000	0.0000	1.176	118	55-135
Endrin	1.000	0.0000	1.177	118	55-135
Endrin Aldehyde	1.000	0.0000	1.143	114	55-135
Endrin Ketone	1.000	0.0000	1.130	113	75-125
Gamma-BHC	1.000	0.0000	1.190	119	25-135
Gamma-Chlordane	1.000	0.0000	1.176	118	60-125
Heptachlor	1.000	0.0000	1.130	113	40-130
Heptachlor Epoxide	1.000	0.0000	1.057	106	60-130
Methoxychlor	1.000	0.0000	1.236	124	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Matrix Spike - Client Sample No.: PW1BLK0902

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	1.000	1.091	109	4	30	25-140
Alpha-BHC	1.000	1.112	111	3	30	60-130
Alpha-Chlordane	1.000	1.045	104	4	30	65-125
Beta-BHC	1.000	1.105	110	5	30	65-125
4,4'-DDD	1.000	1.288	129	6	30	25-150
4,4'-DDE	1.000	1.149	115	5	30	35-140
4,4'-DDT	1.000	1.030	103	7	30	45-140
Delta-BHC	1.000	1.287	129	6	30	45-135
Dieldrin	1.000	1.081	108	5	30	60-130
Endosulfan I	1.000	1.060	106	4	30	50-110
Endosulfan II	1.000	1.021	102	7	30	30-130
Endosulfan Sulfate	1.000	1.074	107	9	30	55-135
Endrin	1.000	1.125	112	4	30	55-135
Endrin Aldehyde	1.000	1.080	108	6	30	55-135
Endrin Ketone	1.000	1.053	105	7	30	75-125
Gamma-BHC	1.000	1.146	115	4	30	25-135
Gamma-Chlordane	1.000	1.121	112	5	30	60-125
Heptachlor	1.000	1.100	110	3	30	40-130
Heptachlor Epoxide	1.000	1.012	101	4	30	60-130
Methoxychlor	1.000	1.126	113	9	30	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 20 outside limits
 Spike Recovery: 1 out of 40 outside limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: Gulfport-010
 Matrix Spike - Client Sample No.: PW1BLK0902

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
PCB-1016	5.000	0.0000	5.663	113	25-145
PCB-1260	5.000	0.0000	5.098	102	30-145

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
PCB-1016	5.000	5.411	108	4	30	25-145
PCB-1260	5.000	4.759	95	7	30	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits
 Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PW1BLK0902

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: PW1BLK0902

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 041F4101

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/13/08 21:50

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.0033	0.010	U
319-84-6-----	Alpha-BHC	0.0033	0.010	U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010	U
319-85-7-----	Beta-BHC	0.0033	0.010	U
72-54-8-----	4,4'-DDD	0.0050	0.020	U
72-55-9-----	4,4'-DDE	0.0050	0.020	U
50-29-3-----	4,4'-DDT	0.0050	0.020	U
319-86-8-----	Delta-BHC	0.0033	0.010	U
60-57-1-----	Dieldrin	0.0050	0.020	U
959-98-8-----	Endosulfan I	0.0033	0.010	U
33213-65-9----	Endosulfan II	0.0050	0.020	U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020	U
72-20-8-----	Endrin	0.0050	0.020	U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020	U
53494-70-5----	Endrin Ketone	0.0050	0.020	U
58-89-9-----	Gamma-BHC	0.0033	0.010	U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010	U
76-44-8-----	Heptachlor	0.0033	0.010	U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010	U
72-43-5-----	Methoxychlor	0.0033	0.010	U
8001-35-2-----	Toxaphene	0.33	1.0	U
12674-11-2----	PCB-1016	0.12	0.50	U
11104-28-2----	PCB-1221	0.12	0.50	U
11141-16-5----	PCB-1232	0.12	0.50	U
53469-21-9----	PCB-1242	0.12	0.50	U
12672-29-6----	PCB-1248	0.12	0.50	U
11097-69-1----	PCB-1254	0.12	0.50	U
11096-82-5----	PCB-1260	0.12	0.50	U

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PW1BLK0902

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Lab Sample ID: PW1BLK0902 Lab File ID: 041F4101
 Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc/Soxh) SEPF
 Sulfur Cleanup (Y/N) Y Date Extracted: 09/02/08
 Date Analyzed (1): 09/13/08 Date Analyzed (2): 09/13/08
 Time Analyzed (1): 2150 Time Analyzed (2): 2150
 Instrument ID (1): ECD3 Instrument ID (2): ECD3
 Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PW1BLK0902LC	PW1BLK0902LCS	09/13/08	09/13/08
02	PW1BLK0902LC	PW1BLK0902LCSD	09/13/08	09/13/08
03	PW1BLK0902LC	PW1BLK0902LCS	09/13/08	09/13/08
04	PW1BLK0902LC	PW1BLK0902LCSD	09/13/08	09/13/08
05	01GW0701	0808253-02	09/13/08	09/13/08
06	01GW0701D	0808253-03	09/13/08	09/13/08
07	01GW0801	0808253-04	09/13/08	09/13/08
08	01GW1201	0808253-05	09/14/08	09/14/08
09	01GW1301	0808253-06	09/14/08	09/14/08
10	01GW1101	0808253-07	09/14/08	09/14/08
11	01GW1501	0808253-08	09/14/08	09/14/08
12	01GW1401	0808253-09	09/14/08	09/14/08
13	01GW1001	0808253-10	09/14/08	09/14/08
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: PW1BLK0904

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Aldrin	1.000	0.0000	1.124	112	25-140
Alpha-BHC	1.000	0.0000	1.103	110	60-130
Alpha-Chlordane	1.000	0.0000	1.051	105	65-125
Beta-BHC	1.000	0.0000	1.138	114	65-125
4,4'-DDD	1.000	0.0000	1.210	121	25-150
4,4'-DDE	1.000	0.0000	1.098	110	35-140
4,4'-DDT	1.000	0.0000	1.014	101	45-140
Delta-BHC	1.000	0.0000	1.257	126	45-135
Dieldrin	1.000	0.0000	1.105	110	60-130
Endosulfan I	1.000	0.0000	1.074	107	50-110
Endosulfan II	1.000	0.0000	1.063	106	30-130
Endosulfan Sulfate	1.000	0.0000	1.081	108	55-135
Endrin	1.000	0.0000	1.066	107	55-135
Endrin Aldehyde	1.000	0.0000	1.125	112	55-135
Endrin Ketone	1.000	0.0000	1.070	107	75-125
Gamma-BHC	1.000	0.0000	1.137	114	25-135
Gamma-Chlordane	1.000	0.0000	1.089	109	60-125
Heptachlor	1.000	0.0000	1.129	113	40-130
Heptachlor Epoxide	1.000	0.0000	1.006	101	60-130
Methoxychlor	1.000	0.0000	1.083	108	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix Spike - Client Sample No.: PW1BLK0904

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	1.000	1.135	114	1	30	25-140
Alpha-BHC	1.000	1.141	114	3	30	60-130
Alpha-Chlordane	1.000	1.085	108	3	30	65-125
Beta-BHC	1.000	1.106	111	3	30	65-125
4,4'-DDD	1.000	1.255	126	4	30	25-150
4,4'-DDE	1.000	1.112	111	1	30	35-140
4,4'-DDT	1.000	1.140	114	12	30	45-140
Delta-BHC	1.000	1.244	124	1	30	45-135
Dieldrin	1.000	1.136	114	3	30	60-130
Endosulfan I	1.000	1.111	111*	3	30	50-110
Endosulfan II	1.000	1.094	109	3	30	30-130
Endosulfan Sulfate	1.000	1.111	111	3	30	55-135
Endrin	1.000	1.109	111	4	30	55-135
Endrin Aldehyde	1.000	1.214	121	8	30	55-135
Endrin Ketone	1.000	1.108	111	3	30	75-125
Gamma-BHC	1.000	1.156	116	2	30	25-135
Gamma-Chlordane	1.000	1.123	112	3	30	60-125
Heptachlor	1.000	1.181	118	4	30	40-130
Heptachlor Epoxide	1.000	1.041	104	3	30	60-130
Methoxychlor	1.000	1.150	115	6	30	55-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 20 outside limits

Spike Recovery: 1 out of 40 outside limits

COMMENTS: _____

FORM 3
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: Gulfport-010
 Matrix Spike - Client Sample No.: PW1BLK0904

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
PCB-1016	5.000	0.0000	5.285	106	25-145
PCB-1260	5.000	0.0000	4.878	98	30-145

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
PCB-1016	5.000	5.072	101	4	30	25-145
PCB-1260	5.000	4.500	90	8	30	30-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits
 Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PW1BLK0904

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Matrix: (soil/water) WATER Lab Sample ID: PW1BLK0904

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 057F5701

% Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/04/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/14/08 02:45

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/L	Q
		MDL	(ug/L or ug/Kg) RL CONC		
309-00-2-----	Aldrin	0.0033	0.010		U
319-84-6-----	Alpha-BHC	0.0033	0.010		U
5103-71-9-----	Alpha-Chlordane	0.0033	0.010		U
319-85-7-----	Beta-BHC	0.0033	0.010		U
72-54-8-----	4,4'-DDD	0.0050	0.020		U
72-55-9-----	4,4'-DDE	0.0050	0.020		U
50-29-3-----	4,4'-DDT	0.0050	0.020		U
319-86-8-----	Delta-BHC	0.0033	0.010		U
60-57-1-----	Dieldrin	0.0050	0.020		U
959-98-8-----	Endosulfan I	0.0033	0.010		U
33213-65-9----	Endosulfan II	0.0050	0.020		U
1031-07-8-----	Endosulfan Sulfate	0.0050	0.020		U
72-20-8-----	Endrin	0.0050	0.020		U
7421-93-4-----	Endrin Aldehyde	0.0050	0.020		U
53494-70-5----	Endrin Ketone	0.0050	0.020		U
58-89-9-----	Gamma-BHC	0.0033	0.010		U
5103-74-2-----	Gamma-Chlordane	0.0033	0.010		U
76-44-8-----	Heptachlor	0.0033	0.010		U
1024-57-3-----	Heptachlor Epoxide	0.0033	0.010		U
72-43-5-----	Methoxychlor	0.0033	0.010		U
8001-35-2-----	Toxaphene	0.33	1.0		U
12674-11-2----	PCB-1016	0.12	0.50		U
11104-28-2----	PCB-1221	0.12	0.50		U
11141-16-5----	PCB-1232	0.12	0.50		U
53469-21-9----	PCB-1242	0.12	0.50		U
12672-29-6----	PCB-1248	0.12	0.50		U
11097-69-1----	PCB-1254	0.12	0.50		U
11096-82-5----	PCB-1260	0.12	0.50		U

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PW1BLK0904

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Lab Sample ID: PW1BLK0904 Lab File ID: 057F5701
 Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc/Soxh) SEPF
 Sulfur Cleanup (Y/N) N Date Extracted: 09/04/08
 Date Analyzed (1): 09/14/08 Date Analyzed (2): 09/14/08
 Time Analyzed (1): 0245 Time Analyzed (2): 0245
 Instrument ID (1): ECD3 Instrument ID (2): ECD3
 Column (1): ZB MR-1 ID: 0.32(mm) Column (2): ZB MR-2 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PW1BLK0904LC	PW1BLK0904LCS	09/14/08	09/14/08
02	PW1BLK0904LC	PW1BLK0904LCSD	09/14/08	09/14/08
03	PW1BLK0904LC	PW1BLK0904LCS	09/14/08	09/14/08
04	PW1BLK0904LC	PW1BLK0904LCSD	09/14/08	09/14/08
05	01GW0601	0808268-02	09/14/08	09/14/08
06	01GW0901	0808268-03	09/14/08	09/14/08
07	01GW1701	0808268-04	09/14/08	09/14/08
08	01GW1601	0808268-05	09/14/08	09/14/08
09	01GW1601D	0808268-06	09/14/08	09/14/08
10	01GW1801	0808268-07	09/14/08	09/14/08
11	01GW1901	0808268-08	09/14/08	09/14/08
12	01GW2101	0808268-09	09/14/08	09/14/08
13	01GW2001	0808268-10	09/14/08	09/14/08
14				
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COMMENTS: _____

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF200: 002F0201 RF100: 003F0301 RF50: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X289.530	X304.446	X310.499	X308.318	X329.980
(2)	X100.046	110.173	110.468	115.384	X136.540
(3)	146.044	160.131	X162.537	165.754	194.710
(4)	150.902	162.787	161.801	164.146	182.960
(5)	118.721	128.850	130.063	133.854	154.940
PCB-1260	663.940	X740.973	714.971	X704.398	770.340
(2)	360.194	372.681	365.631	353.442	369.070
(3)	380.368	407.299	380.739	377.810	371.800
(4)	308.501	335.758	335.611	339.168	X392.690
(5)	X161.922	X178.522	X168.228	X165.726	179.370

J.H. 9.4.08
BM sep or

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1016	✕331.520	✕ 328.960	AVRG	314.750324	5.0
(2)	139.080	✕138.560	AVRG	121.464429	13.3
(3)	206.840	209.040	AVRG	177.865190	14.2
(4)	184.040	173.760	AVRG	168.628105	7.2
(5)	157.700	156.120	AVRG	140.035410	11.3
PCB-1260	✕ 801.460	785.640	AVRG	740.246010	6.6
(2)	394.500	388.280	AVRG	371.971038	4.0
(3)	394.240	420.880	AVRG	390.447952	4.6
(4)	419.580	✕425.320	AVRG	365.232495	12.7
(5)	✕192.240	181.040	AVRG	175.292514	6.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT1: 002F0201 RT2: 003F0301 RT3: 004F0401
RT4: 005F0501 RT5: 006F0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	5.890	5.890	5.890	5.890	5.890
(2)	5.040	5.039	5.040	5.040	5.040
(3)	5.380	5.379	5.380	5.380	5.380
(4)	6.070	6.070	6.070	6.070	6.070
(5)	6.170	6.169	6.170	6.170	6.170
PCB-1260	9.150	9.150	9.150	9.150	9.160
(2)	8.030	8.032	8.040	8.040	8.040
(3)	8.390	8.385	8.390	8.390	8.390
(4)	8.470	8.469	8.470	8.470	8.470
(5)	10.250	10.250	10.250	10.250	10.250

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT6: 007F0701 RT7: 008F0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	5.890	5.890	5.890	5.860	5.920
(2)	5.040	5.040	5.040	5.009	5.069
(3)	5.380	5.380	5.380	5.349	5.409
(4)	6.070	6.070	6.070	6.040	6.100
(5)	6.170	6.170	6.170	6.139	6.199
PCB-1260	9.160	9.160	9.154	9.120	9.180
(2)	8.040	8.040	8.037	8.002	8.062
(3)	8.390	8.390	8.389	8.355	8.415
(4)	8.470	8.470	8.470	8.439	8.499
(5)	10.260	10.260	10.253	10.220	10.280

J.# 9.4.08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION~~ COMPOUNDS

Instrument ID: ecd3.i Injection Date: 02-SEP-2008 19:25
 Lab File ID: 009F0901.D Init. Cal. Date(s): 22-SEP-2006 02-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 19:07
 Lab Sample ID: 1660 ICV #7095 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\090208.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	315	X 316	0.010	0.5	15.0
(2)	121	115	0.010	-5.7	15.0
(3)	178	X 168	0.010	-5.4	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	169	170	0.010	0.9	15.0
(6)	140	136	0.010	-3.1	15.0
35 PCB-1260(1)	740	765	0.010	3.4	15.0
(2)	++++	++++	0.010	++++	15.0
(3)	372	393	0.010	5.7	15.0
(4)	390	408	0.010	4.6	15.0
(5)	365	353	0.010	-3.5	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	175	X 179	0.010	2.1	15.0

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#
01	1660 2500 #7	09/02/08	1715		
02	1660 1000 #7	09/02/08	1734		
03	1660 750 #70	09/02/08	1752		
04	1660 500 #70	09/02/08	1811		
05	1660 100 #70	09/02/08	1829		
06	1660 50 #701	09/02/08	1848		
07	1660 25 #701	09/02/08	1907		
08	1660 ICV #70	09/02/08	1925		
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32					

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPORT-010
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 9.13.08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 9.13.08
 Lab Sample ID (PEM): _____ Time Analyzed: 09:11

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): 4.0 Endrin & breakdown (1): 6.5
 Combined & breakdown (1): NA

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RF200: 003F0301 RF100: 004F0401 RF50: 005F0501
RF25: 006F0601 RF10: 007F0701

COMPOUND	RF200	RF100	RF50	RF25	RF10
Aldrin	8048.525	8026.640	8057.520	8245.160	8262.900
Alpha-BHC	9213.790	9178.170	9263.940	9312.320	9300.800
Alpha-Chlordane	7378.430	7438.400	7592.940	7968.880	8298.300
Beta-BHC	3452.190	3343.280	3454.620	3581.680	3980.800
4,4'-DDD	5328.065	5221.100	5105.500	5259.080	5807.000
4,4'-DDE	6554.440	6417.590	6291.640	6576.120	7412.300
4,4'-DDT	5805.120	5663.410	5462.760	5984.440	6747.200
Delta-BHC	7064.475	6880.230	6911.680	7076.480	7350.300
Dieldrin	7802.435	7777.270	7880.860	8142.840	8374.200
Endosulfan I	7003.115	7055.200	7186.200	7467.240	7738.500
Endosulfan II	6793.035	6893.800	6971.560	7392.240	8045.000
Endosulfan Sulfate	5797.205	5512.040	5563.740	5925.840	6552.000
Endrin	5974.725	5963.820	5939.400	6180.400	6295.100
Endrin Aldehyde	4353.790	4344.530	4324.160	4748.960	4869.200
Endrin Ketone	6906.820	6618.940	6653.920	7236.000	8103.700
Gamma-BHC	x 8055.220	x 7878.850	x 7963.700	x 8138.240	x 8487.700
Gamma-Chlordane	7335.945	7311.070	7410.940	7675.960	7841.000
Heptachlor	7897.500	7901.400	8041.100	8404.000	8985.300
Heptachlor Epoxide	7251.575	7362.490	7593.140	8047.440	8939.600
Methoxychlor	2518.315	2261.390	2008.040	2235.560	2692.700
TCMX	5888.520	5921.030	6066.860	6272.680	6582.000
DCB	4970.565	4857.990	4979.960	5534.240	6420.600

J.H. 9.15.08
CAUTION

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RF5: 008F0801 RF1: 009F0901

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
Aldrin	8314.600	7521.000	AVRG	8068.04929	3.3
Alpha-BHC	10257.000	8785.000	AVRG	9330.14571	4.8
Alpha-Chlordane	9036.200	8162.000	AVRG	7982.16429	7.3
Beta-BHC	4353.000	3359.000	AVRG	3646.36714	10.4
4,4'-DDD	7051.000	4299.000	AVRG	5438.67786	15.4
4,4'-DDE	9414.200	5944.000	AVRG	6944.32714	16.9
4,4'-DDT	7756.200	5357.000	AVRG	6110.87571	14.0
Delta-BHC	8066.000	5258.000	AVRG	6943.88071	12.2
Dieldrin	8957.600	8284.000	AVRG	8174.17214	5.1
Endosulfan I	8808.400	8127.000	AVRG	7626.52214	8.6
Endosulfan II	9501.000	8418.000	AVRG	7716.37643	12.9
Endosulfan Sulfate	7926.800	6277.000	AVRG	6222.08929	13.5
Endrin	6871.800	6262.000	AVRG	6212.46357	5.2
Endrin Aldehyde	5058.000	4353.000	AVRG	4578.80571	6.7
Endrin Ketone	10041.800	7918.000	AVRG	7639.88286	15.8
Gamma-BHC	9179.400	7437.000	AVRG	8162.87286	6.7
Gamma-Chlordane	8442.600	6967.000	AVRG	7569.21643	6.3
Heptachlor	9858.400	8312.000	AVRG	8485.67143	8.4
Heptachlor Epoxide	10379.400	8093.000	AVRG	8238.09214	13.4
Methoxychlor	3398.600	2410.000	AVRG	2503.51500	18.0
TCMX	7532.400	6990.000	AVRG	6464.78429	9.5
DCB	7713.600	5276.000	AVRG	5678.99357	18.4

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RT1: 003F0301 RT2: 004F0401 RT3: 005F0501
RT4: 006F0601 RT5: 007F0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	6.950	6.953	6.950	6.950	6.950
Alpha-BHC	5.630	5.631	5.620	5.630	5.630
Alpha-Chlordane	7.850	7.855	7.850	7.850	7.850
Beta-BHC	6.240	6.250	6.240	6.240	6.240
4,4'-DDD	8.720	8.736	8.720	8.730	8.730
4,4'-DDE	8.050	8.061	8.050	8.050	8.050
4,4'-DDT	9.100	9.106	9.100	9.100	9.100
Delta-BHC	6.510	6.521	6.510	6.510	6.520
Dieldrin	8.270	8.280	8.270	8.270	8.270
Endosulfan I	7.930	7.938	7.930	7.930	7.930
Endosulfan II	8.880	8.886	8.880	8.880	8.880
Endosulfan Sulfate	9.340	9.351	9.340	9.340	9.350
Endrin	8.570	8.576	8.570	8.570	8.570
Endrin Aldehyde	9.050	9.058	9.050	9.050	9.050
Endrin Ketone	9.990	10.000	9.990	9.990	9.990
Gamma-BHC	5.980	5.990	5.980	5.980	5.980
Gamma-Chlordane	7.760	7.771	7.760	7.760	7.760
Heptachlor	6.560	6.570	6.560	6.560	6.560
Heptachlor Epoxide	7.460	7.470	7.460	7.460	7.460
Methoxychlor	9.720	9.730	9.720	9.720	9.720
TCMX	5.130	5.131	5.130	5.130	5.130
DCB	11.540	11.539	11.540	11.540	11.540

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RT6: 008F0801 RT7: 009F0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	6.950	6.950	6.950	6.923	6.983
Alpha-BHC	5.630	5.630	5.629	5.601	5.661
Alpha-Chlordane	7.850	7.850	7.851	7.825	7.885
Beta-BHC	6.250	6.240	6.243	6.220	6.280
4,4'-DDD	8.730	8.750	8.731	8.706	8.766
4,4'-DDE	8.050	8.070	8.055	8.031	8.091
4,4'-DDT	9.100	9.110	9.102	9.076	9.136
Delta-BHC	6.520	6.520	6.516	6.491	6.551
Dieldrin	8.270	8.270	8.271	8.250	8.310
Endosulfan I	7.930	7.930	7.931	7.908	7.968
Endosulfan II	8.880	8.880	8.881	8.856	8.916
Endosulfan Sulfate	9.350	9.350	9.346	9.321	9.381
Endrin	8.570	8.570	8.571	8.546	8.606
Endrin Aldehyde	9.050	9.060	9.053	9.028	9.088
Endrin Ketone	9.990	10.000	9.993	9.970	10.030
Gamma-BHC	5.990	5.980	5.983	5.960	6.020
Gamma-Chlordane	7.760	7.770	7.763	7.741	7.801
Heptachlor	6.560	6.560	6.561	6.540	6.600
Heptachlor Epoxide	7.460	7.460	7.461	7.440	7.500
Methoxychlor	9.720	9.730	9.723	9.700	9.760
=====	=====	=====	=====	=====	=====
TCMX	5.130	5.130	5.130	5.101	5.161
DCB	11.540	11.550	11.541	11.509	11.569

J.H. 9.15.08
L.A. 9/15/08

Empirical Laboratories, LLC
^{ICV}
~~CONTINUING CALIBRATION~~ COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 13:28
Lab File ID: 015F1501.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
Analysis Type: Init. Cal. Times: 14:42 11:20
Lab Sample ID: AB/ICV #7357 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
\$ 36 TCMX	6465	5617	0.010	-13.1	15.0		
3 Alpha-BHC	9330	9943	0.010	6.6	15.0		
23 Gamma-BHC	8163	X 8960	0.010	9.8	15.0		
5 Beta-BHC	3646	3668	0.010	0.6	15.0		
15 Delta-BHC	6944	7115	0.010	2.5	15.0		
25 Heptachlor	8486	9306	0.010	9.7	15.0		
2 Aldrin	8068	9101	0.010	12.8	15.0		
26 Heptachlor Epoxide	8238	8146	0.010	-1.1	15.0		
24 Gamma-Chlordane	7569	7778	0.010	2.8	15.0		
4 Alpha-Chlordane	7982	8283	0.010	3.8	15.0		
17 Endosulfan I	7627	8310	0.010	9.0	15.0		
13 4,4'-DDE	6944	6658	0.010	-4.1	15.0		
16 Dieldrin	8174	9345	0.010	14.3	15.0		
20 Endrin	6212	6706	0.010	7.9	15.0		
12 4,4'-DDD	5439	5363	0.010	-1.4	15.0		
18 Endosulfan II	7716	8312	0.010	7.7	15.0		
21 Endrin Aldehyde	4579	5012	0.010	9.5	15.0		
14 4,4'-DDT	6111	6390	0.010	4.6	15.0		
19 Endosulfan Sulfate	6222	6649	0.010	6.9	15.0		
27 Methoxychlor	2504	2561	0.010	2.3	15.0		
22 Endrin Ketone	7640	7814	0.010	2.3	15.0		
\$ 37 DCB	5679	5435	0.010	-4.3	15.0		

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 09/13/08
SP 9.17.08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 1410

LAB FILE ID: RF5: 016F1601 RF1: 012F1201

** SINGLE POINT **

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	261.580		AVRG	261.580000	0.0
(2)	121.070		AVRG	121.070000	0.0
(3)	84.850		AVRG	84.8500000	0.0
(4)	74.240		AVRG	74.2400000	0.0
(5)	* 69.190		AVRG	69.1900000	0.0
=====	=====	=====	=====	=====	=====

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.13 S2 : 11.54			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====					
01	P.E.M. #7027	09/13/08	0911		
02	AB/SUR 200#7	09/13/08	0929	5.13	11.54
03	AB/SUR 100#7	09/13/08	0948	5.13	11.54
04	AB/SUR 50#71	09/13/08	1006	5.13	11.54
05	AB/SUR 25#71	09/13/08	1024	5.13	11.54
06	AB/SUR 10#71	09/13/08	1043	5.13	11.54
07	AB/SUR 5#718	09/13/08	1101	5.13	11.54
08	AB/SUR 1#735	09/13/08	1120	5.13	11.55
09	CHLOR 5PPB #	09/13/08	1308		
10	AB/ICV #7357	09/13/08	1328	5.14	11.55
11	TOX 100PPB #	09/13/08	1410		
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 9.19.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 21:13
 Lab File ID: 039F3901.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
\$ 36 TCMX	6465	7015	0.010	8.5	15.0		
3 Alpha-BHC	9330	10604	0.010	13.7	15.0		
23 Gamma-BHC	8163	X 9249	0.010	13.3	15.0		
5 Beta-BHC	3646	3944	0.010	8.2	15.0		
15 Delta-BHC	6944	8367	0.010	20.5	15.0		<- HIGH
25 Heptachlor	8486	9057	0.010	6.7	15.0		
2 Aldrin	8068	8905	0.010	10.4	15.0		
26 Heptachlor Epoxide	8238	8262	0.010	0.3	15.0		
24 Gamma-Chlordane	7569	8468	0.010	11.9	15.0		
4 Alpha-Chlordane	7982	8422	0.010	5.5	15.0		
17 Endosulfan I	7627	7965	0.010	4.4	15.0		
13 4,4'-DDE	6944	7782	0.010	12.1	15.0		
16 Dieldrin	8174	8865	0.010	8.4	15.0		
20 Endrin	6212	6683	0.010	7.6	15.0		
12 4,4'-DDD	5439	6494	0.010	19.4	15.0		<- HIGH
18 Endosulfan II	7716	7602	0.010	-1.5	15.0		
21 Endrin Aldehyde	4579	5090	0.010	11.2	15.0		
14 4,4'-DDT	6111	5841	0.010	-4.4	15.0		
19 Endosulfan Sulfate	6222	6673	0.010	7.3	15.0		
27 Methoxychlor	2504	2522	0.010	0.7	15.0		
22 Endrin Ketone	7640	8095	0.010	6.0	15.0		
\$ 37 DCB	5679	6010	0.010	5.8	15.0		

Q/M

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 21:32
 Lab File ID: 040F4001.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	315	✓ 328	0.010	4.1	15.0
(2)	121	114	0.010	-6.0	15.0
(3)	178	175	0.010	-1.9	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	169	193	0.010	14.7	15.0
(6)	140	153	0.010	9.2	15.0
35 PCB-1260(1)	740	X 749	0.010	1.2	15.0
(2)	++++	++++	0.010	++++	15.0 <-
(3)	372	387	0.010	4.0	15.0
(4)	390	455	0.010	16.6	15.0 <-
(5)	365	353	0.010	-3.3	15.0
(6)	++++	++++	0.010	++++	15.0 <-
(7)	++++	++++	0.010	++++	15.0 <-
(8)	175	173	0.010	-1.0	15.0
\$ 36 TCMX	6465	3617	0.010	-----	15.0 <-
\$ 37 DCB	5679	2887	0.010	-49.2	15.0 <-

09/14/08
 3.5%
 > NA

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 02:08
 Lab File ID: 055F5501.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	6465	6691	0.010	3.5	15.0
3 Alpha-BHC	9330	10226	0.010	9.6	15.0
23 Gamma-BHC	8163	X 8928	0.010	9.4	15.0
5 Beta-BHC	3646	3819	0.010	4.7	15.0
15 Delta-BHC	6944	8044	0.010	15.8	15.0
25 Heptachlor	8486	9080	0.010	7.0	15.0
2 Aldrin	8068	8715	0.010	8.0	15.0
26 Heptachlor Epoxide	8238	8166	0.010	-0.9	15.0
24 Gamma-Chlordane	7569	8089	0.010	6.9	15.0
4 Alpha-Chlordane	7982	8167	0.010	2.3	15.0
17 Endosulfan I	7627	7734	0.010	1.4	15.0
13 4,4'-DDE	6944	7678	0.010	10.6	15.0
16 Dieldrin	8174	8586	0.010	5.0	15.0
20 Endrin	6212	6340	0.010	2.1	15.0
12 4,4'-DDD	5439	6252	0.010	15.0	15.0
18 Endosulfan II	7716	7672	0.010	-0.6	15.0
21 Endrin Aldehyde	4579	5100	0.010	11.4	15.0
14 4,4'-DDT	6111	5982	0.010	-2.1	15.0
19 Endosulfan Sulfate	6222	6203	0.010	-0.3	15.0
27 Methoxychlor	2504	2500	0.010	-0.1	15.0
22 Endrin Ketone	7640	7648	0.010	0.1	15.0
\$ 37 DCB	5679	5708	0.010	0.5	15.0

Calibration

HIGH

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 02:26
 Lab File ID: 056F5601.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	315	334	0.010	6.0	15.0
(2)	121	113	0.010	-7.2	15.0
(3)	178	172	0.010	-3.4	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	169	195	0.010	15.6	15.0
(6)	140	152	0.010	8.2	15.0
35 PCB-1260(1)	740	760	0.010	2.7	15.0
(2)	++++	++++	0.010	++++	15.0
(3)	372	380	0.010	2.3	15.0
(4)	390	454	0.010	16.3	15.0
(5)	365	353	0.010	-3.3	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	175	167	0.010	-4.5	15.0
\$ 36 TCMX	6465	3562	0.010	44.9	15.0
\$ 37 DCB	5679	2874	0.010	49.4	15.0

} 3.9%
 } 2.7%
 } > NA

J.H. 9-19-08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 07:02
 Lab File ID: 071F7101.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	6465	✓6788	0.010	5.0	15.0
3 Alpha-BHC	9330	10180	0.010	9.1	15.0
23 Gamma-BHC	8163	X 8837	0.010	8.3	15.0
5 Beta-BHC	3646	3770	0.010	3.4	15.0
15 Delta-BHC	6944	7954	0.010	14.5	15.0
25 Heptachlor	8486	8835	0.010	4.1	15.0
2 Aldrin	8068	8710	0.010	8.0	15.0
26 Heptachlor Epoxide	8238	8021	0.010	-2.6	15.0
24 Gamma-Chlordane	7569	8031	0.010	6.1	15.0
4 Alpha-Chlordane	7982	8136	0.010	1.9	15.0
17 Endosulfan I	7627	7645	0.010	0.2	15.0
13 4,4'-DDE	6944	7249	0.010	4.4	15.0
16 Dieldrin	8174	8488	0.010	3.8	15.0
20 Endrin	6212	6155	0.010	-0.9	15.0
12 4,4'-DDD	5439	5987	0.010	10.1	15.0
18 Endosulfan II	7716	7456	0.010	-3.4	15.0
21 Endrin Aldehyde	4579	5109	0.010	11.6	15.0
14 4,4'-DDT	6111	5860	0.010	-4.1	15.0
19 Endosulfan Sulfate	6222	6149	0.010	-1.2	15.0
27 Methoxychlor	2504	2337	0.010	-6.6	15.0
22 Endrin Ketone	7640	7516	0.010	-1.6	15.0
\$ 37 DCB	5679	5407	0.010	-4.8	15.0

OK 9/19/08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 07:20
 Lab File ID: 072F7201.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m

cdg/mm

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
29 PCB-1016(1)	315	333	0.010	5.7	15.0	
(2)	121	X 116	0.010	-4.1	15.0	
(3)	178	177	0.010	-0.6	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	169	194	0.010	15.1	15.0	<-
(6)	140	158	0.010	12.5	15.0	
35 PCB-1260(1)	740	747	0.010	1.0	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	372	387	0.010	4.2	15.0	
(4)	390	409	0.010	4.7	15.0	
(5)	365	362	0.010	-0.9	15.0	
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	175	167	0.010	-4.8	15.0	
\$ 36 TCMX	6465	3680	0.010	13.1	15.0	<-
\$ 37 DCB	5679	2925	0.010	16.5	15.0	<-

} 5.77.7

> NA

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08-09/14/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.13		S2 : 11.54	
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #
=====					
01	AB/SUR 100#7	09/13/08	2113	5.13	11.54
02	1660 1000 #7	09/13/08	2132	5.13	11.54
03	PW1BLK0902	09/13/08	2150	5.13	11.54
04	PW1BLK0902LC	09/13/08	2208	5.13	11.53
05	PW1BLK0902LC	09/13/08	2227	5.13	11.53
06	PW1BLK0902LC	09/13/08	2245	5.13	11.54
07	PW1BLK0902LC	09/13/08	2304	5.13	11.54
08	01GW0701	0808253-02	2322	5.13	11.54
09	01GW0701D	0808253-03	2340	5.13	11.55
10	01GW0801	0808253-04	2359	5.13	11.54
11	01GW1201	0808253-05	0017	5.13	11.53
12	01GW1301	0808253-06	0036	5.13	11.53
13	01GW1101	0808253-07	0054	5.13	11.53
14	01GW1501	0808253-08	0113	5.13	11.54
15	01GW1401	0808253-09	0131	5.13	11.54
16	01GW1001	0808253-10	0149	5.13	11.53
17	AB/SUR 100#7	09/14/08	0208	5.13	11.54
18	1660 1000 #7	09/14/08	0226	5.13	11.54
19	PW1BLK0904	09/14/08	0245	5.13	11.54
20	PW1BLK0904LC	09/14/08	0303	5.13	11.54
21	PW1BLK0904LC	09/14/08	0321	5.13	11.54
22	PW1BLK0904LC	09/14/08	0340	5.13	11.54
23	PW1BLK0904LC	09/14/08	0358	5.13	11.53
24	01GW0601	0808268-02	0416	5.13	11.54
25	01GW0901	0808268-03	0435	5.13	11.53
26	01GW1701	0808268-04	0453	5.13	11.54
27	01GW1601	0808268-05	0512	5.13	11.53
28	01GW1601D	0808268-06	0530	5.13	11.54
29	01GW1801	0808268-07	0548	5.13	11.54
30	01GW1901	0808268-08	0607	5.13	11.53
31	01GW2101	0808268-09	0625	5.13	11.54
32	01GW2001	0808268-10	0644	5.13	11.53

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08-09/14/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 5.13 S2 : 11.54						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #

01		AB/SUR 100#7	09/14/08	0702	5.13	11.54
02		1660 1000 #7	09/14/08	0720	5.13	11.54
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
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24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
(+/- 0.03 MINUTES)
(+/- 0.03 MINUTES)

S1 = TCMX
S2 = DCB

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF200: 002R0201 RF100: 003R0301 RF50: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	X 524.857	X 554.719	X 568.283	X 593.218	X 638.960
(2)	191.293	X 214.012	216.268	224.518	280.140
(3)	307.264	339.302	342.297	355.294	409.760
(4)	277.021	307.693	308.109	316.772	373.300
(5)	292.256	312.585	323.701	X 333.126	388.330
PCB-1260	X 1225.114	1349.656	X 1310.865	1303.778	X 1422.460
(2)	603.027	708.471	674.371	693.246	863.930
(3)	736.422	827.270	807.393	809.496	935.730
(4)	278.488	294.026	281.761	285.026	X 331.680
(5)	X 282.044	X 316.427	X 302.565	X 296.988	329.380

J.H. 9.4.08
B.M. 1 Sep 08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1016	*715.980	*742.120	AVRG	619.733781	13.4
(2)	7306.720	312.320	AVRG	249.324457	19.7
(3)	442.360	454.080	AVRG	378.622533	15.0
(4)	399.480	441.760	AVRG	346.305076	17.2
(5)	416.880	448.640	AVRG	359.359819	16.4
PCB-1260	1485.560	*1299.280	AVRG	1342.38768	6.4
(2)	743.140	841.840	AVRG	732.574924	12.6
(3)	860.600	949.640	AVRG	846.650133	8.9
(4)	341.540	327.040	AVRG	305.651676	8.8
(5)	*345.940	*347.400	AVRG	317.249190	7.9

*BM
04 Sep 08*

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	4.620	4.624	4.620	4.620	4.630
(2)	4.000	4.002	4.000	4.000	4.000
(3)	4.410	4.411	4.410	4.410	4.410
(4)	4.770	4.774	4.770	4.770	4.770
(5)	4.860	4.857	4.860	4.860	4.860
PCB-1260	7.220	7.222	7.220	7.220	7.230
(2)	6.040	6.039	6.040	6.040	6.040
(3)	6.250	6.251	6.250	6.250	6.260
(4)	7.550	7.551	7.550	7.550	7.550
(5)	8.220	8.219	8.220	8.220	8.220

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): 09/02/08 09/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1715 1907

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	4.630	4.630	4.625	4.594	4.654
(2)	4.000	4.000	4.000	3.972	4.032
(3)	4.410	4.410	4.410	4.381	4.441
(4)	4.780	4.780	4.773	4.744	4.804
(5)	4.860	4.860	4.860	4.827	4.887
PCB-1260	7.230	7.230	7.225	7.192	7.252
(2)	6.040	6.040	6.040	6.009	6.069
(3)	6.260	6.260	6.254	6.221	6.281
(4)	7.550	7.550	7.550	7.521	7.581
(5)	8.220	8.230	8.221	8.189	8.249

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

J.H. 9-4-08
 BM
 2 Sep 08

Instrument ID: ecd3.i Injection Date: 02-SEP-2008 19:25
 Lab File ID: 009R0901.D Init. Cal. Date(s): 22-SEP-2006 02-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 19:07
 Lab Sample ID: 1660 ICV #7095 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\090208.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	620	596	0.010	-3.8	15.0
(2)	249	222	0.010	-11.0	15.0
(3)	379	358	0.010	-5.5	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	346	328	0.010	-5.4	15.0
(6)	359	341	0.010	-5.1	15.0
35 PCB-1260(1)	1342	X 1389	0.010	3.5	15.0
(2)	733	745	0.010	1.7	15.0
(3)	847	868	0.010	2.5	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	306	311	0.010	1.9	15.0
(8)	317	y 365	0.010	15.1	15.0

} 4.9% D

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
01	1660 2500 #7	09/02/08	1715		
02	1660 1000 #7	09/02/08	1734		
03	1660 750 #70	09/02/08	1752		
04	1660 500 #70	09/02/08	1811		
05	1660 100 #70	09/02/08	1829		
06	1660 50 #701	09/02/08	1848		
07	1660 25 #701	09/02/08	1907		
08	1660 ICV #70	09/02/08	1925		
09					
10					
11					
12					
13					
14					
15					
16					
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18					
19					
20					
21					
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30					
31					
32					

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPART.010
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 9-13-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 9-13-08
 Lab Sample ID (PEM): _____ Time Analyzed: 09:11

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT % breakdown (1): ∅ Endrin % breakdown (1): ∅
 Combined % breakdown (1): NA

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RF200: 003R0301 RF100: 004R0401 RF50: 005R0501
RF25: 006R0601 RF10: 007R0701

(191111)

COMPOUND	RF200	RF100	RF50	RF25	RF10
=====	=====	=====	=====	=====	=====
Aldrin	13370.990	13931.150	14662.820	15721.480	16256.000
Alpha-BHC	15216.215	15571.250	16021.260	16638.640	16767.000
Alpha-Chlordane	11761.625	12173.870	12790.740	13654.600	14109.300
Beta-BHC	6230.340	6406.830	6757.140	7350.240	7940.100
4,4'-DDD	9376.150	9328.470	8985.140	10507.080	12053.900
4,4'-DDE	11004.220	11102.240	11061.940	12729.960	13088.300
4,4'-DDT	9615.875	9673.830	10100.100	11412.920	13032.300
Delta-BHC	13048.960	13168.750	13662.880	14875.640	15052.600
Dieldrin	12837.400	13461.060	14123.060	15409.160	16434.000
Endosulfan I	11617.665	12136.790	12727.520	14018.520	14485.500
Endosulfan II	10769.560	11334.500	12210.060	13628.280	15467.600
Endosulfan Sulfate	9607.215	9867.170	10219.840	11928.760	13684.900
Endrin	10415.795	10857.660	11310.020	12361.800	13046.100
Endrin Aldehyde	9523.800	10084.830	10559.920	12199.280	13580.800
Endrin Ketone	11819.235	12512.350	13066.620	15474.600	17166.300
Gamma-BHC	13805.110	14123.540	14625.260	15544.320	15988.100
Gamma-Chlordane	11687.495	11974.030	12480.320	13170.160	13448.800
Heptachlor	12979.785	13430.590	14194.620	15569.040	16806.900
Heptachlor Epoxide	11736.370	12235.220	13030.820	14519.760	15588.400
Methoxychlor	4680.970	4513.950	4814.360	5888.800	6667.000
=====	=====	=====	=====	=====	=====
TCMX	11108.415	11437.750	11819.640	12708.360	13257.200
DCB	8454.670	8488.630	8851.340	10938.960	12656.100

J.H. 9.15.08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RF5: 008R0801 RF1: 009R0901

COMPOUND	RF5	RF1
Aldrin	18780.400	17782.000
Alpha-BHC	18547.800	18074.000
Alpha-Chlordane	16205.200	15444.000
Beta-BHC	9985.600	8726.000
4,4'-DDD	13335.800	8475.000
4,4'-DDE	15098.000	10011.000
4,4'-DDT	14193.600	9889.000
Delta-BHC	18079.600	14470.000
Dieldrin	16915.400	18314.000
Endosulfan I	15701.800	18131.000
Endosulfan II	16673.200	14616.000
Endosulfan Sulfate	15361.800	14262.000
Endrin	14650.400	13290.000
Endrin Aldehyde	12799.600	16012.000
Endrin Ketone	22904.800	17714.000
Gamma-BHC	19204.400	17176.000
Gamma-Chlordane	15387.600	12841.000
Heptachlor	20013.400	17937.000
Heptachlor Epoxide	17524.000	18510.000
Methoxychlor	7713.600	6184.000
TCMX	14356.800	15955.000
DCB	15445.400	15614.000

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 0929 1120

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
-----	-----	-----	-----	-----	-----
Aldrin	AVRG		15786.4057		12.6
Alpha-BHC	AVRG		16690.8807		7.4
Alpha-Chlordane	AVRG		13734.1907		12.0
Beta-BHC	AVRG		7628.03571		17.9
4,4'-DDD	AVRG		10294.5057		17.4
4,4'-DDE	AVRG		12013.6657		14.4
4,4'-DDT	AVRG		11131.0893		16.4
Delta-BHC	AVRG		14622.6329		11.8
Dieldrin	AVRG		15356.2971		13.0
Endosulfan I	AVRG		14116.9707		16.1
Endosulfan II	AVRG		13528.4571		16.2
Endosulfan Sulfate	AVRG		12133.0979		19.2
Endrin	AVRG		12275.9679		12.3
Endrin Aldehyde	AVRG		12108.6043		18.8
Endrin Ketone	LINR	0.00000000	12096.9730		0.996
Gamma-BHC	AVRG		15780.9614		12.1
Gamma-Chlordane	AVRG		12998.4864		9.4
Heptachlor	AVRG		15847.3336		16.2
Heptachlor Epoxide	AVRG		14734.9386		17.7
Methoxychlor	2ORDR	0.00000000	2.074e-004	7.735e-012	0.998
-----	-----	-----	-----	-----	-----
TCMX	AVRG		12949.0236		13.4
DCB	LINR	0.00000000	8535.72174		0.997

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RT1: 003R0301 RT2: 004R0401 RT3: 005R0501
RT4: 006R0601 RT5: 007R0701

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	5.320	5.319	5.320	5.320	5.320
Alpha-BHC	4.460	4.462	4.460	4.460	4.460
Alpha-Chlordane	6.100	6.099	6.100	6.100	6.100
Beta-BHC	5.000	5.004	5.000	5.000	5.000
4,4'-DDD	6.870	6.874	6.870	6.870	6.870
4,4'-DDE	6.270	6.281	6.280	6.280	6.280
4,4'-DDT	7.150	7.152	7.150	7.150	7.150
Delta-BHC	5.210	5.209	5.210	5.210	5.210
Dieldrin	6.420	6.427	6.420	6.420	6.420
Endosulfan I	6.150	6.152	6.150	6.150	6.150
Endosulfan II	7.040	7.039	7.040	7.040	7.040
Endosulfan Sulfate	7.490	7.496	7.490	7.490	7.490
Endrin	6.710	6.716	6.710	6.720	6.710
Endrin Aldehyde	7.230	7.237	7.230	7.230	7.230
Endrin Ketone	8.080	8.086	8.080	8.080	8.080
Gamma-BHC	4.740	4.742	4.740	4.740	4.740
Gamma-Chlordane	6.040	6.037	6.040	6.040	6.040
Heptachlor	5.060	5.061	5.060	5.060	5.060
Heptachlor Epoxide	5.780	5.782	5.780	5.780	5.780
Methoxychlor	7.810	7.822	7.820	7.820	7.820
TCMX	4.050	4.047	4.050	4.050	4.050
DCB	9.420	9.424	9.420	9.420	9.420

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RT6: 008R0801 RT7: 009R0901

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	5.320	5.320	5.320	5.289	5.349
Alpha-BHC	4.460	4.460	4.460	4.432	4.492
Alpha-Chlordane	6.100	6.100	6.100	6.069	6.129
Beta-BHC	5.000	5.000	5.001	4.974	5.034
4,4'-DDD	6.870	6.890	6.873	6.844	6.904
4,4'-DDE	6.280	6.290	6.280	6.251	6.311
4,4'-DDT	7.150	7.160	7.152	7.122	7.182
Delta-BHC	5.210	5.210	5.210	5.179	5.239
Dieldrin	6.420	6.420	6.421	6.397	6.457
Endosulfan I	6.150	6.150	6.150	6.122	6.182
Endosulfan II	7.040	7.040	7.040	7.009	7.069
Endosulfan Sulfate	7.490	7.500	7.492	7.466	7.526
Endrin	6.710	6.710	6.712	6.686	6.746
Endrin Aldehyde	7.230	7.240	7.232	7.207	7.267
Endrin Ketone	8.080	8.090	8.082	8.056	8.116
Gamma-BHC	4.740	4.740	4.740	4.712	4.772
Gamma-Chlordane	6.040	6.040	6.040	6.007	6.067
Heptachlor	5.060	5.060	5.060	5.031	5.091
Heptachlor Epoxide	5.780	5.780	5.780	5.752	5.812
Methoxychlor	7.820	7.830	7.820	7.792	7.852
=====	=====	=====	=====	=====	=====
TCMX	4.050	4.050	4.050	4.017	4.077
DCB	9.420	9.430	9.422	9.394	9.454

JH. 9.15.08

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Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 13:28
 Lab File ID: 015R1501.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: Init. Cal. Times: 14:42 11:20
 Lab Sample ID: AB/ICV #7357 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12949	11088	0.010	-14.4	15.0
3 Alpha-BHC	16691	✓17578	0.010	5.3	15.0
23 Gamma-BHC	15781	X 15877	0.010	0.6	15.0
5 Beta-BHC	7628	6671	0.010	-12.5	15.0
25 Heptachlor	15847	15376	0.010	-3.0	15.0
15 Delta-BHC	14623	14679	0.010	0.4	15.0
2 Aldrin	15786	16823	0.010	6.6	15.0
26 Heptachlor Epoxide	14735	13599	0.010	-7.7	15.0
24 Gamma-Chlordane	12998	12360	0.010	-4.9	15.0
4 Alpha-Chlordane	13734	13192	0.010	-3.9	15.0
17 Endosulfan I	14117	14650	0.010	3.8	15.0
13 4,4'-DDE	12014	10651	0.010	-11.3	15.0
16 Dieldrin	15356	15925	0.010	3.7	15.0
20 Endrin	12276	12234	0.010	-0.3	15.0
12 4,4'-DDD	10295	9018	0.010	-12.4	15.0
18 Endosulfan II	13528	12888	0.010	-4.7	15.0
14 4,4'-DDT	11131	9499	0.010	-14.7	15.0
21 Endrin Aldehyde	12109	13356	0.010	10.3	15.0
19 Endosulfan Sulfate	12133	11060	0.010	-8.8	15.0
27 Methoxychlor	100	100	0.010	0.0	15.0
22 Endrin Ketone	100	114	0.010	-14.5	15.0
\$ 37 DCB	100	103	0.010	-2.5	15.0

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA37527

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 09/13/08
09.17.08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 1410

LAB FILE ID: RF5: 016R1601 RF1: 012R1201

~~★~~ SINGLE POINT ~~★~~

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====					
Toxaphene	655.610		AVRG	655.610000	0.0
(2)	353.640		AVRG	353.640000	0.0
(3)	568.170		AVRG	568.170000	0.0
(4)	456.120		AVRG	456.120000	0.0
(5)	* 253.150		AVRG	253.150000	0.0

C 09/13/08

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.05 S2 : 9.42			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====					
01	P.E.M. #7027	09/13/08	0911		
02	AB/SUR 200#7	09/13/08	0929	4.05	9.42
03	AB/SUR 100#7	09/13/08	0948	4.05	9.42
04	AB/SUR 50#71	09/13/08	1006	4.05	9.42
05	AB/SUR 25#71	09/13/08	1024	4.05	9.42
06	AB/SUR 10#71	09/13/08	1043	4.05	9.42
07	AB/SUR 5#718	09/13/08	1101	4.05	9.42
08	AB/SUR 1#735	09/13/08	1120	4.05	9.43
09	CHLOR 5PPB #	09/13/08	1308		
10	AB/ICV #7357	09/13/08	1328	4.05	9.43
11	TOX 100PPB #	09/13/08	1410		
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
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31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 9.19.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 21:13
 Lab File ID: 039R3901.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12949	12792	0.010	-1.2	15.0
3 Alpha-BHC	16691	17558	0.010	5.2	15.0
23 Gamma-BHC	15781	X 16070	0.010	1.8	15.0
5 Beta-BHC	7628	7453	0.010	-2.3	15.0
25 Heptachlor	15847	15441	0.010	-2.6	15.0
15 Delta-BHC	14623	15490	0.010	5.9	15.0
2 Aldrin	15786	15423	0.010	-2.3	15.0
26 Heptachlor Epoxide	14735	13923	0.010	-5.5	15.0
24 Gamma-Chlordane	12998	13947	0.010	7.3	15.0
4 Alpha-Chlordane	13734	13933	0.010	1.4	15.0
17 Endosulfan I	14117	13573	0.010	-3.9	15.0
13 4,4'-DDE	12014	13375	0.010	11.3	15.0
16 Dieldrin	15356	15086	0.010	-1.8	15.0
20 Endrin	12276	12588	0.010	2.5	15.0
12 4,4'-DDD	10295	11707	0.010	13.7	15.0
18 Endosulfan II	13528	12931	0.010	-4.4	15.0
14 4,4'-DDT	11131	11388	0.010	2.3	15.0
21 Endrin Aldehyde	12109	10544	0.010	-12.9	15.0
19 Endosulfan Sulfate	12133	11573	0.010	-4.6	15.0
27 Methoxychlor	100	119	0.010	-19.2	15.0
22 Endrin Ketone	100	120	0.010	19.6	15.0
\$ 37 DCB	100	122	0.010	-22.5	15.0

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Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 13-SEP-2008 21:32
 Lab File ID: 040R4001.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	620	609	0.010	-1.8	15.0
(2)	249	238	0.010	-4.6	15.0
(3)	379	387	0.010	2.3	15.0
(4)	****	****	0.010	****	15.0|<-
(5)	346	338	0.010	-2.4	15.0
(6)	359	365	0.010	1.6	15.0
35 PCB-1260(1)	1342	1448	0.010	7.9	15.0
(2)	733	695	0.010	-5.1	15.0
(3)	847	824	0.010	-2.7	15.0
(4)	****	****	0.010	****	15.0|<-
(5)	****	****	0.010	****	15.0|<-
(6)	****	****	0.010	****	15.0|<-
(7)	306	284	0.010	-6.9	15.0
(8)	317	312	0.010	-1.6	15.0
\$ 36 TCMX	12949	6795	0.010	-47.5	15.0 <-
\$ 37 DCB	100	60.61284	0.010	20.4	15.0 <-

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Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 02:08
 Lab File ID: 055R5501.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

CA 11/11/08

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12949	12545	0.010	-3.1	15.0
3 Alpha-BHC	16691	17134	0.010	2.7	15.0
23 Gamma-BHC	15781	X 15573	0.010	-1.3	15.0
5 Beta-BHC	7628	7109	0.010	-6.8	15.0
25 Heptachlor	15847	14897	0.010	-6.0	15.0
15 Delta-BHC	14623	14894	0.010	1.9	15.0
2 Aldrin	15786	14969	0.010	-5.2	15.0
26 Heptachlor Epoxide	14735	13608	0.010	-7.6	15.0
24 Gamma-Chlordane	12998	13274	0.010	2.1	15.0
4 Alpha-Chlordane	13734	13395	0.010	-2.5	15.0
17 Endosulfan I	14117	13308	0.010	-5.7	15.0
13 4,4'-DDE	12014	12935	0.010	7.7	15.0
16 Dieldrin	15356	14737	0.010	-4.0	15.0
20 Endrin	12276	11839	0.010	-3.6	15.0
12 4,4'-DDD	10295	11257	0.010	9.4	15.0
18 Endosulfan II	13528	12623	0.010	-6.7	15.0
14 4,4'-DDT	11131	10944	0.010	-1.7	15.0
21 Endrin Aldehyde	12109	11048	0.010	-8.8	15.0
19 Endosulfan Sulfate	12133	11158	0.010	-8.0	15.0
27 Methoxychlor	100	118	0.010	-18.8	15.0 <-
22 Endrin Ketone	100	116	0.010	-15.9	15.0 <-
\$ 37 DCB	100	117	0.010	-17.1	15.0 <- NA

HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 02:26
 Lab File ID: 056R5601.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

Original

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
29 PCB-1016(1)	620	X 581	0.010	-6.2	15.0		
(2)	249	219	0.010	-12.3	15.0		
(3)	379	355	0.010	-6.3	15.0		
(4)	++++	++++	0.010	++++	15.0	<-	
(5)	346	335	0.010	-3.2	15.0		
(6)	359	355	0.010	-1.2	15.0		
35 PCB-1260(1)	1342	1336	0.010	-0.5	15.0		
(2)	733	681	0.010	-7.0	15.0		
(3)	847	803	0.010	-5.2	15.0		
(4)	++++	++++	0.010	++++	15.0	<-	
(5)	++++	++++	0.010	++++	15.0	<-	
(6)	++++	++++	0.010	++++	15.0	<-	
(7)	306	281	0.010	-8.2	15.0		
(8)	317	299	0.010	-5.7	15.0		
\$ 36 TCMX	12949	6761	0.010	-47.0	15.0	<-	
\$ 37 DCB	100	59.04377	0.010	-41.0	15.0	<-	

> NA

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 07:02
 Lab File ID: 071R7101.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	12949	12417	0.010	-4.1	15.0
3 Alpha-BHC	16691	17075	0.010	2.3	15.0
23 Gamma-BHC	15781	15554	0.010	-1.4	15.0
5 Beta-BHC	7628	7111	0.010	-6.8	15.0
25 Heptachlor	15847	14631	0.010	-7.7	15.0
15 Delta-BHC	14623	14832	0.010	1.4	15.0
2 Aldrin	15786	15057	0.010	-4.6	15.0
26 Heptachlor Epoxide	14735	13338	0.010	-9.5	15.0
24 Gamma-Chlordane	12998	13170	0.010	1.3	15.0
4 Alpha-Chlordane	13734	13294	0.010	-3.2	15.0
17 Endosulfan I	14117	13169	0.010	-6.7	15.0
13 4,4'-DDE	12014	12662	0.010	5.4	15.0
16 Dieldrin	15356	14599	0.010	-4.9	15.0
20 Endrin	12276	11377	0.010	-7.3	15.0
12 4,4'-DDD	10295	10825	0.010	5.2	15.0
18 Endosulfan II	13528	12572	0.010	-7.1	15.0
14 4,4'-DDT	11131	10451	0.010	-6.1	15.0
21 Endrin Aldehyde	12109	11370	0.010	-6.1	15.0
19 Endosulfan Sulfate	12133	X 11105	0.010	-8.5	15.0
27 Methoxychlor	100	111	0.010	-11.2	15.0
22 Endrin Ketone	100	115	0.010	-15.1	15.0
\$ 37 DCB	100	113	0.010	-13.2	15.0

J.H.

← HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 14-SEP-2008 07:20
 Lab File ID: 072R7201.D Init. Cal. Date(s): 22-SEP-2006 13-SEP-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 14:10
 Lab Sample ID: 1660 1000 #7331 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	620	613	0.010	-1.1	15.0
(2)	249	247	0.010	-0.8	15.0
(3)	379	397	0.010	4.8	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	346	344	0.010	-0.7	15.0
(6)	359	373	0.010	3.9	15.0
35 PCB-1260(1)	1342	1373	0.010	2.3	15.0
(2)	733	704	0.010	-3.9	15.0
(3)	847	832	0.010	-1.7	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	306	295	0.010	-3.4	15.0
(8)	317	306	0.010	-3.6	15.0
\$ 36 TCMX	12949	6972	0.010	-46.2	15.0
\$ 37 DCB	100	61.53520	0.010	-39.5	15.0

> NA

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08-09/14/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.05 S2 : 9.42			
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT #	RT #
=====					
01	AB/SUR 100#7	09/13/08	2113	4.05	9.42
02	1660 1000 #7	09/13/08	2132	4.05	9.42
03	PW1BLK0902	09/13/08	2150	4.05	9.42
04	PW1BLK0902LC	09/13/08	2208	4.05	9.42
05	PW1BLK0902LC	09/13/08	2227	4.05	9.42
06	PW1BLK0902LC	09/13/08	2245	4.05	9.42
07	PW1BLK0902LC	09/13/08	2304	4.05	9.42
08	01GW0701	0808253-02	2322	4.05	9.42
09	01GW0701D	0808253-03	2340	4.05	9.43
10	01GW0801	0808253-04	2359	4.05	9.42
11	01GW1201	0808253-05	0017	4.05	9.42
12	01GW1301	0808253-06	0036	4.05	9.42
13	01GW1101	0808253-07	0054	4.05	9.42
14	01GW1501	0808253-08	0113	4.05	9.42
15	01GW1401	0808253-09	0131	4.05	9.42
16	01GW1001	0808253-10	0149	4.05	9.43
17	AB/SUR 100#7	09/14/08	0208	4.05	9.42
18	1660 1000 #7	09/14/08	0226	4.05	9.42
19	PW1BLK0904	09/14/08	0245	4.05	9.42
20	PW1BLK0904LC	09/14/08	0303	4.05	9.42
21	PW1BLK0904LC	09/14/08	0321	4.05	9.42
22	PW1BLK0904LC	09/14/08	0340	4.05	9.42
23	PW1BLK0904LC	09/14/08	0358	4.05	9.42
24	01GW0601	0808268-02	0416	4.05	9.42
25	01GW0901	0808268-03	0435	4.05	9.42
26	01GW1701	0808268-04	0453	4.05	9.42
27	01GW1601	0808268-05	0512	4.05	9.43
28	01GW1601D	0808268-06	0530	4.05	9.42
29	01GW1801	0808268-07	0548	4.04	9.42
30	01GW1901	0808268-08	0607	4.05	9.42
31	01GW2101	0808268-09	0625	4.05	9.42
32	01GW2001	0808268-10	0644	4.05	9.42

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-010

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 09/13/08-09/14/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.05 S2 : 9.42			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01	AB/SUR 100#7	09/14/08	0702	4.05	9.43
02	1660 1000 #7	09/14/08	0720	4.05	9.43
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab Sample ID: 0808253-06 Date(s) Analyzed: 09/14/08 09/14/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Endrin Aldehyde	1	9.06	9.03	9.09	0.008825	
	2	7.25	7.21	7.27	0.006620	28.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

J.H. 9.24.08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\050F5001.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\050R5001.D
 Inj Date : 14-SEP-2008 00:36
 Sample Info: 0808253-06
 Misc Info : tet.p08253;1080;10;090208PW1;ug/L;;tcl.sub;02-Sep-2008
 Cal Date : 25-SEP-2008 11:00
 Operator : JH
 Inst ID : ecd3.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd3.i\091308.b\8081_82R.m
 Sub List #1 : tcl.sub
 Sub List #2 : tcl.sub
 Col #1 Phase : ZB MR-1
 Col #2 Phase : ZB MR-2

Concentration Formula: $Amt * DF * Uf * Vt * 2 / (Amt * Vi * (Solids / 100))$

Name	X Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	10.000	Final Volume
Amt	1080.000	Sample Amount
Vi	2.000	Injection Volume
Solids	100.000	Percent Solids

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)	Target Range	Ratio
Aldrin	6.957	0.000	2933186	0	3.366	0.0000		100.00 (A)
Alpha-BHC	5.658	0.000	27227	0	0.02702	0.0000	} NC	100.00
Beta-BHC	6.245	0.000	1423	0	0.003613	0.0000		100.00 (aM)
4,4'-DDD	8.761	0.000	93047	0	0.1584	0.0000		100.00
Delta-BHC	0.000	5.186	0	43413	0.0000	0.02749		
Endosulfan II	0.000	7.048	0	15798	0.0000	0.01081		
Endrin Aldehyde	9.063	7.251	4364	8657	0.008825	0.006620		100.00 (aM)
Gamma-BHC	6.000	0.000	4303	0	0.004881	0.0000	NC	100.00 (aM)
TCMX	5.130	4.046	351607	680957	0.5036	0.4869		100.00
DCB	11.535	9.424	290500	503593	0.4736	0.5463		100.00

$$\text{Concentration (Col. 1)} = \frac{Ax \times DF \times Uf \times Vt \times 2}{Amt \times Vi \times RRF} = \frac{4364 \times 10 \times 2}{1080 \times 2 \times 4578.80571} = 0.0088248$$

Ax = Area of analyte
 RRF = Initial calibration relative response factor

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA35803

Instrument ID: ECD3 Calibration Date(s): 09/13/08 09/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 0929 1120

LAB FILE ID: RF5: 008F0801 RF1: 009F0901

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
Aldrin	8314.600	7521.000	AVRG	8068.04929	3.3
Alpha-BHC	10257.000	8785.000	AVRG	9330.14571	4.8
Alpha-Chlordane	9036.200	8162.000	AVRG	7982.16429	7.3
Beta-BHC	4353.000	3359.000	AVRG	3646.36714	10.4
4,4'-DDD	7051.000	4299.000	AVRG	5438.67786	15.4
4,4'-DDE	9414.200	5944.000	AVRG	6944.32714	16.9
4,4'-DDT	7756.200	5357.000	AVRG	6110.87571	14.0
Delta-BHC	8066.000	5258.000	AVRG	6943.88071	12.2
Dieldrin	8957.600	8284.000	AVRG	8174.17214	5.1
Endosulfan I	8808.400	8127.000	AVRG	7626.52214	8.6
Endosulfan II	9501.000	8418.000	AVRG	7716.37643	12.9
Endosulfan Sulfate	7926.800	6277.000	AVRG	6222.08929	13.5
Endrin	6871.800	6262.000	AVRG	6212.46357	5.2
Endrin Aldehyde	5058.000	4353.000	AVRG	4578.80571	6.7
Endrin Ketone	10041.800	7918.000	AVRG	7639.88286	15.8
Gamma-BHC	9179.400	7437.000	AVRG	8162.87286	6.7
Gamma-Chlordane	8442.600	6967.000	AVRG	7569.21643	6.3
Heptachlor	9858.400	8312.000	AVRG	8485.67143	8.4
Heptachlor Epoxide	10379.400	8093.000	AVRG	8238.09214	13.4
Methoxychlor	3398.600	2410.000	AVRG	2503.51500	18.0
TCMX	7532.400	6990.000	AVRG	6464.78429	9.5
DCB	7713.600	5276.000	AVRG	5678.99357	18.4



Empirical Laboratories
 EMPIRICAL LABORATORIES, LLC
 LABORATORY SAMPLE CUSTODY FORM
 WALK-IN REFRIGERATOR

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/Comments	Task Performed
7015-01,02	AH 9/4/08 7:50	AH 9/4/08 13:10		OP ₄ , TP ₄
8230-01 8231-01-710	↓	↓		TKN
8205-01 8206-05,06	↓	↓		↓
8210-1-2 8208 8208-2-10 2-10 8212-01	JC 8:30 9/4/08	used all		BHA P/PCB
0809023-01	KH from login 9/4/08	KH 9/4/08 11:45		Cr + B
9006-01 9022-02,03	AH 12:05 9/4	12:10 9/4 AH		TKN
8208-01-00 8259-02-00 8266-10,11	AH 13:10 9/4	JG 13:30 9/4/08		phenol
8176-03 9006 9012	AH 14:00 9/4	AH 15:10 9/4		N ₂ /N ₂
9021-01-04 9021-01 9022-01	9/4/08 12:30 (AP)	9/4/08 (AP) 16:00	Samples taken from login	BOD
8251	9/4/08 1:02 JG	9/4/08 4:40 JG		TKN
8197-01,03,04A 8252-1,2,03,4C	9/5/08 9:05 JG	AH 9/5/08 10:10		COD
9010-01,02 9020-01,02	10:25 KGG 9/5/08	10:35 KGG 9/5/08		VFA/AIK
9020-01-03A	10:50 JG 9/5/08	JG 7:00		TSS
8268-10	9/5/08 KH 11:26	KH 9/5/08 12:35		Hg
0808266	11:33 9-5-08 RSB	13:35 9-5-08 RSB		TOC
9021-01 9024-01 9025-03 9037-01-03 9035-01-06,10,12-01	4:50 JG 1:25	JG 4:00-08 3:10		TSS/TDS
8271-1-4	JC 2:00 9/5/08	used all		DAT/SIM
9039-10,12,21 9035-01,204	FROM LOGIN KGG 9/5/08	17:40 KGG 9/5/08		Amion
8269-01 9021-01 8270-01 9022-01 8118-01-03	JG 9/5/08 7:00	JG 8/16/08 6:25		NH ₃
8268-06-10 8272-01	KH 9/8/08 10:40	9/8/08 KH 10:51		metals
9023-01 9024-01 →	from login KH 9/8/08	↓		↓

HOBART SAMPLE EXTRACT CUSTODY FORM

Sample ID	Extraction	Insertion - Retention		Retention for Incoming Retention						
		Screening / Testing	Re-analysis	Analysis	Dilution	Transfer	Inspected / Processed	Released / Issued	Completed	
9019-01-02	EPH	AM. 9:45 9/15/08	AM. 2:30 9/12/08			X				
9004-1 9099-1	PPB	17:45 AF 9/12/08								Y
8253 2-10 8268 2-10	Post	LD 9/13/08 1414	LD 9/15/08 0744			Y				
8215 -1	PCB									
9073 -1 9048 1, 3, 4, 5 9063 1, 2 9067 1	Post L									
9047 -1	Post									
9045 -1 90251-3 9031 -1 -4	PCA L									
8268, 4+7	Hand		9/13/08 1200			X				
9043b	PP	1355 9/11/08	9/11/08 1340			X				
1106-8 9085-01-03	EXP	07:30 9/13/08 B7D	06:45 9/13/08 B7D			X				
9028-19-2b 9064-01	BVA	13:00 TC 9/15/08								Y
9086-1 9124-1-2 9125-1-2	EXP	17:20 AF 9/15/08								Y
9091-1 9094-1 9090-1 9091-28 9127-2	BVA	17:35 AF 9/15/08								Y

Fraction: Pesticide/PCB Matrix: Water

Supervisor

#	Client	Lab No.	Initial Volume(ml)	pH	Date Extracted	Setup Initials	Final Volume(ml)	Surr Added	Surr. Initials	Spike Added	Spike Initials	Turbo Vap	Conc. Initials	Solvent Lot/Vendor		Notes/Comments
														MeC12	Hexane	
1		0808242-01	1040	10	092682PW1	JC	10	1.0	JC	NA	NA	P7	JC	083053	083850	
2	TERRA/NUS	0808253-02	1080		1035			#7233		NA	NA	G27				1
3		-03	1090							NA	NA	P8				
4		-04	1080							NA	NA	P33				
6		-05	1040							NA	NA	G11				
6		-06	1080							NA	NA	P32				
7		-07	1080							NA	NA	G15				
8		-08	1020							NA	NA	P10				
9		-09	1080							NA	NA	G72				
10		-10	1000							NA	NA	G13				
11*		0608272-01	1080							NA	NA	TAT				
12										NA	NA					
13										NA	NA					
14										NA	NA					
15										NA	NA					
16										NA	NA					
17										NA	NA					
18										NA	NA					
19										NA	NA					
20										NA	NA					
	MB	1-11	1000ml	6	SAS	JC	10ml	SAS	SAS	-	-	G28	JC	SAS	SAS	
	LCS AB							SAS	SAS	1.0	JC	P13		SAS	SAS	
	LCS AB							SAS	SAS	#7323		G17		SAS	SAS	
	LCS PB							SAS	SAS	1.0		G51		SAS	SAS	
	LCS PB							SAS	SAS	#7267		P100		SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	

* = Note: Method 608 clients require one (1) full list sample spike every ten (10) samples.

#	Client	Lab No.	Initial Volume(mi)	pH	Date Extracted	Setup Initials	Final Volume(mi)	Surr Added	Surr. Initials	Spike Added	Spike Initials	Vap	Initials	MeC12		
1	ETIPANUS	0837082	1080ml	6	09/04/08	JC	10ml	1.0ml	JC	NA	NA	FR	JC	083053	083912	(3)
2		08	1000ml		11:00					NA	NA	PR				(4)
3		04	1000ml							NA	NA	PO				(1)
4		05	1000ml							NA	NA	GB				(3)
5		06	1000ml							NA	NA	PO				(4)
6		07								NA	NA	UIB				(4)
7		08								NA	NA	UIB				(1)
8		09								NA	NA	U21				(4)
9		10								NA	NA	U9				(5)
10										NA	NA					
11										NA	NA					
12										NA	NA					
13										NA	NA					
14										NA	NA					
15										NA	NA					
16										NA	NA					
17										NA	NA					
18										NA	NA					
19										NA	NA					
20										NA	NA					
	MB	1-9	1000ml	6	SAS	JC	10ml	SAS	SAS			PT	JC	SAS	SAS	
	MB LCS							SAS	SAS	1.0ml	JC	PR		SAS	SAS	
	MB LCS							SAS	SAS	#1303		PR		SAS	SAS	
	MB LCS							SAS	SAS	#1207		PR		SAS	SAS	
	MB LCS							SAS	SAS			PT		SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	
								SAS	SAS					SAS	SAS	

* = Note: Method 608 clients require one (1) full list sample spike every ten (10) samples.

387

Sequence Table (Front/Injector):

Quantification Part:

PG. 14
[Signature]
 9.4.08

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	PCB Primer				
2	Vial 2	1660 2500 #7013A				
3	Vial 3	1660 1000 #7013B				
4	Vial 4	1660 750 #7013C				
5	Vial 5	1660 500 #7013D				
6	Vial 6	1660 100 #7013E				
7	Vial 7	1660 50 #7013F				
8	Vial 8	1660 25 #7013G				
9	Vial 9	1660 ICV #7095				
10	Vial 10	1660 1000 #7331				
11	Vial 11	1242 1000 #7227				
12	Vial 12	1248 1000 #7071				
13	Vial 13	1254 1000 #7222				
14	Vial 14	PWIBLK0827				
15	Vial 15	PWIBLK0827LCS				
16	Vial 16	0808181-01				
17	Vial 17	0808181-02				
18	Vial 18	0808181-03				
19	Vial 19	0808181-04				
20	Vial 20	PS1BLK0825				
21	Vial 21	PS1BLK0825LCS				
22	Vial 22	0808182-01				
23	Vial 23	0808182-02				
24	Vial 24	0808182-03				
25	Vial 25	0808182-04				
26	Vial 26	0808182-05				
27	Vial 27	0808182-06				
28	Vial 28	0808182-07				
29	Vial 29	0808182-08				
30	Vial 30	0808182-09				
31	Vial 31	0808182-09;MS				
32	Vial 32	0808182-09;MSD				
33	Vial 33	0808182-10				
34	Vial 34	1660 1000 #7331				
35	Vial 35	1242 1000 #7227				
36	Vial 36	1248 1000 #7071				
37	Vial 37	1254 1000 #7222				
38	Vial 38	0808182-11				
39	Vial 39	0808182-12				
40	Vial 40	0808182-13				
41	Vial 41	0808182-14				
42	Vial 42	0808182-15				
43	Vial 43	0808182-16				
44	Vial 44	0808182-17				
45	Vial 45	0808182-18				
46	Vial 46	0808182-19				
47	Vial 47	0808182-20				
48	Vial 48	1660 1000 #7331				
49	Vial 49	1242 1000 #7227				
50	Vial 50	1248 1000 #7071				
51	Vial 51	1254 1000 #7222				
52	Vial 52	PS1BLK0827				
53	Vial 53	PS1BLK0827LCS				
54	Vial 54	0808192-14				
55	Vial 55	0808192-14;MS				
56	Vial 56	0808192-14;MSD				
57	Vial 57	0808192-15				
58	Vial 58	0808192-16				
59	Vial 59	0808192-17				

DID NOT RUN
 (MISSING VIALS)

[Signature] 9.4.08

X1.71
9/16/08

Sequence Table (Front/Injector):
Back

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
====	=====	=====	=====	=====	=====	=====
1	Vial 1	Pest. Primer				
2	Vial 2	P.E.M. #7027				
3	Vial 3	AB/Sur 200#7180A				
4	Vial 4	AB/Sur 100#7180B				
5	Vial 5	AB/Sur 50#7180C				
6	Vial 6	AB/Sur 25#7180D				
7	Vial 7	AB/Sur 10#7180E				
8	Vial 8	AB/Sur 5#7180F				
9	Vial 9	AB/Sur 1#7356				
10	Vial 10	AB/ICV #7191				
11	Vial 11	AB/Sur 100#7180H				
12	Vial 12	1660 1000 #7331				
13	Vial 13	AB/ICV #7345				
14	Vial 14	Chlor 5ppb #7200				
15	Vial 15	AB/ICV #7357				
16	Vial 16	TOX 100ppb #7352				
17	Vial 17	PW1BLK0910	9073-01	X1		9048-1,3,4,5; 9063-1,2; 9067-01; 9030-01
18	Vial 18	PW1BLK0910LCS	↓	↓		↓
19	Vial 19	PW1BLK0910LCSD				
20	Vial 20	0809073-01				
21	Vial 21	PS1BLK0912	9097-01	X1		Cu
22	Vial 22	PS1BLK0912LCSPES	↓	↓		
23	Vial 23	PS1BLK0912LCSDPE				
24	Vial 24	PS1BLK0912LCSPCB				
25	Vial 25	PS1BLK0912LCSDPCB				
26	Vial 26	0809097-01				
27	Vial 27	AB/Sur 100#7180H				
28	Vial 28	1660 1000 #7331				
29	Vial 29	0809030-01				
30	Vial 30	0809030-01;MS				
31	Vial 31	0809030-01;MSC/T				
32	Vial 32	0809048-01				
33	Vial 33	0809048-03				
34	Vial 34	0809048-04				
35	Vial 35	0809048-05 cu ^{4.11}				
36	Vial 36	0809063-01				
37	Vial 37	0809063-02				
38	Vial 38	0809067-01				
39	Vial 39	AB/Sur 100#7180H				
40	Vial 40	1660 1000 #7331				
41	Vial 41	PW1BLK0902	8253-2-10	X1		Cu
42	Vial 42	PW1BLK0902LCS	↓	↓		
43	Vial 43	PW1BLK0902LCSD				
44	Vial 44	PW1BLK0902LCSPCB				
45	Vial 45	PW1BLK0902LCSDPCB				
46	Vial 46	0808253-02				
47	Vial 47	0808253-03				
48	Vial 48	0808253-04				
49	Vial 49	0808253-05				
50	Vial 50	0808253-06				
51	Vial 51	0808253-07				
52	Vial 52	0808253-08				
53	Vial 53	0808253-09				
54	Vial 54	0808253-10				
55	Vial 55	AB/Sur 100#7180H				
56	Vial 56	1660 1000 #7331				
57	Vial 57	PW1BLK0904	8268-2-10	X1		
58	Vial 58	PW1BLK0904LCSPES	↓	↓		
59	Vial 59	PW1BLK0904LCSDPE				

Line	Location	SampleName	SampleAmount	ISTDamt	Multiplier	Dilution
60	Vial 60	PW1BLK0904LCSPCB				
61	Vial 61	PW1BLK0904LCSDPCB				
62	Vial 62	0808268-02				
63	Vial 63	0808268-03				
64	Vial 64	0808268-04				
65	Vial 65	0808268-05				
66	Vial 66	0808268-06				
67	Vial 67	0808268-07				
68	Vial 68	0808268-08				
69	Vial 69	0808268-09				
70	Vial 70	0808268-10				
71	Vial 71	AB/Sur 100#7180H				
72	Vial 72	1660 1000 #7331				
73	Vial 73	1242 1000 #7227H				
74	Vial 74	1248 1000 #7339C				
75	Vial 75	1254 1000 #7222				
76	Vial 76	PS1BLK0909	8215-01	X1		
77	Vial 77	PS1BLK0909LCS				
78	Vial 78	PS1BLK0909LCSD				
79	Vial 79	0808215-01				
80	Vial 80	1660 1000 #7331				
81	Vial 81	1242 1000 #7227H				
82	Vial 82	1248 1000 #7339C				
83	Vial 83	1254 1000 #7222				
84	Vial 84	PW1BLK0827	9025-1-3; 9031-1-3; 9064-01	X1		
85	Vial 85	PW1BLK0827LCS				
86	Vial 86	0809025-01				
87	Vial 87	0809025-02				
88	Vial 88	0809025-03				
89	Vial 89	0809031-01				
90	Vial 90	0809031-02				
91	Vial 91	0809031-03				
92	Vial 92	0809031-04				
93	Vial 93	0809064-01				
94	Vial 94	1660 1000 #7331				
95	Vial 95	1242 1000 #7227H				
96	Vial 96	1248 1000 #7339C				
97	Vial 97	1254 1000 #7222				
98	Vial 98	AB/Sur 100#7180H				
99	Vial 99	PW1BLK0910	9048-05	X.1		
100	Vial 100	PW1BLK0910LCS				
101	Vial 1	PW1BLK0910LCSD				
102	Vial 2	0809048-05				
103	Vial 3	AB/Sur 100#7180H				
104	Vial 4	1660 1000 #7331				
105	Vial 5	AB/Sur 100#7358				

X.M.
9/16/08

NOT NEEDED
D.H. 9.17.8

X1-A/cu

Sequence Table (Back Injector):

No entries - empty table!

Herbicide Section

FORM 3
WATER HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Matrix Spike - Client Sample No.: HW1BLK0902

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
2,4-D	1.000	0.0000	0.9486	95	35-145
2,4,5-TP (Silvex)	1.000	0.0000	0.8819	88	45-125
2,4,5-T	1.000	0.0000	0.9522	95	45-135

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-D	1.000	1.049	105	10	30	35-145
2,4,5-TP (Silvex)	1.000	0.8869	89	0	30	45-125
2,4,5-T	1.000	0.9628	96	1	30	45-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 3 outside limits
 Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HW1BLK0902

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010
 Matrix: (soil/water) WATER Lab Sample ID: HW1BLK0902
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: 012F0201
 % Moisture: _____ decanted: (Y/N) _____ Date Sampled: _____
 Extraction: (SepF/Cont/Sonc/Soxh) SEPF Date Extracted: 09/02/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 09/09/08 19:37
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L	Q
		MDL	RL			CONC
94-75-7-----	2,4-D	0.25	0.50		U
93-72-1-----	2,4,5-TP (Silvex)	0.025	0.050		U
93-76-5-----	2,4,5-T	0.025	0.050		U

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HW1BLK0902

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-010

Lab Sample ID: HW1BLK0902 Lab File ID: 012F0201

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc/Soxh) SEPF

Sulfur Cleanup (Y/N) N Date Extracted: 09/02/08

Date Analyzed (1): 09/09/08 Date Analyzed (2): 09/09/08

Time Analyzed (1): 1937 Time Analyzed (2): 2016

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HW1BLK0902LC	HW1BLK0902LCS	09/09/08	09/09/08
02	HW1BLK0902LC	HW1BLK0902LCSD	09/09/08	09/09/08
03	01GW0701	0808253-02	09/09/08	09/09/08
04	01GW0701D	0808253-03	09/09/08	09/09/08
05	01GW0801	0808253-04	09/09/08	09/09/08
06	01GW1201	0808253-05	09/09/08	09/10/08
07	01GW1301	0808253-06	09/10/08	09/10/08
08	01GW1101	0808253-07	09/10/08	09/10/08
09	01GW1501	0808253-08	09/10/08	09/10/08
10	01GW1401	0808253-09	09/10/08	09/10/08
11	01GW1001	0808253-10	09/10/08	09/10/08
12	01GW0601	0808268-02	09/10/08	09/10/08
13	01GW0901	0808268-03	09/10/08	09/10/08
14	01GW1601	0808268-05	09/10/08	09/10/08
15	01GW1601D	0808268-06	09/10/08	09/10/08
16	01GW1901	0808268-08	09/10/08	09/10/08
17	01GW2101	0808268-09	09/10/08	09/10/08
18	01GW2001	0808268-10	09/10/08	09/10/08
19	01GW1701	0808268-04	09/13/08	09/13/08
20	01GW1801	0808268-07	09/13/08	09/13/08
21				
22				
23				
24				
25				
26				

COMMENTS: _____

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): ~~1726~~ 1740

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
2,4-D	271.991	306.482
2,4-DB	138.832	149.109
2,4,5-TP (Silvex)	1266.674	1366.295
2,4,5-T	1121.004	966.026
Dalapon	271.184	319.194
Dicamba	989.688	1122.024
Dichloroprop	214.946	275.132
Dinoseb	734.400	840.196
MCPA	1.057	1.292
MCPP	0.642	0.725
Pentachlorophenol		
DCAA	240.281	256.280

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08
04 9.16.08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): ~~1726~~ 1740

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	2.922e-003	2.979e-008	1.000
2,4-DB	AVRG		118.155083		18.5
2,4,5-TP (Silvex)	AVRG		1126.66937		15.1
2,4,5-T	AVRG		986.002635		11.7
Dalapon	2ORDR	0.00000000	3.728e-003	5.653e-009	1.000
Dicamba	2ORDR	0.00000000	8.668e-004	1.444e-008	1.000
Dichloroprop	2ORDR	0.00000000	3.942e-003	4.114e-008	1.000
Dinoseb	2ORDR	0.00000000	1.212e-003	5.592e-009	1.000
MCPA	2ORDR	0.00000000	0.83822375	2.041e-005	0.999
MCPP	2ORDR	0.00000000	1.38185481	3.651e-005	1.000
Pentachlorophenol	AVRG				
DCAA	2ORDR	0.00000000	3.241e-003	6.957e-008	1.000

J.H. 9.16.08

Empirical Laboratories, LLC

ICV
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 09-SEP-2008 18:19
Lab File ID: 010F0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
Analysis Type: Init. Cal. Times: 17:26 17:40
Lab Sample ID: Herb ICV #7248 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151F.m

09/12/08

COMPOUND	RRF	RF20	MIN	MAX
			RRF	%D
5 Dalapon	455	445	0.010	2.3
6 Dicamba	18.81500	* 18.21768	0.010	3.2
10 MCPP	18779	17791	0.010	5.3
9 MCPA	18691	18587	0.010	0.6
7 Dichloroprop	189	196	0.010	-3.6
1 2,4-D	188	174	0.010	7.3
3 2,4,5-TP (Silvex)	1127	1158	0.010	2.8
4 2,4,5-T	986	1089	0.010	10.4
2 2,4-DB	118	127	0.010	7.9
8 Dinoseb	94.51800	90.15256	0.010	4.6

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1407 1805

LAB FILE ID: RF100: 003F0201 RF50: 004F0201 RF40: 005F0201
RF25: 006F0201 RF20: 007F0201

COMPOUND	RF100	RF50	RF40	RF25	RF20
2,4-D	142.229	169.334	191.380	199.440	213.758
2,4-DB	84.197	97.182	107.841	105.651	112.680
2,4,5-TP (Silvex)	830.314	931.558	1046.209	1004.418	1054.390
2,4,5-T	762.507	869.538	968.561	927.122	969.668
Dalapon	X 180.111	X 199.708	X 218.078	X 233.294	X 245.306
Dicamba	✓ 598.327	692.816	✓ 769.725	786.844	✓ 835.876
Dichloroprop	117.162	136.511	154.696	160.132	172.399
Dinoseb	416.172	476.447	544.902	534.275	569.934
MCPA	0.541	0.628	0.707	0.739	0.806
MCPP	0.378	0.432	0.484	0.495	0.530
DCAA	131.048	158.705	178.367	186.994	201.660

*J.H. 9.18.08
A.M. 9/24/08*

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1407 1805

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
=====	=====	=====
2,4-D	251.889	288.092
2,4-DB	129.307	140.323
2,4,5-TP (Silvex)	1172.417	1257.311
2,4,5-T	1032.387	1036.928
Dalapon	✓ 282.827	✓ 329.357
Dicamba	✓ 948.230	1056.122
Dichloroprop	203.678	257.770
Dinoseb	670.158	755.639
MCPA	0.984	1.186
MCPP	0.613	0.685
=====	=====	=====
DCAA	228.875	249.103

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1407 1805

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	3.659e-003	2.53e-008	0.998
2,4-DB	AVRG		111.025861		17.0
2,4,5-TP (Silvex)	AVRG		1042.37388		13.7
2,4,5-T	AVRG		938.101550		10.3
Dalapon	2ORDR	0.00000000	3.734e-003	4.505e-009	0.998
Dicamba	AVRG		812.562980		18.9
Dichloroprop	2ORDR	0.00000000	4.725e-003	3.476e-008	0.998
Dinoseb	2ORDR	0.00000000	1.474e-003	4.732e-009	0.998
MCPA	2ORDR	0.00000000	1.02433872	1.647e-005	0.998
MCPP	2ORDR	0.00000000	1.62180977	2.919e-005	0.998
DCAA	2ORDR	0.00000000	3.79e-003	6.266e-008	0.999

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1407 1805

LAB FILE ID: RT1: 003F0201 RT2: 004F0201 RT3: 005F0201
RT4: 006F0201 RT5: 007F0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	15.983	15.983	15.980	15.983	15.997
2,4-DB	18.033	18.033	18.033	18.037	18.047
2,4,5-TP (Silvex)	17.097	17.097	17.093	17.093	17.107
2,4,5-T	17.437	17.440	17.437	17.443	17.457
Dalapon	5.323	5.323	5.323	5.317	5.340
Dicamba	14.410	14.410	14.403	14.403	14.417
Dichloroprop	15.647	15.643	15.640	15.640	15.653
Dinoseb	19.103	19.100	19.097	19.100	19.107
MCPA	15.080	15.063	15.057	15.053	15.063
MCPP	14.817	14.803	14.797	14.793	14.803
DCAA	14.077	14.077	14.070	14.073	14.090

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1407 1805

LAB FILE ID: RT6: 008F0201 RT7: 009F0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	15.997	16.007	15.990	15.967	16.027
2,4-DB	18.047	18.057	18.041	18.017	18.077
2,4,5-TP (Silvex)	17.100	17.103	17.099	17.077	17.137
2,4,5-T	17.460	17.473	17.450	17.427	17.487
Dalapon	5.333	5.333	5.328	5.310	5.370
Dicamba	14.410	14.410	14.409	14.387	14.447
Dichloroprop	15.647	15.650	15.646	15.623	15.683
Dinoseb	19.103	19.103	19.102	19.077	19.137
MCPA	15.053	15.053	15.060	15.033	15.093
MCPP	14.793	14.793	14.800	14.773	14.833
DCAA	14.083	14.090	14.080	14.060	14.120

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd2.i Injection Date: 13-SEP-2008 18:44
Lab File ID: 010F0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
Analysis Type: Init. Cal. Times: 17:26 18:05
Lab Sample ID: Herb ICV #7248 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151F.m

COMPOUND	RRF	RF20	MIN	RRF	%D	MAX
5 Dalapon	455	X 440	0.010	3.4	15.0	
6 Dicamba	813	809	0.010	-0.4	15.0	
10 MCPP	18779	✓ 17896	0.010	4.7	15.0	
9 MCPA	18691	18533	0.010	0.8	15.0	
7 Dichloroprop	189	195	0.010	-3.3	15.0	
1 2,4-D	188	175	0.010	7.0	15.0	
3 2,4,5-TP (Silvex)	1042	1057	0.010	1.4	15.0	
4 2,4,5-T	938	981	0.010	4.6	15.0	
2 2,4-DB	111	115	0.010	3.9	15.0	
8 Dinoseb	94.51800	90.35287	0.010	4.4	15.0	

J.M.
9/24/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 09-SEP-2008 18:58
 Lab File ID: 011F0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 17:40
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151F.m

Handwritten: 09/11/08
 JJ
 9/15/08

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	455	✓472	0.010	-3.6	15.0
\$ 12 DCAA	93.63300	94.33987	0.010	-0.8	15.0
6 Dicamba	18.81500	19.23831	0.010	-2.2	15.0
10 MCPP	18779	19347	0.010	-3.0	15.0
9 MCPA	18691	19304	0.010	-3.3	15.0
7 Dichloroprop	189	192	0.010	-1.7	15.0
1 2,4-D	188	190	0.010	-1.2	15.0
3 2,4,5-TP (Silvex)	1127	φ1205	0.010	7.0	15.0
4 2,4,5-T	986	1111	0.010	12.7	15.0
2 2,4-DB	118	129	0.010	9.0	15.0
8 Dinoseb	94.51800	96.72283	0.010	-2.3	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-SEP-2008 03:24
 Lab File ID: 024F0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 17:40
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151F.m

*OK 11/24
 12/9/2008*

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	455	√463	0.010	-1.6	15.0
\$ 12 DCAA	93.63300	83.46002	0.010	10.9	15.0
6 Dicamba	18.81500	16.96898	0.010	9.8	15.0
10 MCPP	18779	17310	0.010	7.8	15.0
9 MCPA	18691	17257	0.010	7.7	15.0
7 Dichloroprop	189	171	0.010	9.2	15.0
1 2,4-D	188	164	0.010	12.8	15.0
3 2,4,5-TP (Silvex)	1127	ϕ1062	0.010	-5.7	15.0
4 2,4,5-T	986	931	0.010	-5.5	15.0
2 2,4-DB	118	110	0.010	-6.7	15.0
8 Dinoseb	94.51800	81.89198	0.010	13.4	15.0

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-SEP-2008 09:53
 Lab File ID: 034F0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 17:26 17:40
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	455	452	0.010	0.7	15.0
\$ 12 DCAA	93.63300	79.31169	0.010	15.3	15.0
6 Dicamba	18.81500	16.43173	0.010	12.7	15.0
10 MCPP	18779	16597	0.010	11.6	15.0
9 MCPA	18691	16170	0.010	13.5	15.0
7 Dichloroprop	189	162	0.010	13.9	15.0
1 2,4-D	188	153	0.010	18.7	15.0
3 2,4,5-TP (Silvex)	1127	996	0.010	-11.6	15.0
4 2,4,5-T	986	882	0.010	-10.5	15.0
2 2,4-DB	118	103	0.010	-12.4	15.0
8 Dinoseb	94.51800	76.74541	0.010	18.8	15.0

OK 11/24
9/25/08
aw 6.47

J.H. 9.19.08
J) 9/21/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 13-SEP-2008 19:24
Lab File ID: 011F0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
Analysis Type: Init. Cal. Times: 17:26 18:05
Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	455	X 449	0.010	1.4	15.0
\$ 12 DCAA	93.63300	91.24320	0.010	2.6	15.0
6 Dicamba	813	814	0.010	0.2	15.0
10 MCPP	18779	18642	0.010	0.7	15.0
9 MCPA	18691	18547	0.010	0.8	15.0
7 Dichloroprop	189	186	0.010	1.4	15.0
1 2,4-D	188	184	0.010	2.1	15.0
3 2,4,5-TP (Silvex)	1042	1045	0.010	0.2	15.0
4 2,4,5-T	938	962	0.010	2.6	15.0
2 2,4-DB	111	111	0.010	0.2	15.0
8 Dinoseb	94.51800	92.11847	0.010	2.5	15.0

J.H. 9.19.08
 JJ 9/24/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 14-SEP-2008 03:52
 Lab File ID: 024F0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
 Analysis Type: Init. Cal. Times: 17:26 18:05
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151F.m

COMPOUND	RRF	RF20	MIN RRF	%D	MAX %D
5 Dalapon	455	✓ 475	0.010	-4.3	15.0
\$ 12 DCAA	93.63300	86.28778	0.010	7.8	15.0
6 Dicamba	813	799	0.010	-1.6	15.0
10 MCPP	18779	17387	0.010	7.4	15.0
9 MCPA	18691	17210	0.010	7.9	15.0
7 Dichloroprop	189	184	0.010	2.2	15.0
1 2,4-D	188	181	0.010	4.0	15.0
3 2,4,5-TP (Silvex)	1042	⊕ 1032	0.010	-1.0	15.0
4 2,4,5-T	938	917	0.010	-2.3	15.0
2 2,4-DB	111	109	0.010	-1.8	15.0
8 Dinoseb	94.51800	94.57593	0.010	-0.1	15.0

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08
9.16.08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): ~~1805~~ 1819

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
 RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	254.239	271.852	292.614	294.133	284.124
2,4-DE	145.365	148.545	161.259	139.624	135.104
2,4,5-TP (Silvex)	1486.703	1446.001	1506.299	1394.546	1287.255
2,4,5-T	1220.866	1186.019	1248.345	1155.800	1082.608
Dalapon	337.015	377.490	396.594	415.432	404.295
Dicamba	969.492	1014.818	1064.206	1047.198	982.248
Dichloroprop	231.362	254.917	272.226	284.551	273.290
Dinoseb	909.683	896.794	950.935	901.115	857.710
MCPA	1.075	1.286	1.411	1.590	1.635
MCPP	0.805	1.008	1.104	1.290	1.344
Pentachlorophenol					
DCAA	212.367	237.843	252.608	260.951	252.368

J.H. 9.16.08

CVG/mm

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08
SD 9.16.08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 1819

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	298.608	417.033
2,4-DB	142.201	194.876
2,4,5-TP (Silvex)	1177.782	1541.973
2,4,5-T	1049.794	1389.534
Dalapon	383.184	500.584
Dicamba	* 905.390	* 1230.017
Dichloroprop	262.561	369.981
Dinoseb	879.557	1183.800
MCPA	2.010	11.680
MCPP	1.710	2.789
Pentachlorophenol		
DCAA	253.225	354.366

NOT USED (MATRIX)

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): ~~1805~~ ^{9.14.08} 1819

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		301.800388		17.6
2,4-DB	AVRG		152.425062		13.4
2,4,5-TP (Silvex)	AVRG		1405.79430		9.3
2,4,5-T	AVRG		1190.42375		9.5
Dalapon	AVRG		402.084929		12.5
Dicamba	AVRG		1030.48125		10.0
Dichloroprop	AVRG		278.412525		15.7
Dinoseb	AVRG		939.941943		11.8
MCPA	2ORDR	0.00000000	0.47367412	4.587e-006	0.999
MCPP	2ORDR	0.00000000	0.46210798	1.045e-005	0.998
Pentachlorophenol	AVRG				
DCAA	AVRG		260.532852		17.0

J.H. 9.16.08

Empirical Laboratories, LLC
ICV

~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd2.i Injection Date: 09-SEP-2008 18:58
 Lab File ID: 010R0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: Init. Cal. Times: 18:05 18:19
 Lab Sample ID: Herb ICV #7248 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151R.m

COMPOUND	RRF	RF100	MIN	MAX
5 Dalapon	402	429	0.010	6.6 | 15.0
6 Dicamba	1030	1095	0.010	6.3 | 15.0
10 MCPP	18779	19650	0.010	-4.6 | 15.0
9 MCPA	18691	19761	0.010	-5.7 | 15.0
7 Dichloroprop	278	325	0.010	16.8 | 15.0
1 2,4-D	302	306	0.010	1.5 | 15.0
3 2,4,5-TP (Silvex)	1406	1477	0.010	5.1 | 15.0
4 2,4,5-T	1190	1279	0.010	7.4 | 15.0
2 2,4-DB	152	157	0.010	3.0 | 15.0
8 Dinoseb	940	956	0.010	1.7 | 15.0

Call

← HIGH

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1446 1844

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	330.700	344.235	370.652	346.781	409.892
2,4-DB	187.734	184.040	202.681	177.590	215.677
2,4,5-TP (Silvex)	1892.308	1785.920	1876.732	1567.623	1848.351
2,4,5-T	1606.704	1524.866	1621.944	1369.836	1636.177
Dalapon	X 399.830	X 422.867	X 446.576	X 431.767	X 481.210
Dicamba	✓ 1213.130	✓ 1209.154	✓ 1278.349	✓ 1124.883	✓ 1308.265
Dichloroprop	282.122	298.129	322.086	304.580	360.554
Dinoseb	1122.051	1092.262	1147.734	1014.448	1215.462
MCPA	1.304	1.504	1.668	1.754	2.109
MCPP	0.947	1.138	1.268	1.378	1.657
DCAA	267.713	284.703	305.266	286.651	336.003

J.A. 9-18-08

A.M. 9/24/08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1446 1844

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	446.600	474.074
2,4-DB	228.782	247.487
2,4,5-TP (Silvex)	1735.220	1669.472
2,4,5-T	1578.858	1527.115
Dalapon	✓ 513.732	✓ 551.233
Dicamba	✓ 1307.112	✓ 1332.058
Dichloroprop	391.965	426.033
Dinoseb	1244.271	1261.458
MCPA	2.708	13.403
MCPP	2.222	3.053
DCAA	361.564	386.150

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1446 1844

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		388.990611		14.3
2,4-DB	AVRG		206.284304		12.5
2,4,5-TP (Silvex)	AVRG		1767.94665		6.7
2,4,5-T	AVRG		1552.21433		5.9
Dalapon	AVRG		463.887740		11.6
Dicamba	AVRG		1253.27872		5.9
Dichloroprop	AVRG		340.781542		15.7
Dinoseb	AVRG		1156.81220		7.7
MCPA	2ORDR	0.00000000	0.41781772	2.917e-006	0.995
MCPP	2ORDR	0.00000000	0.44124271	7.054e-006	0.994
DCAA	AVRG		318.293074		13.8

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1446 1844

LAB FILE ID: RT1: 003R0201 RT2: 004R0201 RT3: 005R0201
RT4: 006R0201 RT5: 007R0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.833	16.830	16.830	16.833	16.840
2,4-DB	18.823	18.823	18.823	18.827	18.833
2,4,5-TP (Silvex)	17.850	17.847	17.847	17.850	17.857
2,4,5-T	18.293	18.290	18.290	18.293	18.300
Dalapon	5.760	5.760	5.760	5.753	5.767
Dicamba	15.293	15.290	15.287	15.290	15.297
Dichloroprop	16.393	16.390	16.390	16.393	16.400
Dinoseb	19.143	19.140	19.140	19.143	19.147
MCPA	15.920	15.903	15.900	15.897	15.903
MCPP	15.540	15.527	15.520	15.520	15.527
DCAA	14.990	14.987	14.987	14.990	15.000

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA75247

Instrument ID: ECD2 Calibration Date(s): 09/13/08 09/13/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1446 1844

LAB FILE ID: RT6: 008R0201 RT7: 009R0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	16.833	16.840	16.834	16.810	16.870
2,4-DB	18.830	18.833	18.827	18.803	18.863
2,4,5-TP (Silvex)	17.850	17.853	17.851	17.827	17.887
2,4,5-T	18.297	18.300	18.295	18.270	18.330
Dalapon	5.763	5.767	5.761	5.737	5.797
Dicamba	15.290	15.293	15.291	15.267	15.327
Dichloroprop	16.393	16.397	16.394	16.370	16.430
Dinoseb	19.143	19.143	19.143	19.117	19.177
MCPA	15.890	15.883	15.899	15.873	15.933
MCPP	15.517	15.520	15.524	15.497	15.557
DCAA	14.990	14.997	14.992	14.970	15.030

J.H. 9.18.08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd2.i Injection Date: 13-SEP-2008 19:24
Lab File ID: 010R0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
Analysis Type: Init. Cal. Times: 18:05 18:44
Lab Sample ID: Herb ICV #7248 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX
5 Dalapon	464	X 434	0.010	-6.4	15.0	
6 Dicamba	1253	✓ 1171	0.010	-6.5	15.0	
10 MCPP	18779	18103	0.010	3.6	15.0	
9 MCPA	18691	19576	0.010	-4.7	15.0	
7 Dichloroprop	341	341	0.010	0.1	15.0	
1 2,4-D	389	355	0.010	-8.8	15.0	
3 2,4,5-TP (Silvex)	1768	1638	0.010	-7.3	15.0	
4 2,4,5-T	1552	1486	0.010	-4.3	15.0	
2 2,4-DB	206	195	0.010	-5.3	15.0	
8 Dinoseb	1157	1085	0.010	-6.2	15.0	

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 09-SEP-2008 19:37
 Lab File ID: 011R0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 18:05 18:19
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	402	424	0.010	5.3	15.0
\$ 12 DCAA	261	287	0.010	10.3	15.0
6 Dicamba	1030	1128	0.010	9.4	15.0
10 MCPP	18779	20669	0.010	-10.1	15.0
9 MCPA	18691	22165	0.010	18.6	15.0 <-
7 Dichloroprop	278	323	0.010	16.2	15.0 <-
1 2,4-D	302	346	0.010	14.8	15.0
3 2,4,5-TP (Silvex)	1406	1596	0.010	13.5	15.0
4 2,4,5-T	1190	1404	0.010	17.9	15.0 <-
2 2,4-DB	152	175	0.010	14.7	15.0
8 Dinoseb	940	1104	0.010	17.4	15.0 <-

*Minimum
 JJ 9/25/08*

8.2%

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-SEP-2008 04:03
 Lab File ID: 024R0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 18:05 18:19
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151R.m

*Cal 11/10/08
 Y 01/01/08*

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	402	429	0.010	6.7	15.0
\$ 12 DCAA	261	295	0.010	13.3	15.0
6 Dicamba	1030	1149	0.010	11.5	15.0
10 MCPP	18779	20836	0.010	-11.0	15.0
9 MCPA	18691	22359	0.010	-19.6	15.0
7 Dichloroprop	278	327	0.010	17.6	15.0
1 2,4-D	302	368	0.010	21.8	15.0
3 2,4,5-TP (Silvex)	1406	1667	0.010	18.6	15.0
4 2,4,5-T	1190	1556	0.010	30.7	15.0
2 2,4-DB	152	195	0.010	28.0	15.0
8 Dinoseb	940	1186	0.010	26.2	15.0

201.

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 10-SEP-2008 11:12
 Lab File ID: 034R0201.D Init. Cal. Date(s): 02-APR-2008 09-SEP-2008
 Analysis Type: WATER Init. Cal. Times: 18:05 18:19
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151R.m

*09/10/08
 JJ 9/25/08*

COMPOUND	RRF	RF100	MIN RRF	MAX %D
5 Dalapon	402	451	0.010	12.1
\$ 12 DCAA	261	303	0.010	16.3
6 Dicamba	1030	1184	0.010	14.9
10 MCPP	18779	21465	0.010	-14.3
9 MCPA	18691	23097	0.010	-23.6
7 Dichloroprop	278	338	0.010	21.5
1 2,4-D	302	372	0.010	23.4
3 2,4,5-TP (Silvex)	1406	1665	0.010	18.4
4 2,4,5-T	1190	1511	0.010	27.0
2 2,4-DB	152	194	0.010	27.2
8 Dinoseb	940	1153	0.010	22.6

NA

22.6

J.H. 9.19.08
J.J. 9/24/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 13-SEP-2008 20:03
Lab File ID: 011R0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
Analysis Type: Init. Cal. Times: 18:05 18:44
Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151R.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
5 Dalapon	464	X 459	0.010	-1.1 | 15.0
12 DCAA	318	315	0.010	-0.9 | 15.0
6 Dicamba	1253	1227	0.010	-2.1 | 15.0
10 MCPP	18779	19297	0.010	-2.8 | 15.0
9 MCPA	18691	20210	0.010	-8.1 | 15.0
7 Dichloroprop	341	339	0.010	-0.4 | 15.0
1 2,4-D	389	φ 388	0.010	-0.3 | 15.0
3 2,4,5-TP (Silvex)	1768	1710	0.010	-3.3 | 15.0
4 2,4,5-T	1552	1526	0.010	-1.7 | 15.0
2 2,4-DB	206	204	0.010	-1.2 | 15.0
8 Dinoseb	1157	1179	0.010	1.9 | 15.0

J.H. 9.19.08
11 9/24/08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 14-SEP-2008 04:31
Lab File ID: 024R0201.D Init. Cal. Date(s): 02-APR-2008 13-SEP-2008
Analysis Type: Init. Cal. Times: 18:05 18:44
Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\091308A.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	464	499	0.010	7.6	15.0
12 DCAA	318	334	0.010	4.9	15.0
6 Dicamba	1253	1353	0.010	8.0	15.0
10 MCPP	18779	18778	0.010	0.0	15.0
9 MCPA	18691	19765	0.010	-5.7	15.0
7 Dichloroprop	341	361	0.010	6.0	15.0
1 2,4-D	389	415	0.010	6.6	15.0
3 2,4,5-TP (Silvex)	1768	1890	0.010	6.9	15.0
4 2,4,5-T	1552	1618	0.010	4.2	15.0
2 2,4-DB	206	205	0.010	-0.5	15.0
8 Dinoseb	1157	1296	0.010	12.1	15.0

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW0701

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808253-02 Date(s) Analyzed: 09/09/08 09/09/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.04126	17.6
	2	17.85	17.84	17.90	0.04925	
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW0701D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808253-03 Date(s) Analyzed: 09/09/08 09/09/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32 (mm) Column(2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.05049	
	2	17.85	17.84	17.90	0.03869	26.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW1201

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808253-05 Date(s) Analyzed: 09/09/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.07290	
	2	17.85	17.84	17.90	0.3148	124.8
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW1301

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808253-06 Date(s) Analyzed: 09/10/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.03043	
	2	17.85	17.84	17.90	0.6494	182.1
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW1601

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808268-05 Date(s) Analyzed: 09/10/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.08256	
	2	17.85	17.84	17.90	0.1631	65.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW1601D

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808268-06 Date(s) Analyzed: 09/10/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.10	17.09	17.15	0.1056	
	2	17.86	17.84	17.90	0.1747	49.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW2101

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808268-09 Date(s) Analyzed: 09/10/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.11	17.09	17.15	0.07892	
	2	17.86	17.84	17.90	0.5439	149.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01GW2001

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: GULPORT-010

Lab Sample ID: 0808268-10 Date(s) Analyzed: 09/10/08 09/10/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32 (mm) Column(2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-TP (Silvex)	1	17.11	17.09	17.15	0.1576	
	2	17.86	17.84	17.90	0.1693	7.2
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HW1BLK0902LCS

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-10

Lab Sample ID: HW1BLK0902LCS Date(s) Analyzed: 09/09/08 09/09/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32 (mm) Column(2): RTX-CLP2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-D	1	16.01	15.97	16.03	0.6858	
	2	16.86	16.83	16.89	0.9486	32.2
2,4,5-TP (Silvex)	1	17.10	17.08	17.14	0.6012	
	2	17.87	17.84	17.90	0.8819	37.8
2,4,5-T	1	17.44	17.44	17.50	0.5659	
	2	18.31	18.29	18.35	0.9522	50.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HW1BLK0902LCSD

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-10

Lab Sample ID: HW1BLK0902LCSD Date(s) Analyzed: 09/09/08 09/09/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-D	1	16.00	15.97	16.03	0.8320	
	2	16.86	16.83	16.89	1.049	23.1
2,4,5-TP (Silvex)	1	17.10	17.08	17.14	0.6532	
	2	17.87	17.84	17.90	0.8869	30.3
2,4,5-T	1	17.44	17.44	17.50	0.5870	
	2	18.31	18.29	18.35	0.9628	48.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

J.A. 9.26.08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\016F0201.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\016R0201.D
 Inj Date : 09-SEP-2008 22:13
 Sample Info: 0808253-03
 Misc Info : Gulport-010;1060;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008
 Cal Date : 20-SEP-2008 06:04
 Operator : JH
 Inst ID : ecd2.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd2.i\090908.b\8151R.m
 Sub List #1 : appendixix.sub
 Sub List #2 : appendixix.sub
 Col #1 Phase : RTX-CLP
 Col #2 Phase : RTX-CLP2

Concentration Formula: Amt * DF * Uf * Vt * Vi / (Amt * Vi * (Solids/100))

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	10.000	Final Volume
Vi	2.000	Injection Volume
Amt	1060.000	Sample Amount
Solids	100.000	Percent Solids

0.05049

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/L)	Conc#2 (ug/L)
2,4,5-TP (Silvex)	17.100	17.853	6030	5765	0.05049	0.03869 (M)
DCAA	14.093	15.017	25078	37965	1.180	1.375

QC Flag Legend

M - Compound response manually integrated.

$$\text{Concentration (Column 1)} = \frac{A_x \times DF \times U_f \times V_t \times V_i}{\text{Amt} \times V_i \times RRF} = \frac{6030 \times 10 \times 2}{1060 \times 2 \times 1126.66937} = 0.05049$$

A_x = Area of analyte
RRF = Initial Calibration relative response factor

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA88629

Instrument ID: ECD2 Calibration Date(s): ~~04/02/08~~ 09/09/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): ~~1726~~ ^{9.16.08} 1740

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	2.922e-003	2.979e-008	1.000
2,4-DB	AVRG		118.155083		18.5
2,4,5-TP (Silvex)	AVRG		1126.66937	REF	15.1
2,4,5-T	AVRG		986.002635		11.7
Dalapon	2ORDR	0.00000000	3.728e-003	5.653e-009	1.000
Dicamba	2ORDR	0.00000000	8.668e-004	1.444e-008	1.000
Dichloroprop	2ORDR	0.00000000	3.942e-003	4.114e-008	1.000
Dinoseb	2ORDR	0.00000000	1.212e-003	5.592e-009	1.000
MCPA	2ORDR	0.00000000	0.83822375	2.041e-005	0.999
MCPP	2ORDR	0.00000000	1.38185481	3.651e-005	1.000
Pentachlorophenol	AVRG				
DCAA	2ORDR	0.00000000	3.241e-003	6.957e-008	1.000



Empirical Laboratories
 EMPIRICAL LABORATORIES, LLC
 LABORATORY SAMPLE CUSTODY FORM
 WALK-IN REFRIGERATOR

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/ Comments	Task Performed
8242-01 8251-1-3 8251-02 8252-2-10 8265-14	11:35 9/2/08 JC	Used all 1:43 8205-04 JC	8205-04 used 500 mL	BNA
8248-01,02 8263-01,02	15:20 9/2/08 K02	15:30 9/2/08 K09		VFA/AIK
8253-2-10 8268-2-10	3:50 9/2/08 AF		Used all	HERB
0808180; 0808212 0808186	7:50 9-3-08 RB	9:35 9-3-08 RB		sol. metals
8251-01A 8258-01A 8259-01C	8:45 9-3-08 JC	9/3/08 15:30 (cat)		TSS
8251-01C 8260-04B	↓	9/3/08 15:30 (cat)		TDS
8271-1-4 8252-1-4 8271-1-4 8259-1-3 8260-3-4	8:50 JC 9/3/08	returned 8271-1-4 9/3/08 SPM AF		Fluoro
8205-01 8208-05,06 8230-01 8236-01 8251-01	All 9/3/08 9:00 ↓	9/3/08 12:00 ↓		↓
9008-01-03 9015-02	9/3/08 11:15 (cat)	9/3/08 15:30 (cat)		TSS/VSS
9010-01-03	9/3/08 10:30 (cat)	13:51 9/3/08 (cat)	Take from login	Bad
0808197 080905	11:23 9-3-08 RB	13:40 9-3-08 RB		Toc
8196-01-02 8266-01 02,05 8265-02-15	K.H 9-3-08 12:15	K.H 9-3-08 1:25		Hg
8251-01 8252-01	JG 9-3-08 12:30	JG 9-3-08 2:00		NH ₃
8251-01 8252-01 8253-01	↓			
9015-01,02	From log-in 9-3-08 RB	13:55 RB 9/3/08		Anions
9017-01-03	From log-in 9/3/08	2:10 K.H 9/3/08		metals
8259-03	4:00 9-3-08 RB	4:13 9-3-08 RB		Hardness
8251-01 8194-01 8194-04	JG 9/4/08 6:40	8251-01 JG 10:50 9/4/08		NH ₃
8233-01-03 8236-01 8237-01-12	↓	↓		↓



Empirical Laboratories
 EMPIRICAL LABORATORIES, LLC
 LABORATORY SAMPLE CUSTODY FORM
 WALK-IN REFRIGERATOR

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/ Comments	Task Performed
7015-01,02	AM 9/4/08 7:50	AM 9/4/08 13:10		OP ₀₄ , TP ₀₄
8230-01 8231-01-70	↓	↓		TKN
8205-01 8206-05,06				↓
8210-1-2 8209-2-10 8212-01				Used all	BVA P/PCB
0809023-01	JC 8:30 9/4/08 KH from login	Used all KH 9/4/08 11:45		Cr + 6
9006-01 9022-02,03	AM 12:05 9/4	12:10 9/4 AM		TKN
8208-08,00 8257-10,11 8266-10,11	AM 13:10 9/4	3:18:30 9/4/08		Phenol
8178-03 9006 9012	AM 14:00 9/4	AM 15:10 9/4		N ₂ /N ₂
9031-01,04 9021-01 9022-01	9/4/08 12:30 (cap)	9/4/08 (cap) 16:00	Samples taken from login	Bad
8251	9/4/08 1:02 JG	9/4/08 4:40 JG		TKN
8197-0,03,04A 8252-1,20,24C	9/5/08 9:05 JK	AM 9/5/08 10:10		COD
9010-01,02 9020-01,08	10:25 KGG 9/5/08	10:35 KGG 9/5/08		VFA/AIK
9020-01-03A	10:50 JG 9/5/08	JG 7:00		TSS
8268-10	9/5/08 11:26 KH	KH 9/5/08 12:35		Hg
0808266	11:33 9-5-08 RB	13:35 9-5-08 RB		TOC
9021-01 9024-01 9025-03 9037-01-43 9135-01-06,07,08,01	4:50 JG 1:25	JG 9-5-08 3:10		TSS/TDS
8271-1-4	JC 2:00 9/5/08	Used all		PAH SIM
9039-10,12,21 9035-01,204	FROM LOGIN KGG 9/5/08	17:40 KGG 9/5/08		Anions
8269-01 9121-01 8270-01 9122-01 9115-11,12	TS 9/5/08 7:00	JG 8/11/08 8:25		NH ₃
8268-06-10 8272-01	KH 9/8/08 19:40	9/8/08 KH 10:51		metals
9023-01 9024-01 →	From login KH 9/8/08	↓		↓

HOBART SAMPLE EXTRACT CUSTODY FORM

Sample ID	Extraction	Insertion / Removal		Responsible for the following Procedure								
		Insertion	Removal	Sampling	Checkout	Re-analysis	Analysis	Dilution	Transfer	Insertion	Removal	Completion
9019-01-02	EPH	RM. 9:45 9/15/08	RM. 2:30 9/12/08				X					
9004-1 9199-1	PRP	17:45 AF 9/12/08										Y
8253 2-10 8268 2-10	Post	LC 911310 14/14	LC 9113108 074*					Y				
8213-1	PCB											
9073-1 9048 1,3,4,5 9063 1,2 9067 1	Post L											
9047-1	Post											
9065-1 90251-3	PCA L											
9031-1-4	L											
82108, 4+7	Hand		9113108 1200				X					
9048	PP	1355 9/11/08	9111106 134U					X				
9068 9085-01-03	EXP	07:30 9/13/08	06:45 9/13/08 B7D						X			
9028-19-20 9004-01	BVA	13:00 TC 9115108										X
9086-1 9124-1-2 9125-1-2	EXP	17:20 AF 9/15/08										Y
9082-1 9004-1 9091-28 9127-2	BVA	17:35 AF 9/15/08										X

Fraction: Herbicide

Matrix: Water/Soil

Empirical Laboratories

EX077

Supervisor

Client	Lab No.	Date Extracted	Setup Initials	pH	Initial Vol/Wt	Final Volume	DCAA		Spike		10ml Conc.	TV Tube	Transl. Initials	Solvent Lot/Vendor				Diazo. Used	Date Ester.	Ester. Initials	Volume Check	Notes/Comments
							Added	Initials	Added	Initials				MeCl2	Ether	iso-octan	Methanc					
Ptra NCS	0808253-02	090208HW	AF	6	1020	10	1.0	AF	NA	NA	N/A	G112	AF	08345	03545	92047624821	2103	918	AF	AC	(5)	
	-03	17:00			1000				NA	NA		G107										(3)
	-04				1000				NA	NA		G104										(1)
	-05				1000				NA	NA		G111										(1)
	-06				1070				NA	NA		G08										(3)
	-07				1070				NA	NA		G										(1)
	-08				1060				NA	NA		G03										(5)
	-09				1080				NA	NA		G12										(5)
	-10				1040				NA	NA		G103										(5)
	0808268-02				1080				NA	NA		G17										(1)
-03				1070				NA	NA		G10										(2)	
-04				1080				NA	NA		G113										(2)	
-05				1070				NA	NA		G1										(2)	
-06				1000				NA	NA		KD1										(1)	
-07				1020				NA	NA		P122										(1)	
-08				1020				NA	NA		G										(2)	
-09				1000				NA	NA		G111										(2)	
-10				1020				NA	NA		P2										(2)	
								NA	NA		G5										(1)	
								NA	NA													
								NA	NA													
MB	1-18	SAS	SAS	6	10W	10	SAS	SAS	-	-	W	N/A	G3	AF	SAS	SAS	SAS	SAS	SAS	SAS	AF	
LCS		SAS	SAS				SAS	SAS	10	AF	G7	N/A	G13	AF	SAS			SAS	SAS	SAS	SAS	
LCS		SAS	SAS				SAS	SAS	0783		G1		G100		SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	
		SAS	SAS				SAS	SAS							SAS			SAS	SAS	SAS	SAS	

Note: All volumes are in milliliters (surrogate in microliters) and weights are in grams.

Lim Moe, II
9/10/08

```

NAME SeqFileMacro
DELSEQUENCE
VERSION 3
SETPARAMS "JH", "", 0, 0, 1
SETDATAPATH "090908"
SETMETHODPATH
SETPRESEQ ""
SETPOSTSEQ ""
SETCOMMENT
SETNAMEMODE 1
SETSIG1FLEX "SIG1", "0001"
SETSIG2FLEX "SIG2", "0001"
SETSEQLINE 1,1,"8151F",1,1,2,-1
SETSEQLINE 1,2,"8151F",3,34,1,-1
SETSEQLINE 2,1,"8151R",2,2,2,-1
SETSEQLINE 2,2,"8151R",3,34,1,-1
DELSAMPLE 1,100
SETSAMPLE 1,"Herb. Primer",,,,
SETINFO 1
SETINFO 1,";;;;;herbd.sub\"
SETSAMPLE 2,"Herb. Primer",,,,
SETINFO 2
SETINFO 2,";;;;;herbd.sub\"
SETSAMPLE 3,"Herb/DCAA #7245A",,,, 100/500 ppb
SETINFO 3
SETINFO 3,";;;;;herbd.sub\"
SETSAMPLE 4,"Herb/DCAA #7245B",,,, 50/250
SETINFO 4
SETINFO 4,";;;;;herbd.sub\"
SETSAMPLE 5,"Herb/DCAA #7245C",,,, 40/200
SETINFO 5
SETINFO 5,";;;;;herbd.sub\"
SETSAMPLE 6,"Herb/DCAA #7245D",,,, 25/125
SETINFO 6
SETINFO 6,";;;;;herbd.sub\"
SETSAMPLE 7,"Herb/DCAA #7245E",,,, 20/100
SETINFO 7
SETINFO 7,";;;;;herbd.sub\"
SETSAMPLE 8,"Herb/DCAA #7245F",,,, 10/50
SETINFO 8
SETINFO 8,";;;;;herbd.sub\"
SETSAMPLE 9,"Herb/DCAA #7245G",,,, 5/25
SETINFO 9
SETINFO 9,";;;;;herbd.sub\"
SETSAMPLE 10,"Herb ICV #7248",,,, 20
SETINFO 10
SETINFO 10,";;;;;herbd.sub\"
SETSAMPLE 11,"Herb/DCAA #7245H",,,, 20/100ppb
SETINFO 11
SETINFO 11,";;;;;herbd.sub\"
SETSAMPLE 12,"HW1BLK0902",,,, 8253.2-10 ; 8248.2-10 X
SETINFO 12
SETINFO 12,"Gulport-010;1000;10;090208HW1;ug/L;herbd.sub;02-Sep-2008\"
SETSAMPLE 13,"HW1BLK0902LCS",,,,
SETINFO 13
SETINFO 13,"Gulport-010;1000;10;090208HW1;ug/L;herbd.sub;02-Sep-2008\"
SETSAMPLE 14,"HW1BLK0902LCSD",,,,

```

Xiao Mow, II
9/10/08

SETINFO 14
 SETINFO 14, "Gulport-010;1000;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 15, "0808253-02",,,
 SETINFO 15
 SETINFO 15, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 16, "0808253-03",,,
 SETINFO 16
 SETINFO 16, "Gulport-010;1060;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 17, "0808253-04",,,
 SETINFO 17
 SETINFO 17, "Gulport-010;1000;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 18, "0808253-05",,,
 SETINFO 18
 SETINFO 18, "Gulport-010;1060;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 19, "0808253-06",,,
 SETINFO 19
 SETINFO 19, "Gulport-010;1070;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 20, "0808253-07",,,
 SETINFO 20
 SETINFO 20, "Gulport-010;1070;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 21, "0808253-08",,,
 SETINFO 21
 SETINFO 21, "Gulport-010;1060;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 22, "0808253-09",,,
 SETINFO 22
 SETINFO 22, "Gulport-010;1080;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 23, "0808253-10",,,
 SETINFO 23
 SETINFO 23, "Gulport-010;1040;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 24, "Herb/DCAA #7245H",,, *20/100ppb*
 SETINFO 24
 SETINFO 24, ";;;;;herbd.sub\
 SETSAMPLE 25, "0808268-02",,,
 SETINFO 25
 SETINFO 25, "Gulport-010;1080;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 26, "0808268-03",,,
 SETINFO 26
 SETINFO 26, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 27, "0808268-04",,,
 SETINFO 27
 SETINFO 27, "Gulport-010;1080;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 28, "0808268-05",,,
 SETINFO 28
 SETINFO 28, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 29, "0808268-06",,,
 SETINFO 29
 SETINFO 29, "Gulport-010;1000;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 30, "0808268-07",,,
 SETINFO 30
 SETINFO 30, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 31, "0808268-08",,,
 SETINFO 31
 SETINFO 31, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 32, "0808268-09",,,
 SETINFO 32
 SETINFO 32, "Gulport-010;1060;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
 SETSAMPLE 33, "0808268-10",,,

x |
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 x |
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Mino Morici, II
9/10/08

SETINFO 33
SETINFO 33, "Gulport-010;1020;10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\
SETSAMPLE 34, "Herb/DCAA #7245H",... *20/100ppb*
SETINFO 34
SETINFO 34, ";;;;;herbd.sub\
RETURN

091308A
ECD-2\HP-C/D\090908\8151

32
PG. 30
30

21.11.
9/16/08

```
NAME SeqFileMacro
DELSEQUENCE
VERSION 3
SETPARAMS "JH", "", 0, 0, 1
SETDATAPATH "091308A"
SETMETHODPATH
SETPRESEQ ""
SETPOSTSEQ ""
SETCOMMENT
SETNAMEMODE 1
SETSIG1FLEX "SIG1", "0001"
SETSIG2FLEX "SIG2", "0001"
SETSEQLINE 1,1,"8151F",1,1,2,-1
SETSEQLINE 1,2,"8151F",3,24,1,-1
SETSEQLINE 2,1,"8151R",2,2,2,-1
SETSEQLINE 2,2,"8151R",3,24,1,-1
DELSAMPLE 1,100
SETSAMPLE 1,"Herb. Primer",,,,
SETINFO 1
SETINFO 1,";;;;;herbd.sub\"
SETSAMPLE 2,"Herb. Primer",,,,
SETINFO 2
SETINFO 2,";;;;;herbd.sub\"
SETSAMPLE 3,"Herb/DCAA #7245A",,,,
SETINFO 3
SETINFO 3,";;;;;herbd.sub\"
SETSAMPLE 4,"Herb/DCAA #7245B",,,,
SETINFO 4
SETINFO 4,";;;;;herbd.sub\"
SETSAMPLE 5,"Herb/DCAA #7245C",,,,
SETINFO 5
SETINFO 5,";;;;;herbd.sub\"
SETSAMPLE 6,"Herb/DCAA #7245D",,,,
SETINFO 6
SETINFO 6,";;;;;herbd.sub\"
SETSAMPLE 7,"Herb/DCAA #7245E",,,,
SETINFO 7
SETINFO 7,";;;;;herbd.sub\"
SETSAMPLE 8,"Herb/DCAA #7245F",,,,
SETINFO 8
SETINFO 8,";;;;;herbd.sub\"
SETSAMPLE 9,"Herb/DCAA #7245G",,,,
SETINFO 9
SETINFO 9,";;;;;herbd.sub\"
SETSAMPLE 10,"Herb ICV #7248",,,,
SETINFO 10
SETINFO 10,";;;;;herbd.sub\"
SETSAMPLE 11,"Herb/DCAA #7245H",,,,
SETINFO 11
SETINFO 11,";;;;;herbd.sub\"
SETSAMPLE 12,"0808268-04",,,,
SETINFO 12
SETINFO 12,"Gulfport-10;1080:10;090208HW1;ug/L;;herbd.sub;02-Sep-2008\"
SETSAMPLE 13,"0808268-07",,,,
SETINFO 13
```

100/500 ppb

100/500 ppb 50/250 ppb

50/250 ppb 40/200 ppb

30/150 25/125 ppb

20/100 ppb

10/50 ppb

5/25 ppb

20 ppb

20/100 ppb

X 1

↓

TO: R. FISHER – PAGE 2
DATE: OCTOBER 30, 2008

Matrix Spike / Matrix Spike Duplicate Sample Results

The matrix spike / matrix spike duplicate percent recoveries for antimony were < 75% quality control limit. Nondetected results reported for antimony were qualified as estimated, "UJ".

Notes

None.

Executive Summary

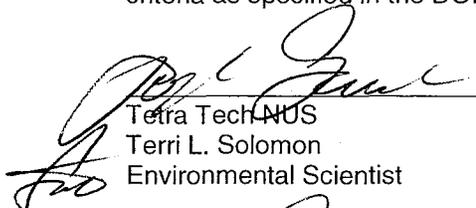
Laboratory Performance: None.

Other Factors Affecting Data Quality: The matrix spike / matrix spike duplicate percent recoveries for antimony were < 75% quality control limit.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004 and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM."


Tetra Tech NUS
Terri L. Solomon
Environmental Scientist


Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS-GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O - Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography, interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DOT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: M

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units MG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units MG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units MG/KG
 Pct_Solids 80.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	6840		
ANTIMONY	1.1	UJ	D
ARSENIC	0.83		
BARIUM	12.2		
BERYLLIUM	0.23	U	
CADMIUM	0.23	U	
CALCIUM	228	U	
CHROMIUM	4.7		
COBALT	1.1	U	
COPPER	2.8		
IRON	2300		
LEAD	6.1		
MAGNESIUM	228	U	
MANGANESE	3.5		
MERCURY	0.045		
NICKEL	2.5		
POTASSIUM	228	U	
SELENIUM	0.69		
SILVER	0.23	U	
SODIUM	228	U	
THALLIUM	0.68	U	
VANADIUM	6.6		
ZINC	6.7		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5530		
ANTIMONY	1.1	UJ	D
ARSENIC	0.96		
BARIUM	11		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	214	U	
CHROMIUM	3.9		
COBALT	1.1	U	
COPPER	2.5		
IRON	2440		
LEAD	6.3		
MAGNESIUM	214	U	
MANGANESE	3.7		
MERCURY	0.059		
NICKEL	2.2		
POTASSIUM	214	U	
SELENIUM	0.64	U	
SILVER	0.21	U	
SODIUM	214	U	
THALLIUM	0.64	U	
VANADIUM	5.6		
ZINC	7		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	6490		
ANTIMONY	1.2	UJ	D
ARSENIC	1.5		
BARIUM	12.9		
BERYLLIUM	0.24	U	
CADMIUM	0.24	U	
CALCIUM	244	U	
CHROMIUM	4.7		
COBALT	1.2	U	
COPPER	1.4		
IRON	4470		
LEAD	5		
MAGNESIUM	244	U	
MANGANESE	5.2		
MERCURY	0.016		
NICKEL	2.3		
POTASSIUM	244	U	
SELENIUM	0.73	U	
SILVER	0.24	U	
SODIUM	244	U	
THALLIUM	0.73	U	
VANADIUM	8.7		
ZINC	7.3		

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: M

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units MG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units MG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units MG/KG
 Pct_Solids 79.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5460		
ANTIMONY	1.2	UJ	D
ARSENIC	1.1		
BARIUM	10.4		
BERYLLIUM	0.24	U	
CADMIUM	0.24	U	
CALCIUM	398		
CHROMIUM	4.3		
COBALT	1.2	U	
COPPER	4.1		
IRON	2100		
LEAD	6.7		
MAGNESIUM	236	U	
MANGANESE	4.9		
MERCURY	0.016		
NICKEL	1.4		
POTASSIUM	236	U	
SELENIUM	0.71	U	
SILVER	0.24	U	
SODIUM	236	U	
THALLIUM	0.71	U	
VANADIUM	6.1		
ZINC	6.9		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5850		
ANTIMONY	1.1	UJ	D
ARSENIC	4.8		
BARIUM	12.9		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	8730		
CHROMIUM	6		
COBALT	1.1	U	
COPPER	5.4		
IRON	3490		
LEAD	20.6		
MAGNESIUM	3390		
MANGANESE	24.4		
MERCURY	0.017		
NICKEL	2.4		
POTASSIUM	219	U	
SELENIUM	0.71		
SILVER	0.22	U	
SODIUM	219	U	
THALLIUM	0.66	U	
VANADIUM	7.9		
ZINC	23.3		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	10900		
ANTIMONY	1.2	UJ	D
ARSENIC	1.6		
BARIUM	16.5		
BERYLLIUM	0.24	U	
CADMIUM	0.24	U	
CALCIUM	241	U	
CHROMIUM	8.2		
COBALT	1.2	U	
COPPER	2.8		
IRON	2840		
LEAD	5.4		
MAGNESIUM	278		
MANGANESE	5.2		
MERCURY	0.022		
NICKEL	3.9		
POTASSIUM	241	U	
SELENIUM	1		
SILVER	0.24	U	
SODIUM	241	U	
THALLIUM	0.72	U	
VANADIUM	11.6		
ZINC	6.7		

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: M

nsample 01SS06QT
samp_date 8/14/2008
lab_id 0808142-07
qc_type NM
units MG/KG
Pct_Solids 89.4
DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	8320		
ANTIMONY	1.0	UJ	D
ARSENIC	1.3		
BARIUM	17.1		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	337		
CHROMIUM	6.3		
COBALT	1.0	U	
COPPER	1.6		
IRON	3290		
LEAD	7.5		
MAGNESIUM	263		
MANGANESE	4.1		
MERCURY	0.018		
NICKEL	2.8		
POTASSIUM	206	U	
SELENIUM	1.3		
SILVER	0.21	U	
SODIUM	206	U	
THALLIUM	0.62	U	
VANADIUM	8.8		
ZINC	8.3		

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 Pct_Solids 80.8
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 Pct_Solids 79.1
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.16	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS06QT
samp_date 8/14/2008
lab_id 0808142-07
qc_type NM
Pct_Solids 89.4
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-01
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6840			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	0.83	B		P
7440-39-3	Barium	12.2	B		P
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	228	U		P
7440-47-3	Chromium	4.7			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	2.8	B		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	2300			P
7439-92-1	Lead	6.1			P
7439-95-4	Magnesium	228	U		P
7439-96-5	Manganese	3.5			P
7439-97-6	Mercury	0.045			AV
7440-02-0	Nickel	2.5	B		P
7440-09-7	Potassium	228	U		P
7782-49-2	Selenium	0.69	B		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	228	U		P
7440-28-0	Thallium	0.68	U		P
7440-62-2	Vanadium	6.6	B		P
7440-66-6	Zinc	6.7			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01QTDUP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-02
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 88.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5530			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	0.96	B		P
7440-39-3	Barium	11.0	B		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	214	U		P
7440-47-3	Chromium	3.9			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	2.5	B		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	2440			P
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	214	U		P
7439-96-5	Manganese	3.7			P
7439-97-6	Mercury	0.059			AV
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	214	U		P
7782-49-2	Selenium	0.64	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	214	U		P
7440-28-0	Thallium	0.64	U		P
7440-62-2	Vanadium	5.6	B		P
7440-66-6	Zinc	7.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS02QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-03
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 81.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6490			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	12.9	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	244	U		P
7440-47-3	Chromium	4.7			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	1.4	B		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	4470			P
7439-92-1	Lead	5.0			P
7439-95-4	Magnesium	244	U		P
7439-96-5	Manganese	5.2			P
7439-97-6	Mercury	0.016	B		AV
7440-02-0	Nickel	2.3	B		P
7440-09-7	Potassium	244	U		P
7782-49-2	Selenium	0.73	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	244	U		P
7440-28-0	Thallium	0.73	U		P
7440-62-2	Vanadium	8.7	B		P
7440-66-6	Zinc	7.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS03QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-04
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 83.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5460			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.1	B		P
7440-39-3	Barium	10.4	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	398	B		P
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	4.1	B		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	2100			P
7439-92-1	Lead	6.7			P
7439-95-4	Magnesium	236	U		P
7439-96-5	Manganese	4.9			P
7439-97-6	Mercury	0.016	B		AV
7440-02-0	Nickel	1.4	B		P
7440-09-7	Potassium	236	U		P
7782-49-2	Selenium	0.71	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	236	U		P
7440-28-0	Thallium	0.71	U		P
7440-62-2	Vanadium	6.1	B		P
7440-66-6	Zinc	6.9			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS04QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-05
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 86.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5850			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	4.8			P
7440-39-3	Barium	12.9	B		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	8730			P
7440-47-3	Chromium	6.0			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	5.4	B		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	3490			P
7439-92-1	Lead	20.6			P
7439-95-4	Magnesium	3390			P
7439-96-5	Manganese	24.4			P
7439-97-6	Mercury	0.017	B		AV
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	219	U		P
7782-49-2	Selenium	0.71	B		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	219	U		P
7440-28-0	Thallium	0.66	U		P
7440-62-2	Vanadium	7.9	B		P
7440-66-6	Zinc	23.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS05QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-06
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 79.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10900			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.6	B		P
7440-39-3	Barium	16.5	B		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	241	U		P
7440-47-3	Chromium	8.2			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	2.8	B		P
57-12-5	Cyanide	0.16	U		AS
7439-89-6	Iron	2840			P
7439-92-1	Lead	5.4			P
7439-95-4	Magnesium	278	B		P
7439-96-5	Manganese	5.2			P
7439-97-6	Mercury	0.022	B		AV
7440-02-0	Nickel	3.9	B		P
7440-09-7	Potassium	241	U		P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	241	U		P
7440-28-0	Thallium	0.72	U		P
7440-62-2	Vanadium	11.6	B		P
7440-66-6	Zinc	6.7			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS06QT

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Matrix (soil/water): SOLID Lab Sample ID: 0808142-07
 Level (low/med): LOW Date Received: 08/15/08
 % Solids: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8320			P
7440-36-0	Antimony	1.0	U	N	P
7440-38-2	Arsenic	1.3	B		P
7440-39-3	Barium	17.1	B		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	337	B		P
7440-47-3	Chromium	6.3			P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.6	B		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	3290			P
7439-92-1	Lead	7.5			P
7439-95-4	Magnesium	263	B		P
7439-96-5	Manganese	4.1			P
7439-97-6	Mercury	0.018	B		AV
7440-02-0	Nickel	2.8	B		P
7440-09-7	Potassium	206	U		P
7782-49-2	Selenium	1.3			P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	206	U		P
7440-28-0	Thallium	0.62	U		P
7440-62-2	Vanadium	8.8	B		P
7440-66-6	Zinc	8.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

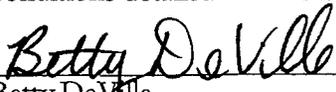
Comments: _____

APPENDIX C
SUPPORT DOCUMENTATION

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 009
Work Order # 0808142
August, 2008

Empirical Laboratories ID	Client ID
0808142-01	01SS01QT
0808142-02	01SS01QTDUP
0808142-03	01SS02QT
0808142-04	01SS03QT
0808142-05	01SS04QT
0808142-06	01SS05QT
0808142-07	01SS06QT

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.



Betty DeVille
Inorganic Lab Manager

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

I. HOLDING TIMES

- A. Sample Preparation:** All holding times were met.
- B. Sample Analysis:** All holding times were met .

II. METHODS

US EPA SW846 Method 3050B was used to digest and method 6010B was used for analysis of ICAP metals. Method 7471A was used to digest and analyze mercury and method 9012A was used to distill and analyze cyanide. Note: The "U" flag indicates that the sample concentration is reported down to the laboratory MDL. The "B" flag indicates that the analyte result is between the laboratory reporting limit and the laboratory MDL. All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

III. PREPARATION

All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

**INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 009
Work Order # 0808142
August, 2008**

IV. ANALYSIS

- A. **Calibration:** All calibration criteria were met.
- B. **Blanks:** All blank criteria were met.
- C. **Spikes:** All matrix spikes quality control criteria were met with the following exceptions: The matrix spike and the matrix spike duplicate were out of the specification limits of 75 to 125% at 40.9 and 41.4% for antimony on sample 01SS06QT. The post digestion spike recovery was at 102.3% for antimony. **All associated data are flagged with an "N" on the final report.**
- D. **Duplicates:** All duplicate quality control criteria were met.
- E. **Samples:** All sample analysis proceeded normally.
- F. **Laboratory Control Samples:** All percent recovery quality control criteria were met.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

41347

SHIP TO: 227 French Landing Drive, Suite 550 • Nashville, TN 37228 • 615-345-1115 • (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:				Lab Use Only:					
Name: <u>ROBERT FISHER</u>		Name: _____		VOL <u>8/26/08</u> SVOC / Pest / PCB / HCB TAL Metals + Hg / CN						VOA Headspace	Y	<u>N</u>	NA
Company: <u>TETRA TECH</u>		Company: _____								Field Filtered	Y	<u>N</u>	NA
Address: _____		Address: <u>SAME</u>								Correct Containers	<u>Y</u>	N	NA
City: <u>TALLAHASSEE</u>		City: _____								Discrepancies	Y	<u>N</u>	NA
State, Zip: <u>FL 32312</u>		State, Zip: _____								Cust. Seals Intact	<u>Y</u>	N	NA
Phone: <u>850 385 9899</u>		Phone: _____								Containers Intact	<u>Y</u>	N	NA
Fax: <u>850 385 9860</u>		Fax: _____		Airbill #: _____									
E-mail: <u>Robert.fisher</u>		E-mail: _____		CAR #: _____									
Project No./Name: <u>@Hms.com</u>				Sampler's (Signature): _____				Site: <u>NCBC Golf Course</u>					

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix							Comments	No. of Bottles	Lab Use Only Containers/Pres.
<u>0808142</u>	<u>-01 8-14/12:45</u>	<u>01SS01QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	<u>1K, 1M, 3EN</u>
	<u>-02 8-14/12:45</u>	<u>01SS01QTDUP</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-03 8-14/12:50</u>	<u>01SS02QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-04 8-14/12:40</u>	<u>01SS03QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-05 8-14/12:35</u>	<u>01SS04QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-06 8-14/12:55</u>	<u>01SS05QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-07 8-14/13:00</u>	<u>01SS06QT</u>	<u>SOIL</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>					<u>5</u>	
	<u>-08 8-14-08</u>	<u>TRB-14-08-01</u>	<u>H2O</u>	<u>✓</u>					<u>TRIP BLANK</u>		<u>2</u>	<u>2J-HY</u>
		<u>TEMP BLANK</u>									<u>1</u>	

Sample Kit Prep'd by: (Signature) _____	Date/Time _____	Received By: (Signature) _____	REMARKS: * VOL, SVOC, Pest, PCB, and metals for <u>3-DAY TAT</u> * <u>HERB RUN 7-DAY TAT</u> FED-EX # <u>8628-0433-0042</u>	Details:
Relinquished by: (Signature) _____	Date/Time _____	Received By: (Signature) _____		Page <u>1</u> of <u>1</u>
Relinquished by: (Signature) _____	Date/Time <u>8/14/08/17:00</u>	Received By: (Signature) _____		Cooler No. _____ of _____
Received for Laboratory by: (Signature) _____	Date/Time <u>8-15-08</u>	Temperature <u>2.8°C</u>		Date Shipped <u>8-14-08</u>
				Shipped By <u>RF</u>
				Turnaround <u>* 3/7 DAY</u>

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

HOLDTIME

SDG GULFPORT00

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	%	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HG	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP_DATE	EXTR_DATE	ANAL_DATE	SMP EXTR	EXTR ANL	SMP ANL
HG	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
CN	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
OS	%	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OV	%	TB 8-14-08-01	0808142-08	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1

**NCBC GULFPORT
SOIL DATA
GULFPORT009**

FRACTION	CHEMICAL	01SS01QT	UNITS	01SS01QTDUP	RPD	D
M	ALUMINUM	6840	MG/KG	5530	21.18	1310.00
M	ARSENIC	0.83	MG/KG	0.96	14.53	0.13
M	BARIUM	12.2	MG/KG	11	10.34	1.20
M	CHROMIUM	4.7	MG/KG	3.9	18.60	0.80
M	COPPER	2.8	MG/KG	2.5	11.32	0.30
M	IRON	2300	MG/KG	2440	5.91	140.00
M	LEAD	6.1	MG/KG	6.3	3.23	0.20
M	MANGANESE	3.5	MG/KG	3.7	5.56	0.20
M	MERCURY	0.045	MG/KG	0.059	26.92	0.01
M	NICKEL	2.5	MG/KG	2.2	12.77	0.30
M	SELENIUM	0.69	MG/KG	ND	200.00	0.69
M	VANADIUM	6.6	MG/KG	5.6	16.39	1.00
M	ZINC	6.7	MG/KG	7	4.38	0.30

Current RPD Quality Control Limit: 50 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	9878.51	98.8	10000.0	10145.40	101.5	10014.31	100.1	P
Antimony	1000.0	962.88	96.3	1000.0	1027.53	102.8	1012.27	101.2	P
Arsenic	1000.0	1025.09	102.5	1000.0	1045.42	104.5	1028.83	102.9	P
Barium	1000.0	967.90	96.8	1000.0	987.24	98.7	970.08	97.0	P
Beryllium	1000.0	1005.13	100.5	1000.0	1050.78	105.1	1012.34	101.2	P
Cadmium	1000.0	1022.13	102.2	1000.0	1028.44	102.8	1017.08	101.7	P
Calcium	1000.0	966.69	96.7	1000.0	1017.43	101.7	924.19	92.4	P
Chromium	1000.0	972.09	97.2	1000.0	1010.97	101.1	1000.13	100.0	P
Cobalt	1000.0	966.64	96.7	1000.0	984.86	98.5	957.27	95.7	P
Copper	1000.0	992.76	99.3	1000.0	1017.51	101.8	1002.18	100.2	P
Cyanide	100.0	105.40	105.4	100.0	104.70	104.7	103.50	103.5	AS
Iron	10000.0	9960.36	99.6	10000.0	10330.58	103.3	10164.66	101.6	P
Lead	1000.0	973.96	97.4	1000.0	1004.87	100.5	993.53	99.4	P
Magnesium	1000.0	949.97	95.0	1000.0	967.09	96.7	961.49	96.1	P
Manganese	1000.0	1007.19	100.7	1000.0	1035.31	103.5	1020.56	102.1	P
Mercury	4.0	3.94	98.5	4.0/2.0	4.08	102.0	2.02	101.0	AV
Nickel	1000.0	988.66	98.9	1000.0	1000.01	100.0	988.59	98.9	P
Potassium	10000.0	10021.99	100.2	10000.0	10115.74	101.2	9787.32	97.9	P
Selenium	1000.0	1008.76	100.9	1000.0	1038.96	103.9	1007.05	100.7	P
Silver	500.0	475.60	95.1	500.0	488.72	97.7	485.15	97.0	P
Sodium	11000.0	10981.27	99.8	11000.0	11332.14	103.0	11121.78	101.1	P
Thallium	1000.0	950.88	95.1	1000.0	1013.70	101.4	994.26	99.4	P
Vanadium	1000.0	975.55	97.6	1000.0	1002.54	100.3	985.17	98.5	P
Zinc	1000.0	1009.54	101.0	1000.0	1036.06	103.6	1022.10	102.2	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Initial Calibration Source: Accustandard, HighPurity, Fisher

Continuing Calibration Source: Spex, Fisher

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				1000.0	10162.90	101.6	10042.42	100.4	P
Antimony				1000.0	1005.54	100.6	1000.55	100.1	P
Arsenic				1000.0	1051.36	105.1	1044.78	104.5	P
Barium				1000.0	990.45	99.0	972.05	97.2	P
Beryllium				1000.0	987.53	98.8	1033.59	103.4	P
Cadmium				1000.0	1042.85	104.3	1054.75	105.5	P
Calcium				1000.0	955.98	95.6	1015.75	101.6	P
Chromium				1000.0	996.88	99.7	1007.16	100.7	P
Cobalt				1000.0	972.74	97.3	1003.55	100.4	P
Copper				1000.0	1021.71	102.2	1003.17	100.3	P
Iron				10000.0	10156.95	101.6	10293.26	102.9	P
Lead				1000.0	1009.86	101.0	1015.19	101.5	P
Magnesium				1000.0	979.27	97.9	967.16	96.7	P
Manganese				1000.0	1025.61	102.6	1037.38	103.7	P
Mercury				2.0	2.02	101.0			AV
Nickel				1000.0	1010.31	101.0	1013.70	101.4	P
Potassium				10000.0	10078.92	100.8	9649.63	96.5	P
Selenium				1000.0	1053.12	105.3	1054.07	105.4	P
Silver				500.0	489.28	97.9	490.05	98.0	P
Sodium				11000.0	11341.17	103.1	11271.83	102.5	P
Thallium				1000.0	978.92	97.9	975.44	97.5	P
Vanadium				1000.0	995.23	99.5	999.35	99.9	P
Zinc				1000.0	1038.38	103.8	1080.78	108.1	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	123.92	103.3		
Arsenic				20.0	20.92	104.6		
Barium								
Beryllium				10.0	10.30	103.0		
Cadmium				10.0	10.04	100.4		
Calcium								
Chromium				20.0	19.29	96.4		
Cobalt				100.0	93.21	93.2		
Copper				50.0	46.92	93.8		
Iron								
Lead				6.0	5.83	97.2		
Magnesium								
Manganese				30.0	30.06	100.2		
Nickel				80.0	78.62	98.3		
Potassium								
Selenium				10.0	10.13	101.3		
Silver				20.0	18.57	92.8		
Sodium								
Thallium				20.0	18.49	92.4		
Vanadium				100.0	96.35	96.4		
Zinc				40.0	40.07	100.2		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cyanide	5.0	U	5.0	U	5.0	U			0.125	U	AS
Iron	30.0	U	30.0	U	30.0	U	30.0	U	6.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	0.300	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Mercury	0.080	U	0.080	U	0.080	U	0.080	U	0.013	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank		M
			1	C	2	C	3	C	C	C	
Aluminum			50.0	U							P
Antimony			5.0	U							P
Arsenic			3.0	U							P
Barium			5.0	U							P
Beryllium			1.0	U							P
Cadmium			1.0	U							P
Calcium			1000.0	U							P
Chromium			2.0	U							P
Cobalt			5.0	U							P
Copper			5.0	U							P
Iron			30.0	U							P
Lead			1.5	U							P
Magnesium			1000.0	U							P
Manganese			3.0	U							P
Nickel			5.0	U							P
Potassium			1000.0	U							P
Selenium			3.0	U							P
Silver			1.0	U							P
Sodium			1000.0	U							P
Thallium			3.0	U							P
Vanadium			5.0	U							P
Zinc			5.0	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	503500	502556.2	100.5			
Antimony	0	600	4	608.0	101.3			
Arsenic	0	100	1	107.1	107.1			
Barium	0	500	2	520.6	104.1			
Beryllium	0	500	1	476.4	95.3			
Cadmium	0	1000	0	936.1	93.6			
Calcium	500000	500000	463273	466558.8	93.3			
Chromium	0	500	1	474.3	94.9			
Cobalt	0	500	-1	438.4	87.7			
Copper	0	500	-1	531.9	106.4			
Iron	200000	200000	194688	195062.4	97.5			
Lead	0	50	3	47.9	95.8			
Magnesium	500000	500000	507762	506946.3	101.4			
Manganese	0	500	-1	486.6	97.3			
Nickel	0	1000	-1	918.2	91.8			
Potassium	0	0	38	52.3				
Selenium	0	50	-6	47.0	94.0			
Silver	0	200	0	201.5	100.8			
Sodium	0	0	131	133.9				
Thallium	0	100	-11	84.3	84.3			
Vanadium	0	500	0	478.4	95.7			
Zinc	0	1000	-14	880.8	88.1			

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS06QTS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009Matrix (soil/water): SOLID Level (low/med): LOW% Solids for Sample: 89.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		9638.3440	8318.4770	449.44	293.7		P
Antimony	75 - 125	22.9610	1.0308 U	56.18	40.9	N	P
Arsenic	75 - 125	57.3438	1.3332 B	56.18	99.7		P
Barium	75 - 125	476.9541	17.1375 B	449.44	102.3		P
Beryllium	75 - 125	12.1044	0.2062 U	11.24	107.7		P
Cadmium	75 - 125	29.8050	0.2062 U	28.09	106.1		P
Calcium	75 - 125	1344.5370	337.1962 B	1123.60	89.7		P
Chromium	75 - 125	53.5539	6.2835	44.94	105.2		P
Cobalt	75 - 125	114.0608	1.0308 U	112.36	101.5		P
Copper	75 - 125	59.4291	1.5523 B	56.18	103.0		P
Iron		2152.4050	3294.5200	224.72	-508.2		P
Lead	75 - 125	63.3503	7.4647	56.18	99.5		P
Magnesium	75 - 125	1383.0450	263.4223 B	1123.60	99.6		P
Manganese	75 - 125	122.9197	4.1227	112.36	105.7		P
Mercury	75 - 125	0.3190	0.0184 B	0.37	81.2		AV
Nickel	75 - 125	117.2506	2.8283 B	112.36	101.8		P
Potassium	75 - 125	1284.1780	206.1643 U	1123.60	114.3		P
Selenium	75 - 125	56.3012	1.2517	56.18	98.0		P
Silver	75 - 125	57.7106	0.2062 U	56.18	102.7		P
Sodium	75 - 125	1226.5750	206.1643 U	1123.60	109.2		P
Thallium	75 - 125	55.3701	0.6185 U	56.18	98.6		P
Vanadium	75 - 125	122.3038	8.7849 B	112.36	101.0		P
Zinc	75 - 125	130.3643	8.2777	112.36	108.7		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS06QTS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Matrix (soil/water): SOLID Level (low/med): LOW

% Solids for Sample: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		9047.7810	8318.4770	424.00	172.0		P
Antimony	75 - 125	21.9680	1.0308 U	53.00	41.4 N		P
Arsenic	75 - 125	54.9253	1.3332 B	53.00	101.1		P
Barium	75 - 125	449.5391	17.1375 B	424.00	102.0		P
Beryllium	75 - 125	11.3953	0.2062 U	10.60	107.5		P
Cadmium	75 - 125	28.2555	0.2062 U	26.50	106.6		P
Calcium	75 - 125	1283.4690	337.1962 B	1060.00	89.3		P
Chromium	75 - 125	50.4681	6.2835	42.40	104.2		P
Cobalt	75 - 125	107.4619	1.0308 U	106.00	101.4		P
Copper	75 - 125	56.2135	1.5523 B	53.00	103.1		P
Iron		2077.0790	3294.5200	212.00	-574.3		P
Lead	75 - 125	59.8228	7.4647	53.00	98.8		P
Magnesium	75 - 125	1303.5700	263.4223 B	1060.00	98.1		P
Manganese	75 - 125	115.8295	4.1227	106.00	105.4		P
Mercury	75 - 125	0.3180	0.0184 B	0.37	81.0		AV
Nickel	75 - 125	110.7724	2.8283 B	106.00	101.8		P
Potassium	75 - 125	1210.9410	206.1643 U	1060.00	114.2		P
Selenium	75 - 125	53.4935	1.2517	53.00	98.6		P
Silver	75 - 125	54.4745	0.2062 U	53.00	102.8		P
Sodium	75 - 125	1154.5070	206.1643 U	1060.00	108.9		P
Thallium	75 - 125	52.9570	0.6185 U	53.00	99.9		P
Vanadium	75 - 125	115.3005	8.7849 B	106.00	100.5		P
Zinc	75 - 125	123.3352	8.2777	106.00	108.5		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS06QTA

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS _____ SDG No.: Gulfport-009Matrix (soil/water): SOLID Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		42478.47		40348.77		2000.0	106.5		P
Antimony		255.63		5.00	U	250.0	102.3		P
Arsenic		284.57		6.47	B	250.0	111.2		P
Barium		2188.64		83.13	B	2000.0	105.3		P
Beryllium		54.98		1.00	U	50.0	110.0		P
Cadmium		138.69		1.00	U	125.0	111.0		P
Calcium		7668.32		1635.57	B	5000.0	120.7		P
Chromium		243.23		30.48		200.0	106.4		P
Cobalt		517.42		5.00	U	500.0	103.5		P
Copper		273.61		7.53	B	250.0	106.4		P
Iron		16912.58		15980.07		1000.0	93.3		P
Lead		271.11		36.21		250.0	94.0		P
Magnesium		6286.25		1277.73	B	5000.0	100.2		P
Manganese		558.86		20.00		500.0	107.8		P
Nickel		534.21		13.72	B	500.0	104.1		P
Potassium		5926.39		1000.00	U	5000.0	118.5		P
Selenium		269.36		6.07		250.0	105.3		P
Silver		262.32		1.00	U	250.0	104.9		P
Sodium		5639.71		1000.00	U	5000.0	112.8		P
Thallium		229.10		3.00	U	250.0	91.6		P
Vanadium		562.17		42.61	B	500.0	103.9		P
Zinc		593.79		40.15		500.0	110.7		P

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

01SS06QTS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Matrix (soil/water): SOLID Level (low/med): LOW

% Solids for Sample: 89.0 % Solids for Duplicate: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		9638.3440		9047.7810		6.3		P
Antimony		22.9610		21.9680		4.4		P
Arsenic		57.3438		54.9253		4.3		P
Barium		476.9541		449.5391		5.9		P
Beryllium		12.1044		11.3953		6.0		P
Cadmium		29.8050		28.2555		5.3		P
Calcium		1344.5370		1283.4690		4.6		P
Chromium		53.5539		50.4681		5.9		P
Cobalt		114.0608		107.4619		6.0		P
Copper		59.4291		56.2135		5.6		P
Iron		2152.4050		2077.0790		3.6		P
Lead		63.3503		59.8228		5.7		P
Magnesium		1383.0450		1303.5700		5.9		P
Manganese		122.9197		115.8295		5.9		P
Mercury		0.3190		0.3180		0.3		AV
Nickel		117.2506		110.7724		5.7		P
Potassium		1284.1780		1210.9410		5.9		P
Selenium		56.3012		53.4935		5.1		P
Silver		57.7106		54.4745		5.8		P
Sodium		1226.5750		1154.5070		6.1		P
Thallium		55.3701		52.9570		4.5		P
Vanadium		122.3038		115.3005		5.9		P
Zinc		130.3643		123.3352		5.5		P

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Solid LCS Source: HighPurity, Fisher

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				400.0	438.3		320.0 | 480.0	109.6
Antimony				50.0	51.8		40.0 | 60.0	103.6
Arsenic				50.0	52.8		40.0 | 60.0	105.6
Barium				400.0	412.5		320.0 | 480.0	103.1
Beryllium				10.0	10.5		8.0 | 12.0	105.0
Cadmium				25.0	26.4		20.0 | 30.0	105.6
Calcium				1000.0	1081.3		800.0 | 1200.0	108.1
Chromium				40.0	41.9		32.0 | 48.0	104.8
Cobalt				100.0	98.3		80.0 | 120.0	98.3
Copper				50.0	51.5		40.0 | 60.0	103.0
Cyanide				4.2	3.83		3.4 | 5.0	91.2
Iron				200.0	218.4		160.0 | 240.0	109.2
Lead				50.0	52.1		40.0 | 60.0	104.2
Magnesium				1000.0	992.5	B	800.0 | 1200.0	99.2
Manganese				100.0	105.3		80.0 | 120.0	105.3
Mercury				0.33	0.27		0.3 | 0.4	81.8
Nickel				100.0	101.7		80.0 | 120.0	101.7
Potassium				1000.0	1068.6		800.0 | 1200.0	106.9
Selenium				50.0	50.2		40.0 | 60.0	100.4
Silver				50.0	51.8		40.0 | 60.0	103.6
Sodium				1000.0	1042.0		800.0 | 1200.0	104.2
Thallium				50.0	49.8		40.0 | 60.0	99.6
Vanadium				100.0	102.2		80.0 | 120.0	102.2
Zinc				100.0	106.5		80.0 | 120.0	106.5

USEPA - CLP

9
ICP SERIAL DILUTIONS

SAMPLE NO.

01SS06QTL

Lab Name: Empirical Laboratories

Contract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-009

Matrix (soil/water): SOLID

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Difference	Q	M
		C		C			
Aluminum	40348.77		40832.63		1.2		P
Antimony	5.00	U	25.00	U			P
Arsenic	6.47	B	15.00	U	100.0		P
Barium	83.13	B	84.81	B	2.0		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	1635.57	B	39257.55		2300.2		P
Chromium	30.48		30.04	B	1.4		P
Cobalt	5.00	U	25.00	U			P
Copper	7.53	B	25.00	U	100.0		P
Iron	15980.07		15957.10		0.1		P
Lead	36.21		34.51		4.7		P
Magnesium	1277.73	B	5000.00	U	100.0		P
Manganese	20.00		21.68	B	8.4		P
Nickel	13.72	B	25.00	U	100.0		P
Potassium	1000.00	U	5000.00	U			P
Selenium	6.07		15.00	U	100.0		P
Silver	1.00	U	5.00	U			P
Sodium	1000.00	U	5000.00	U			P
Thallium	3.00	U	15.00	U			P
Vanadium	42.61		41.62	B	2.3		P
Zinc	40.15		72.90	B	81.6		P

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP Date: 02/04/08

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Aluminum	308.22		200.0	50.0	P
Antimony	206.84		60.0	10.0	P
Arsenic	189.04		10.0	3.0	P
Barium	493.41		200.0	5.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	226.50		5.0	1.0	P
Calcium	317.93		5000.0	1000.0	P
Chromium	267.72		10.0	2.0	P
Cobalt	228.62		50.0	5.0	P
Copper	324.75		25.0	5.0	P
Iron	271.44		100.0	30.0	P
Lead	220.35		3.0	1.5	P
Magnesium	279.08		5000.0	1000.0	P
Manganese	257.61		15.0	3.0	P
Nickel	231.60		40.0	5.0	P
Potassium	766.49		5000.0	1000.0	P
Selenium	196.02		5.0	6.0	P
Silver	328.07		10.0	1.0	P
Sodium	330.23		5000.0	1000.0	P
Thallium	190.86		10.0	3.0	P
Vanadium	292.40		50.0	5.0	P
Zinc	206.84		20.0	5.0	P

Comments: _____

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: _____ Date: 03/18/08

Flame AA ID Number: PE CVAA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.08	AV

Comments: _____

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: _____ Date: 05/22/06

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Cyanide	570		10.0	5.00	AS

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	As
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Arsenic	189.04	0.0000030	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000240	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001100	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0001910	0.0000000
Lead	220.35	0.0002530	0.0000000	0.0001120	0.0000000	0.0000000
Lead	220.35	-0.0001600	0.0000000	0.0000450	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000120	0.0216570	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000130	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0003400	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	-0.0001200	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0018200	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000210	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	-0.0000700	0.0282910	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		B	Ba	Be	Cd	Co
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	-0.0139700
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0017660
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000900
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	-0.0014600	0.0000000	-0.000190	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0865310
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019300
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000700
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0009900
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0025020
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	K	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0071840
Antimony	206.84	0.0031350	0.0000000	0.0000000	0.0000000	-0.0027800
Arsenic	189.04	0.0001610	0.0000000	0.0000000	0.0000000	0.0003200
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001310	-0.0003400
Cobalt	228.62	-0.0000200	0.0000000	0.0000000	0.0000000	0.0000290
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0004170
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000160	-0.0000800	0.0000000	0.0000840	-0.0001300
Lead	220.35	-0.0000500	0.0000000	0.0000000	0.0000510	-0.0011800
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000140
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0000700	0.0000000	0.0000000	0.0001750	0.0000000
Selenium	196.02	-0.0001100	0.0000000	0.0000000	0.0001450	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000350	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002970	0.0000000	0.0000000	0.0004160	-0.0026800
Tin	189.99	0.0000000	0.0000000	0.0000000	-0.000110	0.0000000
Titanium	334.94	0.0000430	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0004700
Zinc	206.20	0.0003790	0.0000000	0.0000000	0.0000000	0.0003690

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Na	Ni	Pb	Si	Sn
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000400
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	-0.0000600	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0002750	0.0000000	0.0000000	-0.0000100
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0007000	-0.0008700	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.99	0.0000000	-0.0000700	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000670	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		Ti	Tl	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.0028970	0.0000000
Antimony	206.84	0.0000870	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	-0.0030300	0.0000000	0.0005980	0.0000000
Boron	249.68	-0.0002400	0.0000000	-0.0000600	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000790	0.0000000	-0.0000500	0.0000000
Cobalt	228.62	0.0020140	0.0000000	0.0000000	0.0000000
Copper	324.75	-0.0001600	0.0000000	-0.0001000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0089800	0.0000000
Lead	220.35	0.0000260	0.0000000	-0.0000500	0.0000000
Lead	220.35	-0.0008800	0.0000000	-0.0001300	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0001020	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0001000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000390	0.0000000
Sodium	331.23	-0.0000300	0.0000000	0.0000000	0.0000230
Thallium	190.86	0.0002100	0.0000000	0.0017130	0.0000000
Tin	189.99	0.0007090	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000220	0.0000000
Vanadium	292.40	0.0004080	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000770	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009ICP ID Number: TJA61E TRACE ICP Date: 02/05/08

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	15.00	500000.0	P
Antimony	15.00	10000.0	P
Arsenic	15.00	10000.0	P
Barium	15.00	5000.0	P
Beryllium	15.00	10000.0	P
Cadmium	15.00	10000.0	P
Calcium	15.00	250000.0	P
Chromium	15.00	10000.0	P
Cobalt	15.00	10000.0	P
Copper	15.00	10000.0	P
Iron	15.00	500000.0	P
Lead	15.00	10000.0	P
Magnesium	15.00	500000.0	P
Manganese	15.00	10000.0	P
Nickel	15.00	10000.0	P
Potassium	15.00	100000.0	P
Selenium	15.00	10000.0	P
Silver	15.00	2000.0	P
Sodium	15.00	250000.0	P
Thallium	15.00	10000.0	P
Vanadium	15.00	50000.0	P
Zinc	15.00	10000.0	P

Comments: _____

USEPA - CLP

13

PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
PBS081508D	08/15/08	1.00	200.0
LCSS081508D	08/15/08	1.00	200.0
01SS01QT	08/15/08	1.01	200.0
01SS01QTDUP	08/15/08	1.06	200.0
01SS02QT	08/15/08	1.01	200.0
01SS03QT	08/15/08	1.02	200.0
01SS04QT	08/15/08	1.06	200.0
01SS05QT	08/15/08	1.05	200.0
01SS06QT	08/15/08	1.09	200.0
01SS06QTS	08/15/08	1.00	200.0
01SS06QTSD	08/15/08	1.06	200.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009

Method: CV

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
LCSS081508B	08/15/08	0.30	50.0
PBS081508B	08/15/08	0.30	50.0
01SS01QT	08/15/08	0.33	50.0
01SS01QTDUP	08/15/08	0.35	50.0
01SS02QT	08/15/08	0.31	50.0
01SS03QT	08/15/08	0.36	50.0
01SS04QT	08/15/08	0.30	50.0
01SS05QT	08/15/08	0.32	50.0
01SS06QT	08/15/08	0.32	50.0
01SS06QTS	08/15/08	0.30	50.0
01SS06QTSD	08/15/08	0.30	50.0

USEPA - CLP

13

PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009Method: AS
mg/kg

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
PBS081808S	08/18/08	1.00	25.0
LCSS081808S	08/18/08	1.00	25.0
01SS01QT	08/18/08	1.04	25.0
01SS01QTDUP	08/18/08	1.01	25.0
01SS02QT	08/18/08	1.01	25.0
01SS03QT	08/18/08	1.02	25.0
01SS04QT	08/18/08	1.00	25.0
01SS05QT	08/18/08	1.01	25.0
01SS06QT	08/18/08	1.02	25.0

USEPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 08/18/08 End Date: 08/18/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
S0	1.00	0905		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	0911			X	X		X	X		X	X	X		X		X		X				X	X	X						
S	1.00	0918		X			X							X	X						X										
S	1.00	0924							X										X			X									
ZZZZZZ	1.00	0936																													
ZZZZZZ	1.00	0946																													
S0	1.00	0954																		X			X								
ZZZZZZ	1.00	0958																													
ZZZZZZ	1.00	1004																													
ZZZZZZ	1.00	1010																													
ZZZZZZ	1.00	1016																													
ZZZZZZ	1.00	1025																													
ZZZZZZ	1.00	1032																													
ICV1	1.00	1045		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB1	1.00	1110		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1116																													
ZZZZZZ	1.00	1122																													
ZZZZZZ	1.00	1140																													
ZZZZZZ	1.00	1146																													
ZZZZZZ	1.00	1153																													
ZZZZZZ	1.00	1159																													
ZZZZZZ	1.00	1206																													
ZZZZZZ	1.00	1212																													
CRDL1	1.00	1221		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA-0	1.00	1227		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB-0	1.00	1233		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1300																													
ZZZZZZ	1.00	1307																													
CCV1	1.00	1316		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1327		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1333																													
ZZZZZZ	1.00	1340																													
ZZZZZZ	1.00	1349																													
ZZZZZZ	1.00	1355																													
ZZZZZZ	1.00	1401																													
ZZZZZZ	1.00	1408																													
ZZZZZZ	1.00	1414																													
ZZZZZZ	1.00	1420																													

USEPA - CLP
14
ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 08/18/08 End Date: 08/18/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V	Z N	C N				
ZZZZZZ	1.00	1427																													
ZZZZZZ	1.00	1447																													
ZZZZZZ	1.00	1453																													
ZZZZZZ	1.00	1502																													
ZZZZZZ	1.00	1508																													
ZZZZZZ	1.00	1515																													
ZZZZZZ	1.00	1524																													
ZZZZZZ	1.00	1535																													
ZZZZZZ	1.00	1542																													
ZZZZZZ	1.00	1548																													
ZZZZZZ	1.00	1557																													
ZZZZZZ	1.00	1603																													
ZZZZZZ	1.00	1609																													
ZZZZZZ	1.00	1616																													
ZZZZZZ	1.00	1622																													
ZZZZZZ	1.00	1628																													
ZZZZZZ	1.00	1635																													
ZZZZZZ	1.00	1641																													
ZZZZZZ	1.00	1648																													
ZZZZZZ	1.00	1654																													
ZZZZZZ	1.00	1700																													
ZZZZZZ	1.00	1707																													
ZZZZZZ	5.00	1714																													
ZZZZZZ	1.00	1721																													
ZZZZZZ	1.00	1729																													
ZZZZZZ	1.00	1740																													
ZZZZZZ	1.00	1747																													
ZZZZZZ	1.00	1753																													
ZZZZZZ	1.00	1800																													
ZZZZZZ	1.00	1806																													
ZZZZZZ	1.00	1812																													
ZZZZZZ	1.00	1819																													
ZZZZZZ	1.00	1825																													
ZZZZZZ	1.00	1831																													
ZZZZZZ	1.00	1838																													
ZZZZZZ	1.00	1844																													
CCV2	1.00	1853		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB2	1.00	1904		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 08/18/08 End Date: 08/18/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
PBS081508D	1.00	1910		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LGSS081508D	1.00	1917		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1926																													
ZZZZZZ	1.00	1932																													
ZZZZZZ	1.00	1938																													
ZZZZZZ	1.00	1945																													
ZZZZZZ	1.00	1951																													
ZZZZZZ	1.00	1957																													
ZZZZZZ	1.00	2004																													
ZZZZZZ	1.00	2010																													
ZZZZZZ	1.00	2017																													
ZZZZZZ	1.00	2023																													
CCV3	1.00	2032		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB3	1.00	2043		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	2049																													
ZZZZZZ	1.00	2056																													
ZZZZZZ	1.00	2102																													
01SS01QT	1.00	2108		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS01QTDUP	1.00	2115		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02QT	1.00	2121		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS03QT	1.00	2128		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS04QT	1.00	2134		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS05QT	1.00	2140		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS06QT	1.00	2147		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS06QTS	1.00	2153		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS06QTSD	1.00	2200		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS06QTA	1.00	2206		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS06QTL	5.00	2214		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV4	1.00	2222		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB4	1.00	2233		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Instrument ID Number: PE CVAA Method: AV
 Start Date: 08/18/08 End Date: 08/18/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T L	V N	Z N	C N		
S0	1.00	0921																									X		
S0.20	1.00	0922																									X		
S0.50	1.00	0923																									X		
ZZZZZZ	1.00	0924																											
S2.0	1.00	0925																									X		
S4.0	1.00	0927																									X		
S6.0	1.00	0928																									X		
S10.0	1.00	0929																									X		
EGV1	1.00	0933																									X		
ICB1	1.00	0934																									X		
ZZZZZZ	1.00	0935																											
ZZZZZZ	1.00	0936																											
ZZZZZZ	1.00	0937																											
ZZZZZZ	1.00	0938																											
ZZZZZZ	1.00	0940																											
ZZZZZZ	1.00	0941																											
ZZZZZZ	1.00	0944																											
ZZZZZZ	1.00	0945																											
ZZZZZZ	1.00	0946																											
ZZZZZZ	1.00	0947																											
ZZZZZZ	1.00	0949																											
ZZZZZZ	1.00	0950																											
ZZZZZZ	1.00	0951																											
ZZZZZZ	1.00	0952																											
ZZZZZZ	1.00	0953																											
ZZZZZZ	1.00	0955																											
ZZZZZZ	1.00	0956																											
ZZZZZZ	1.00	0957																											
ZZZZZZ	1.00	0958																											
ZZZZZZ	1.00	1000																											
ZZZZZZ	1.00	1001																											
ZZZZZZ	1.00	1002																											
CCV1	1.00	1004																									X		
CCB1	1.00	1005																									X		
ZZZZZZ	1.00	1006																											
ZZZZZZ	1.00	1007																											
ZZZZZZ	1.00	1008																											
ZZZZZZ	1.00	1009																											

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-009
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 08/18/08 End Date: 08/18/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F U	P E	M B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N			
S1000	1.00	1616																											X		
S500	1.00	1617																											X		
S200	1.00	1618																											X		
S100	1.00	1619																											X		
S20	1.00	1620																											X		
S10	1.00	1621																											X		
S5.0	1.00	1622																											X		
S0	1.00	1623																											X		
ICV1	1.00	1624																											X		
ICB1	1.00	1626																											X		
ZZZZZZ	1.00	1627																													
ZZZZZZ	1.00	1628																													
ZZZZZZ	1.00	1629																													
ZZZZZZ	1.00	1630																													
ZZZZZZ	1.00	1631																													
ZZZZZZ	1.00	1632																													
ZZZZZZ	1.00	1633																													
ZZZZZZ	1.00	1635																													
PBS081808S	1.00	1636																											X		
LCSS081808S	1.00	1637																											X		
ZZZZZZ	1.00	1638																													
ZZZZZZ	1.00	1639																													
ZZZZZZ	1.00	1640																													
ZZZZZZ	1.00	1641																													
ZZZZZZ	1.00	1642																													
01SS01QT	1.00	1644																											X		
01SS01QTDUP	1.00	1645																											X		
ZZZZZZ	1.00	1646																													
ZZZZZZ	1.00	1647																													
01SS02QT	1.00	1648																											X		
01SS03QT	1.00	1649																											X		
01SS04QT	1.00	1650																											X		
CCV1	1.00	1651																											X		
CCB1	1.00	1652																											X		
01SS05QT	1.00	1654																											X		
01SS06QT	1.00	1655																											X		
CCV2	1.00	1656																											X		
CCB2	1.00	1657																											X		

Sample 015501QT Se reported result 0.69 mg/kg

Method: TESTING Sample Name: 0808142-01,TS,TETRA Operator: RGB

Run Time: 08/18/08 21:08:57

Comment: 200.7 / 6010B

Mode: CONC Corr. Factor: 1

$$(3.0357) \left(\frac{200 \text{ ml}}{1.01 \text{ g}} \right) \left(\frac{1}{.87} \right) \left(\frac{1}{1000} \right) = 0.69 \text{ mg/kg}$$

Elem	Ag3280	Al3082	As1890	B 2496	Ba4934	Be3130	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppm
Avg	.17510	30055.	3.6298	.77399	53.402	.58486	.63895
SDev	.27236	172.	1.1139	.39340	.343	.01888	.01654
%RSD	155.54	.57091	30.687	50.827	.64279	3.2288	2.5886

#1	-.21878	30252.	4.2014	1.2071	53.799	.60663	.65794
#2	-.42298	29966.	2.3462	.67611	53.208	.57280	.63119
#3	.11645	29945.	4.3418	.43877	53.200	.57517	.62772

Errors	LC Pass						
High	2000.0	500000.	10000.	50000.	5000.0	10000.	100.00
Low	-1.0000	-50.000	-3.0000	-10.000	-5.0000	-1.0000	-1.0000

Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K 7664	Mg2790
Units	ppb	ppb	ppb	ppb	ppb	ppm	ppm
Avg	.09434	1.7875	20.786	12.396	10105.	.38178	.65468
SDev	.04967	.2807	.229	.267	45.	.01903	.00761
%RSD	52.654	15.703	1.1020	2.1534	.44146	4.9858	1.1622

#1	.09726	1.7176	20.902	12.704	10157.	.37673	.66346
#2	.14248	1.5483	20.523	12.228	10079.	.36578	.65054
#3	.04327	2.0965	20.935	12.256	10080.	.40283	.65005

Errors	LC Pass						
High	10000.	10000.	10000.	10000.	500000.	100.00	500.00
Low	-1.0000	-5.0000	-2.0000	-5.0000	-30.000	-1.0000	-1.0000

Elem	Mn2576	Mo2020	Na3302	Ni2316	Pb2203	Se1960	Sb2068
Units	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Avg	15.182	1.6024	.21889	11.150	26.661	3.0357	1.1913
SDev	.153	1.0115	.06891	.555	1.118	2.3072	2.1540
%RSD	1.0107	63.122	31.481	4.9735	4.1927	76.003	180.82

#1	15.349	1.7908	.19668	11.011	27.539	.39764	1.3977
#2	15.149	2.5065	.16383	11.761	27.042	4.0326	3.2346
#3	15.048	.51001	.29617	10.678	25.403	4.6769	-1.0585

Errors	LC Pass						
High	10000.	10000.	100.00	10000.	10000.	10000.	10000.
Low	-3.0000	-5.0000	-1.0000	-5.0000	-3.0000	-3.0000	-10.000

Elem	Sn1899	Ti3349	Tl1908	V 2924	Zn2062	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	14.549	191.97	-2.6435	29.095	29.301	25.332	27.324
SDev	.318	.89	3.7020	.291	1.171	2.074	2.697
%RSD	2.1874	.46219	140.04	1.0000	3.9951	8.1892	9.8710

#1	14.210	192.99	L-3.0881	29.297	30.349	23.369	29.620
#2	14.596	191.55	L-6.1031	29.225	29.516	25.123	27.999
#3	14.841	191.38	1.2608	28.761	28.038	27.502	24.354

Errors	LC Pass	NOCHECK	NOCHECK				
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Sample 0155016T rep result 0.045 mg/kg

Client: $\left(\frac{0.0030 - 0.000404}{0.010057}\right) \left(\frac{50\text{mL}}{.33\text{g}}\right) \left(\frac{1}{.87}\right) \left(\frac{1\text{Mercury}}{1000}\right) = 0.0449 \text{ mg/kg}$

Curve Date: 8/18/2008 Curve age OK
 Correlation: 0.99979 Corr. OK
 Slope: 0.010057
 Intercept: 0.000404

RL= 0.20 ug/l for H2O and TCLP
 0.033 mg/kg (using 0.30 g) for soils or other
 MDL= 0.08 ug/L WATER AND 0.013 mg/Kg SOIL
 QC Criteria: Method Blank < 1/2 RL for CORP Samples
 LCS = ±20% of True Value
 CCB =<MDL

Analysis Time	Curve Data	
	Conc.(ug/L)	Pk Height
9:21:31	0	0.0005
9:22:28	0.2	0.0024
9:23:22	0.5	0.0055
9:24:39	1	
9:25:57	2	0.0214
9:27:16	4	0.0399
9:28:36	6	0.0596
9:29:57	10	0.1018

Empirical Laboratories

Digestion Date: 8/15/2008
 Digestion by: KBG
 Analysis Date: 8/18/2008
 Analyst: KBG
 Analyst Authorization: KBG
 Method#: 245.177470A for H2O
 7471A for soils
 Method Type: Cold Vapor

Concentration (ug/L) = (Peak Height - intercept)/slope * dilution

Conversion for soils from concentration (ug/L) to mg/kg (wet weight) = concentration (ug/L) * final volume (mL)/initial weight (g) * 1L/1000mL * 1000g/1kg * 1g/1000mg

Lab. #	Client	Waste Description	T.V. (ug/L) (mg/kg)	Analysis Time HH:MM (Military)	Matrix Type	Digestion		Analysis		Dilution	Peak Height	[Hg] ug/L	[Hg] mg/kg	Recovery %	Control Limits		RPD	Method
						Initial Sample Volume (mL or g)	Final Sample Volume (mL)	Initial Sample Volume (mL)	Final Sample Volume (mL)						Low Limit %	High Limit %		
ICV	QC	ISA080021	4.0000	9:33:08	H2O	50.00	50.0	50.0	50.0	1.00	0.0400	3.9399		98.50	90.0	110.0		7471S
ICB	QC	DI H2O		9:34:23	H2O	50.00	50.0	50.0	50.0	1.00	0.0004	0.0019						7471S
LCSS081508A	QC	ISA080021	0.3333	9:35:16	SOIL	0.30	50.0	50.0	50.0	1.00	0.0169	1.6409	0.27348	82.05	80.0	120.0		7471S
PBS081508A	QC	DI H2O		9:36:32	SOIL	0.30	50.0	50.0	50.0	1.00	0.0004	0.0008	0.00014					7471S
0808130-01				9:37:25	SOIL	0.31	50.0	50.0	50.0	1.00	0.0110	1.0548	0.17013					7471S
0808130-02				9:38:44	SOIL	0.30	50.0	50.0	50.0	1.00	0.0249	2.4332	0.40553					7471S
0808130-03				9:40:03	SOIL	0.30	50.0	50.0	50.0	1.00	0.0209	2.0368	0.33946					7471S
0808130-04				9:41:24	SOIL	0.32	50.0	50.0	50.0	1.00	0.0187	1.8205	0.28445					7471S
0808130-05				9:44:03	SOIL	0.34	50.0	50.0	50.0	1.00	0.0310	3.0397	0.44702					7471S
0808130-06				9:45:18	SOIL	0.35	50.0	50.0	50.0	4.00	0.1525	15.1264	2.16092					7471S
0808130-07				9:46:34	SOIL	0.35	50.0	50.0	50.0	4.00	0.1973	19.5730	2.70615					7471S
0808130-07MS				9:47:45	SOIL	0.30	50.0	50.0	50.0	4.00	0.1928	19.1270	3.18784					7471S
CCV	QC	ISA080195	4.0000	9:49:00	H2O	50.00	50.0	50.0	50.0	1.00	0.0417	4.1071		102.68	85.0	115.0		7471S
CCB	QC	DI H2O		9:50:16	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0096						7471S
0808130-07MSD			0.3333	9:51:09	SOIL	0.30	50.0	50.0	50.0	1.00	0.0703	6.9456	1.15760		75.0	125.0		7471S
0808130-08				9:52:25	SOIL	0.35	50.0	50.0	50.0	1.00	0.0274	2.6853	0.38362					7471S
0808130-09				9:53:43	SOIL	0.32	50.0	50.0	50.0	1.00	0.0104	0.9921	0.15501					7471S
0808130-10				9:55:00	SOIL	0.34	50.0	50.0	50.0	1.00	0.0260	2.5428	0.37394					7471S
0808130-11				9:56:17	SOIL	0.32	50.0	50.0	50.0	1.00	0.0144	1.3965	0.21820					7471S
0808130-12				9:57:36	SOIL	0.30	50.0	50.0	50.0	1.00	0.0376	3.6994	0.61657					7471S
0808130-13				9:58:55	SOIL	0.31	50.0	50.0	50.0	1.00	0.0339	3.3280	0.53678					7471S
0808130-14				10:00:14	SOIL	0.33	50.0	50.0	50.0	1.00	0.7375	73.2932	11.10504					7471S
0808130-15				10:01:34	SOIL	0.33	50.0	50.0	50.0	1.00	0.0086	0.8125	0.12311					7471S
0808141-01				10:02:51	SOIL	0.30	50.0	50.0	50.0	1.00	0.0352	3.4574	0.57623					7471S
CCV	QC	ISA080195	4.0000	10:04:04	H2O	50.00	50.0	50.0	50.0	1.00	0.0414	4.0759		101.90	85.0	115.0		7471S
CCB	QC	DI H2O		10:05:17	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0089						7471S
0808141-02				10:06:10	SOIL	0.31	50.0	50.0	50.0	1.00	0.0136	1.3128	0.21174					7471S
0808141-03				10:07:25	SOIL	0.36	50.0	50.0	50.0	1.00	0.0200	1.9461	0.27029					7471S
0808141-04				10:08:41	SOIL	0.32	50.0	50.0	50.0	1.00	0.0068	0.6312	0.09862					7471S
0808141-05				10:09:55	SOIL	0.32	50.0	50.0	50.0	1.00	0.0096	0.9099	0.14217					7471S
LCSS081508B	QC	ISA080021	0.3333	10:11:12	SOIL	0.30	50.0	50.0	50.0	1.00	0.0166	1.6065	0.26775	80.33	80.0	120.0		7471S
PBS081508B	QC	DI H2O		10:12:29	SOIL	0.30	50.0	50.0	50.0	1.00	0.0005	0.0100	0.00166					7471S

Lab #	Client	Waste Description	T.V. (ug/L) (mg/kg)	Analysis Time HH:MM (Military)	Matrix Type	Digestion		Analysis		Dilution	Peak Height	[Hg] ug/L	[Hg] mg/kg	Recovery %	Control Limits		RPD	Method
						Initial Sample Volume (mL or g)	Final Sample Volume (mL)	Initial Sample Volume (mL)	Final Sample Volume (mL)						Low Limit %	High Limit %		
3808141-06				10:13:22	SOIL	0.31	50.0	50.0	50.0	1.00	0.0041	0.3637	0.05866					7471S
0808142-01	Tetra Tech			10:14:39	SOIL	0.33	50.0	50.0	50.0	1.00	0.0030	0.2597	0.03936					7471S
0808142-02	Tetra Tech			10:15:57	SOIL	0.35	50.0	50.0	50.0	1.00	0.0041	0.3659	0.05227					7471S
0808142-03	Tetra Tech			10:17:15	SOIL	0.31	50.0	50.0	50.0	1.00	0.0012	0.0819	0.01321					7471S
CCV	QC	ISA080195	2.0000	10:18:34	H2O	50.00	50.0	50.0	50.0	1.00	0.0207	2.0161		100.81	85.0	115.0		7471S
CCB	QC	DI H2O		10:19:54	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0079						7471S
0808142-04	Tetra Tech			10:20:47	SOIL	0.36	50.0	50.0	50.0	1.00	0.0014	0.0960	0.01333					7471S
0808142-05	Tetra Tech			10:22:04	SOIL	0.30	50.0	50.0	50.0	1.00	0.0013	0.0857	0.01428					7471S
0808142-06	Tetra Tech			10:23:16	SOIL	0.32	50.0	50.0	50.0	1.00	0.0015	0.1110	0.01734					7471S
0808142-07	Tetra Tech			10:24:29	SOIL	0.32	50.0	50.0	50.0	1.00	0.0015	0.1050	0.01640					7471S
0808142-07MS	Tetra Tech		0.3333	10:25:43	SOIL	0.30	50.0	50.0	50.0	1.00	0.0175	1.7035	0.28392	85.19	75.0	125.0	0.3	7471S
0808142-07MSD	Tetra Tech		0.3333	10:26:58	SOIL	0.30	50.0	50.0	50.0	1.00	0.0175	1.6982	0.28304	84.92	75.0	125.0		7471S
0808127-01				10:28:12	SOIL	0.33	50.0	50.0	50.0	1.00	0.0042	0.3819	0.05787					7471S
0808026-19				10:29:27	SOIL	0.32	50.0	50.0	50.0	1.00	0.0030	0.2617	0.04089					7471S
0808026-20				10:30:43	SOIL	0.32	50.0	50.0	50.0	1.00	1.1582	115.1246	17.98822					7471S
0808026-21				10:31:58	SOIL	0.30	50.0	50.0	50.0	1.00	0.0048	0.4360	0.07267					7471S
CCV	QC	ISA080195	2.0000	10:33:14	H2O	50.00	50.0	50.0	50.0	1.00	0.0207	2.0182		100.91	85.0	115.0		7471S
CCB	QC	DI H2O		10:34:31	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0129						7471S
0808026-22				10:35:49	SOIL	0.35	50.0	50.0	50.0	1.00	0.0045	0.4071	0.05816					7471S
0808026-23				10:37:07	SOIL	0.38	50.0	50.0	50.0	1.00	0.0056	0.5215	0.06862					7471S
0808026-24				10:38:26	SOIL	0.34	50.0	50.0	50.0	1.00	0.0034	0.2996	0.04406					7471S
0808026-25				10:39:45	SOIL	0.31	50.0	50.0	50.0	1.00	0.0032	0.2732	0.04407					7471S
0808026-26				10:41:01	SOIL	0.33	50.0	50.0	50.0	1.00	0.0039	0.3520	0.05333					7471S
0808026-27				10:42:13	SOIL	0.31	50.0	50.0	50.0	1.00	0.0035	0.3117	0.05028					7471S
0808026-28				10:43:25	SOIL	0.36	50.0	50.0	50.0	1.00	0.0029	0.2504	0.03478					7471S
0808026-29				10:44:39	SOIL	0.31	50.0	50.0	50.0	1.00	0.0916	9.0671	1.46244					7471S
LCSS081508C	QC	ISA080024	0.3333	10:45:53	SOIL	0.30	50.0	50.0	50.0	1.00	0.0163	1.5813	0.26355	79.07				7471S
PBS081508C	QC	DI H2O		10:47:07	SOIL	0.30	50.0	50.0	50.0	1.00	0.0005	0.0104	0.00173					7471S
CCV	QC	ISA080195	4.0000	10:48:22	H2O	50.00	50.0	50.0	50.0	1.00	0.0397	3.9090		97.72	85.0	115.0		7471S
CCB	QC	DI H2O		10:49:38	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0125						7471S
0808026-30				10:50:55	SOIL	0.34	50.0	50.0	50.0	1.00	0.0042	0.3740	0.05499					7471S
0808026-30MS			0.3125	10:52:12	SOIL	0.32	50.0	50.0	50.0	1.00	0.0202	1.9685	0.30757	90.8	75.0	125.0	14.4	7471S
0808026-30MSD			0.303	10:53:29	SOIL	0.33	50.0	50.0	50.0	1.00	0.0240	2.3447	0.35526	99.1	75.0	125.0		7471S
0808026-31				10:54:45	SOIL	0.36	50.0	50.0	50.0	1.00	0.0081	0.7651	0.10627					7471S
0808026-32				10:56:03	SOIL	0.33	50.0	50.0	50.0	1.00	0.0021	0.1668	0.02527					7471S
0808026-33				10:57:22	SOIL	0.34	50.0	50.0	50.0	1.00	0.0028	0.2353	0.03460					7471S
0808026-34				10:58:41	SOIL	0.34	50.0	50.0	50.0	1.00	0.0031	0.2698	0.03968					7471S
0808026-35				10:59:55	SOIL	0.34	50.0	50.0	50.0	1.00	0.0014	0.0999	0.01469					7471S
0808026-36				11:01:08	SOIL	0.34	50.0	50.0	50.0	1.00	0.0026	0.2176	0.03199					7471S
0808026-37				11:02:20	SOIL	0.34	50.0	50.0	50.0	1.00	0.0014	0.1003	0.01475					7471S
CCV	QC	ISA080195	4.0000	11:03:33	H2O	50.00	50.0	50.0	50.0	1.00	0.0398	3.9177		97.94	85.0	115.0		7471S
CCB	QC	DI H2O		11:04:48	H2O	50.00	50.0	50.0	50.0	1.00	0.0005	0.0088						7471S
0808026-38				11:05:41	SOIL	0.32	50.0	50.0	50.0	1.00	0.0753	7.4504	1.16413					7471S
0808042-01				11:06:55	SOIL	0.31	50.0	50.0	50.0	1.00	0.0018	0.1351	0.02179					7471S
0808042-02				11:08:10	SOIL	0.32	50.0	50.0	50.0	1.00	0.0054	0.4996	0.07806					7471S
0808042-03				11:09:25	SOIL	0.32	50.0	50.0	50.0	1.00	0.0042	0.3749	0.05858					7471S
0808042-04				11:10:42	SOIL	0.32	50.0	50.0	50.0	1.00	0.0030	0.2594	0.04052					7471S
0808042-05				11:11:58	SOIL	0.35	50.0	50.0	50.0	1.00	0.0015	0.1065	0.01522					7471S
0808042-06				11:13:15	SOIL	0.31	50.0	50.0	50.0	1.00	0.0050	0.4545	0.07330					7471S
0808042-07				11:14:33	SOIL	0.35	50.0	50.0	50.0	1.00	0.0041	0.3675	0.05249					7471S
0808042-08				11:15:51	SOIL	0.32	50.0	50.0	50.0	1.00	0.0044	0.3958	0.06185					7471S
0808042-09				11:17:07	SOIL	0.30	50.0	50.0	50.0	1.00	0.0025	0.2038	0.03397					7471S

VOC

The continuing calibration run on 08/15/08 at 09:24 on instrument VOA1 had percent difference results outside of the quality control range of $\pm 25\%$ for methyl acetate and methyl tert-butyl ether. Non-detected results for these compounds were qualified as estimated (UJ) in the associated samples: 01SS01QT, 01SS01QTDUP, 01SS02QT, 01SS03QT, 01SS04QT, 01SS05QT, and 01SS06QT.

The following compound was detected in the method blanks at the following maximum concentration:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Methylene chloride	1.3 ug/kg	13 ug/kg

An action level of 10X the maximum concentration of methylene chloride was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results less the action level were qualified as non-detected (U) for method blank contamination.

SVOC

The following compound was detected in the method blanks at the following maximum concentration:

<u>Compound</u>	<u>Maximum Concentration</u>	<u>Action Level</u>
Bis(2-ethylhexyl)phthalate	120 ug/kg	1200 ug/kg

An action level of 10X the maximum concentration of bis(2-ethylhexyl)phthalate was used to evaluate the sample data for blank contamination. Sample aliquot, percent solids, and dilution factors, if applicable, were taken into consideration when evaluating for blank contamination. Positive sample results reported to be less the action level were qualified as non-detected (U) for method blank contamination.

Positive results for compounds reported to be below the quantitation limit but above the method detection limit were qualified as estimated (J) due to uncertainty near the detection limit.

Originally, the SVOC initial calibration forms in this data package did not include percent relative standard deviations (RSD) results. The laboratory was contacted and provided these results at a later date.

PEST/PCB

The toxaphene initial calibration forms were originally missing from the data package. The laboratory was contacted, and the initial calibration forms were obtained and are included in this report.

Toxaphene was run as a single-component analyte in the initial calibration analysis. All results were non-detected, so the laboratory did not perform continuing calibration for toxaphene. However, the the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006) requires that continuing calibration verifications be run for all target analytes. Therefore, all non-detected toxaphene results were qualified as estimated (UJ).

The continuing calibration performed on 08/26/08 at 03:47 on Column ZB MR-1 (Column 1) had percent difference results outside the quality control acceptance range of $\pm 15\%$ for the following analytes:

Alpha-BHC	Delta-BHC	Aldrin
Heptachlor epoxide	Gamma-chlordane	Alpha-chlordane
Endosulfan I	4,4'-DDE	Dieldrin
Endrin	4,4'-DDD	Endosulfan II
Endrin Aldehyde	4,4'-DDT	Endosulfan sulfate
Methoxychlor	Endrin ketone	

Percent difference results for all analytes except for endrin ketone were within acceptance limits on Column ZB MR-2 (Column 2). Thus, the non-detected results for endrin ketone were qualified as estimated (UJ) in the affected samples (01SS01QT, 01SS01QTDUP, 01SS02QT, 01SS03QT, 01SS04QT, 01SS05QT, 01SS06QT).

The continuing calibration run on 08/26/08 at 04:06 on Column 1 had mean percent difference results outside of the acceptance range of $\pm 15\%$ for Aroclor-1016 and Aroclor-1260. No data were qualified because the percent difference results were within limits on Column 2.

The continuing calibration performed on 08/26/08 at 09:58 on Column 1 produced percent difference results outside of the acceptance range of $\pm 15\%$ for the following analytes:

Delta-BHC	Gamma-chlordane	Alpha-chlordane
Endosulfan I	4,4'-DDE	Dieldrin
Endrin	4,4'-DDD	Endosulfan II
Endrin aldehyde	4,4'-DDT	Endosulfan sulfate
Endrin ketone		

No data were qualified because all percent difference results were within limits on Column 2.

The continuing calibration run on 08/26/08 at 10:17 on Column 1 produced mean percent difference results outside of the quality control acceptance range of $\pm 15\%$ for Aroclor-1016 and Aroclor-1260. No action was taken for Aroclor-1016 because results for this analyte were compliant on Column 2. No action was taken for Aroclor-1260 because even though percent difference results from two individual peaks on Column 2 were outside the acceptance limits, the mean percent difference was within limits on Column 2.

The following analytes exceeded the maximum percent difference between columns (25%).

<u>Sample</u>	<u>Analyte</u>	<u>Percent Difference</u>
01SS04QT	Dieldrin	124%
01SS06QT	Endrin aldehyde	34%

The positive result for endrin aldehyde was qualified as estimated (J) because the percent difference was greater than 25% but less than 100%. The positive result for dieldrin was qualified as unusable (R) because the percent difference was greater than 100%.

Positive results for compounds reported to be below the quantitation limit but above the method detection limit were qualified as estimated (J) due to uncertainty near the detection limit.

HERB

The laboratory control/laboratory control sample duplicate (LCS/LCSD) analysis had a LCSD percent recovery that was greater than the laboratory quality control limit for MCPA. No qualification was made because the LCS was within limits.

The continuing calibration run on 08/19/08 at 15:36 on Column RTX-CLP (Column 1) had percent difference results outside of the acceptance range of $\pm 15\%$ for MCPA and MCPA. No qualifications were made because these results were compliant in the corresponding continuing calibration (08/19/08 at 16:20) on Column RTX-CLP2 (Column 2).

The continuing calibration run on 08/19/08 at 16:20 on Column 2 had a percent difference result outside of the acceptance range of $\pm 15\%$ for 2,4,5-T. No action was taken because the result for this analyte was within limits in the corresponding calibration (08/19/08 at 15:36) on Column 1.

The continuing calibration run on 08/19/08 at 22:47 on Column 1 had percent difference results outside of the acceptance range for MCPA, MCPA, and 2,4-DB. Similarly, percent difference results were also outside of the acceptance range for these analytes in the corresponding continuing calibration on Column 2 (08/19/08 at 23:26). All samples were affected. Positive results and non-detected results for these analytes were

qualified as estimated (J and UJ, respectively) in all samples.

The continuing calibration run on 08/19/08 at 23:26 on Column 2 also had percent difference results outside of the $\pm 15\%$ acceptance range for dichloroprop and 2,4-D. No action was taken for these results because the percent difference results for these analytes were within limits in the corresponding calibration on Column 1 (08/19/08 at 22:47).

The following analytes exceeded the maximum percent difference between columns (25%).

<u>Sample</u>	<u>Analyte</u>	<u>Percent Difference</u>
01SS03QT	2,4-DB	155.3%
	Dinoseb	37.9%
01SS04QT	2,4-DB	128.3%

The positive result for dinoseb was qualified as estimated (J) because the percent difference was greater than 25% but less than 100%. The positive results for 2,4-DB were qualified as unusable (R) because the percent difference was greater than 100%.

Positive results for compounds reported to be below the quantitation limit but above the method detection limit were qualified as estimated (J) due to uncertainty near the detection limit.

Although continuing calibrations run on 08/19/08 at 22:47 on Column 1 and 23:26 on Column 2 do not appear on their respective analytical sequences, these calibrations do appear in the run logs and apply to the samples in this SDG.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Several VOCs, pesticides, and herbicides were qualified due to calibration noncompliances. Analytes in the VOC and SVOC fractions were qualified due to method blank contamination. Several pesticides and herbicides were qualified due to percent differences between columns.

Other Factors Affecting Data Quality: Several analytes were qualified as estimated due to uncertainty near the detection limits.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (10/99), and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD QSM for Environmental Laboratories.


Tetra Tech NUS

Leigh A. Ciofani
Data Validator/Environmental Scientist I



TetraTech NUS

Joseph A. Samchuck
Data Validation Quality Assurance Officer

Attachments:

- Appendix A – Qualified Analytical Results
- Appendix B – Results as Reported by the Laboratory
- Appendix C – Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's $r < 0.995$
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $< CRQL$ for organics)
- Q = Other problems (can be any number of issues; e.g. poor chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	11	U	
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	UJ	C
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	UJ	C
METHYLENE CHLORIDE	0.99	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	10	U	
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	UJ	C
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	UJ	C
METHYLENE CHLORIDE	1.1	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	11	U	
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	UJ	C
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	UJ	C
METHYLENE CHLORIDE	1.2	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.7	U	
1,1,2,2-TETRACHLOROETHANE	9.7	U	
1,1,2-TRICHLOROETHANE	9.7	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.7	U	
1,1-DICHLOROETHANE	9.7	U	
1,1-DICHLOROETHENE	9.7	U	
1,2,3-TRICHLOROBENZENE	9.7	U	
1,2,4-TRICHLOROBENZENE	9.7	U	
1,2-DIBROMOETHANE	9.7	U	
1,2-DICHLOROETHANE	9.7	U	
1,2-DICHLOROPROPANE	9.7	U	
2-BUTANONE	9.7	U	
2-HEXANONE	9.7	U	
4-METHYL-2-PENTANONE	9.7	U	
ACETONE	9.7	U	
BENZENE	9.7	U	
BROMOCHLOROMETHANE	9.7	U	
BROMODICHLOROMETHANE	9.7	U	
BROMOFORM	9.7	U	
BROMOMETHANE	9.7	U	
CARBON DISULFIDE	9.7	U	
CARBON TETRACHLORIDE	9.7	U	
CHLOROBENZENE	9.7	U	
CHLORODIBROMOMETHANE	9.7	U	
CHLOROETHANE	9.7	U	
CHLOROFORM	9.7	U	
CHLOROMETHANE	9.7	U	
CIS-1,2-DICHLOROETHENE	9.7	U	
CIS-1,3-DICHLOROPROPENE	9.7	U	
CYCLOHEXANE	9.7	U	
ETHYLBENZENE	9.7	U	
ISOPROPYLBENZENE	9.7	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.7	UJ	C
METHYL CYCLOHEXANE	9.7	U	
METHYL TERT-BUTYL ETHER	9.7	UJ	C
METHYLENE CHLORIDE	1.1	U	A
STYRENE	9.7	U	
TETRACHLOROETHENE	9.7	U	
TOLUENE	9.7	U	
TOTAL 1,2-DICHLOROETHENE	9.7	U	
TOTAL XYLENES	9.7	U	
TRANS-1,2-DICHLOROETHENE	9.7	U	
TRANS-1,3-DICHLOROPROPENE	9.7	U	
TRICHLOROETHENE	9.7	U	
VINYL CHLORIDE	9.7	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	10	U	
1,1,2,2-TETRACHLOROETHANE	10	U	
1,1,2-TRICHLOROETHANE	10	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	10	U	
1,1-DICHLOROETHANE	10	U	
1,1-DICHLOROETHENE	10	U	
1,2,3-TRICHLOROBENZENE	10	U	
1,2,4-TRICHLOROBENZENE	10	U	
1,2-DIBROMOETHANE	10	U	
1,2-DICHLOROETHANE	10	U	
1,2-DICHLOROPROPANE	10	U	
2-BUTANONE	10	U	
2-HEXANONE	10	U	
4-METHYL-2-PENTANONE	10	U	
ACETONE	10	U	
BENZENE	10	U	
BROMOCHLOROMETHANE	10	U	
BROMODICHLOROMETHANE	10	U	
BROMOFORM	10	U	
BROMOMETHANE	10	U	
CARBON DISULFIDE	10	U	
CARBON TETRACHLORIDE	10	U	
CHLOROBENZENE	10	U	
CHLORODIBROMOMETHANE	10	U	
CHLOROETHANE	10	U	
CHLOROFORM	10	U	
CHLOROMETHANE	10	U	
CIS-1,2-DICHLOROETHENE	10	U	
CIS-1,3-DICHLOROPROPENE	10	U	
CYCLOHEXANE	10	U	
ETHYLBENZENE	10	U	
ISOPROPYLBENZENE	10	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	10	UJ	C
METHYL CYCLOHEXANE	10	U	
METHYL TERT-BUTYL ETHER	10	UJ	C
METHYLENE CHLORIDE	1.1	U	A
STYRENE	10	U	
TETRACHLOROETHENE	10	U	
TOLUENE	10	U	
TOTAL 1,2-DICHLOROETHENE	10	U	
TOTAL XYLENES	10	U	
TRANS-1,2-DICHLOROETHENE	10	U	
TRANS-1,3-DICHLOROPROPENE	10	U	
TRICHLOROETHENE	10	U	
VINYL CHLORIDE	10	U	

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	11	U	
1,1,2,2-TETRACHLOROETHANE	11	U	
1,1,2-TRICHLOROETHANE	11	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	11	U	
1,1-DICHLOROETHANE	11	U	
1,1-DICHLOROETHENE	11	U	
1,2,3-TRICHLOROBENZENE	11	U	
1,2,4-TRICHLOROBENZENE	11	U	
1,2-DIBROMOETHANE	11	U	
1,2-DICHLOROETHANE	11	U	
1,2-DICHLOROPROPANE	11	U	
2-BUTANONE	11	U	
2-HEXANONE	11	U	
4-METHYL-2-PENTANONE	11	U	
ACETONE	11	U	
BENZENE	11	U	
BROMOCHLOROMETHANE	11	U	
BROMODICHLOROMETHANE	11	U	
BROMOFORM	11	U	
BROMOMETHANE	11	U	
CARBON DISULFIDE	11	U	
CARBON TETRACHLORIDE	11	U	
CHLOROBENZENE	11	U	
CHLORODIBROMOMETHANE	11	U	
CHLOROETHANE	11	U	
CHLOROFORM	11	U	
CHLOROMETHANE	11	U	
CIS-1,2-DICHLOROETHENE	11	U	
CIS-1,3-DICHLOROPROPENE	11	U	
CYCLOHEXANE	11	U	
ETHYLBENZENE	11	U	
ISOPROPYLBENZENE	11	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	11	UJ	C
METHYL CYCLOHEXANE	11	U	
METHYL TERT-BUTYL ETHER	11	UJ	C
METHYLENE CHLORIDE	1.2	U	A
STYRENE	11	U	
TETRACHLOROETHENE	11	U	
TOLUENE	11	U	
TOTAL 1,2-DICHLOROETHENE	11	U	
TOTAL XYLENES	11	U	
TRANS-1,2-DICHLOROETHENE	11	U	
TRANS-1,3-DICHLOROPROPENE	11	U	
TRICHLOROETHENE	11	U	
VINYL CHLORIDE	11	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OV

nsample 01SS06QT
 samp_date 8/14/2008
 lab_id 0808142-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.4
 DUP_OF:

nsample 01SS06QT
 samp_date 8/14/2008
 lab_id 0808142-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.4
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	9.2	U	
1,1,2,2-TETRACHLOROETHANE	9.2	U	
1,1,2-TRICHLOROETHANE	9.2	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	9.2	U	
1,1-DICHLOROETHANE	9.2	U	
1,1-DICHLOROETHENE	9.2	U	
1,2,3-TRICHLOROBENZENE	9.2	U	
1,2,4-TRICHLOROBENZENE	9.2	U	
1,2-DIBROMOETHANE	9.2	U	
1,2-DICHLOROETHANE	9.2	U	
1,2-DICHLOROPROPANE	9.2	U	
2-BUTANONE	9.2	U	
2-HEXANONE	9.2	U	
4-METHYL-2-PENTANONE	9.2	U	
ACETONE	9.2	U	
BENZENE	9.2	U	
BROMOCHLOROMETHANE	9.2	U	
BROMODICHLOROMETHANE	9.2	U	
BROMOFORM	9.2	U	
BROMOMETHANE	9.2	U	
CARBON DISULFIDE	9.2	U	
CARBON TETRACHLORIDE	9.2	U	
CHLOROBENZENE	9.2	U	
CHLORODIBROMOMETHANE	9.2	U	
CHLOROETHANE	9.2	U	
CHLOROFORM	9.2	U	
CHLOROMETHANE	9.2	U	
CIS-1,2-DICHLOROETHENE	9.2	U	
CIS-1,3-DICHLOROPROPENE	9.2	U	
CYCLOHEXANE	9.2	U	
ETHYLBENZENE	9.2	U	
ISOPROPYLBENZENE	9.2	U	

Parameter	Result	Val Qual	Qual Code
METHYL ACETATE	9.2	UJ	C
METHYL CYCLOHEXANE	9.2	U	
METHYL TERT-BUTYL ETHER	9.2	UJ	C
METHYLENE CHLORIDE	1	U	A
STYRENE	9.2	U	
TETRACHLOROETHENE	9.2	U	
TOLUENE	9.2	U	
TOTAL 1,2-DICHLOROETHENE	9.2	U	
TOTAL XYLENES	9.2	U	
TRANS-1,2-DICHLOROETHENE	9.2	U	
TRANS-1,3-DICHLOROPROPENE	9.2	U	
TRICHLOROETHENE	9.2	U	
VINYL CHLORIDE	9.2	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: WATER DATA FRACTION: OV

nsample TB 8-14-08-01
 samp_date 8/14/2008
 lab_id 0808142-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

nsample TB 8-14-08-01
 samp_date 8/14/2008
 lab_id 0808142-08
 qc_type NM
 units UG/L
 Pct_Solids
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1,1-TRICHLOROETHANE	1	U	
1,1,2,2-TETRACHLOROETHANE	1	U	
1,1,2-TRICHLOROETHANE	1	U	
1,1,2-TRICHLOROTRIFLUOROETHANE	1	U	
1,1-DICHLOROETHANE	1	U	
1,1-DICHLOROETHENE	1	U	
1,2,3-TRICHLOROBENZENE	1	U	
1,2,4-TRICHLOROBENZENE	1	U	
1,2-DIBROMO-3-CHLOROPROPANE	2	U	
1,2-DIBROMOETHANE	1	U	
1,2-DICHLOROBENZENE	1	U	
1,2-DICHLOROETHANE	1	U	
1,2-DICHLOROPROPANE	1	U	
1,3-DICHLOROBENZENE	1	U	
1,4-DICHLOROBENZENE	1	U	
2-BUTANONE	5	U	
2-HEXANONE	5	U	
4-METHYL-2-PENTANONE	5	U	
ACETONE	5	U	
BENZENE	1	U	
BROMOCHLOROMETHANE	1	U	
BROMODICHLOROMETHANE	1	U	
BROMOFORM	1	U	
BROMOMETHANE	1	U	
CARBON DISULFIDE	1	U	
CARBON TETRACHLORIDE	1	U	
CHLOROBENZENE	1	U	
CHLORODIBROMOMETHANE	1	U	
CHLOROETHANE	1	U	
CHLOROFORM	1	U	
CHLOROMETHANE	1	U	
CIS-1,2-DICHLOROETHENE	1	U	

Parameter	Result	Val Qual	Qual Code
CIS-1,3-DICHLOROPROPENE	1	U	
CYCLOHEXANE	1	U	
DICHLORODIFLUOROMETHANE	1	U	
ETHYLBENZENE	1	U	
ISOPROPYLBENZENE	1	U	
METHYL ACETATE	1	U	
METHYL CYCLOHEXANE	1	U	
METHYL TERT-BUTYL ETHER	1	U	
METHYLENE CHLORIDE	2	U	
STYRENE	1	U	
TETRACHLOROETHENE	1	U	
TOLUENE	1	U	
TOTAL XYLENES	1	U	
TRANS-1,3-DICHLOROPROPENE	1	U	
TRICHLOROETHENE	1	U	
TRICHLOROFLUOROMETHANE	5	U	
VINYL CHLORIDE	1	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	380	U	
1,2,4,5-TETRACHLOROBENZENE	380	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	380	U	
2,4,5-TRICHLOROPHENOL	950	U	
2,4,6-TRICHLOROPHENOL	380	U	
2,4-DICHLOROPHENOL	380	U	
2,4-DIMETHYLPHENOL	380	U	
2,4-DINITROPHENOL	950	U	
2,4-DINITROTOLUENE	380	U	
2,6-DINITROTOLUENE	380	U	
2-CHLORONAPHTHALENE	380	U	
2-CHLOROPHENOL	380	U	
2-METHYLNAPHTHALENE	380	U	
2-METHYLPHENOL	380	U	
2-NITROANILINE	380	U	
2-NITROPHENOL	380	U	
3,3'-DICHLOROBENZIDINE	380	U	
3-NITROANILINE	950	U	
4,6-DINITRO-2-METHYLPHENOL	950	U	
4-BROMOPHENYL PHENYL ETHER	380	U	
4-CHLORO-3-METHYLPHENOL	380	U	
4-CHLOROANILINE	380	U	
4-CHLOROPHENYL PHENYL ETHER	380	U	
4-METHYLPHENOL	380	U	
4-NITROANILINE	950	U	
4-NITROPHENOL	950	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ACETOPHENONE	380	U	
ANTHRACENE	380	U	
ATRAZINE	380	U	
BENZALDEHYDE	380	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
BIS(2-CHLOROETHOXY)METHANE	380	U	
BIS(2-CHLOROETHYL)ETHER	380	U	
BIS(2-ETHYLHEXYL)PHTHALATE	380	U	
BUTYL BENZYL PHTHALATE	380	U	
CAPROLACTAM	380	U	
CARBAZOLE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
DIBENZOFURAN	380	U	
DIETHYL PHTHALATE	380	U	
DIMETHYL PHTHALATE	380	U	
DI-N-BUTYL PHTHALATE	380	U	
DI-N-OCTYL PHTHALATE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
HEXACHLOROBENZENE	380	U	
HEXACHLOROBUTADIENE	380	U	
HEXACHLOROCYCLOPENTADIENE	380	U	
HEXACHLOROETHANE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
ISOPHORONE	380	U	
NAPHTHALENE	380	U	
NITROBENZENE	380	U	
N-NITROSO-DI-N-PROPYLAMINE	380	U	
N-NITROSODIPHENYLAMINE	380	U	
PENTACHLOROPHENOL	950	U	
PHENANTHRENE	380	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	380	U	
PYRENE	380	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	380	U	
1,2,4,5-TETRACHLOROBENZENE	380	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	380	U	
2,4,5-TRICHLOROPHENOL	950	U	
2,4,6-TRICHLOROPHENOL	380	U	
2,4-DICHLOROPHENOL	380	U	
2,4-DIMETHYLPHENOL	380	U	
2,4-DINITROPHENOL	950	U	
2,4-DINITROTOLUENE	380	U	
2,6-DINITROTOLUENE	380	U	
2-CHLORONAPHTHALENE	380	U	
2-CHLOROPHENOL	380	U	
2-METHYLNAPHTHALENE	380	U	
2-METHYLPHENOL	380	U	
2-NITROANILINE	380	U	
2-NITROPHENOL	380	U	
3,3'-DICHLORO BENZIDINE	380	U	
3-NITROANILINE	950	U	
4,6-DINITRO-2-METHYLPHENOL	950	U	
4-BROMOPHENYL PHENYL ETHER	380	U	
4-CHLORO-3-METHYLPHENOL	380	U	
4-CHLOROANILINE	380	U	
4-CHLOROPHENYL PHENYL ETHER	380	U	
4-METHYLPHENOL	380	U	
4-NITROANILINE	950	U	
4-NITROPHENOL	950	U	
ACENAPHTHENE	380	U	
ACENAPHTHYLENE	380	U	
ACETOPHENONE	380	U	
ANTHRACENE	380	U	
ATRAZINE	380	U	
BENZALDEHYDE	380	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	380	U	
BENZO(A)PYRENE	380	U	
BENZO(B)FLUORANTHENE	380	U	
BENZO(G,H,I)PERYLENE	380	U	
BENZO(K)FLUORANTHENE	380	U	
BIS(2-CHLOROETHOXY)METHANE	380	U	
BIS(2-CHLOROETHYL)ETHER	380	U	
BIS(2-ETHYLHEXYL)PHTHALATE	380	U	
BUTYL BENZYL PHTHALATE	380	U	
CAPROLACTAM	380	U	
CARBAZOLE	380	U	
CHRYSENE	380	U	
DIBENZO(A,H)ANTHRACENE	380	U	
DIBENZOFURAN	380	U	
DIETHYL PHTHALATE	380	U	
DIMETHYL PHTHALATE	380	U	
DI-N-BUTYL PHTHALATE	380	U	
DI-N-OCTYL PHTHALATE	380	U	
FLUORANTHENE	380	U	
FLUORENE	380	U	
HEXACHLOROBENZENE	380	U	
HEXACHLOROBUTADIENE	380	U	
HEXACHLOROCYCLOPENTADIENE	380	U	
HEXACHLOROETHANE	380	U	
INDENO(1,2,3-CD)PYRENE	380	U	
ISOPHORONE	380	U	
NAPHTHALENE	380	U	
NITROBENZENE	380	U	
N-NITROSO-DI-N-PROPYLAMINE	380	U	
N-NITROSODIPHENYLAMINE	380	U	
PENTACHLOROPHENOL	950	U	
PHENANTHRENE	380	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	380	U	
PYRENE	380	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	410	U	
1,2,4,5-TETRACHLOROBENZENE	410	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	410	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	410	U	
2,4-DICHLOROPHENOL	410	U	
2,4-DIMETHYLPHENOL	410	U	
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	410	U	
2,6-DINITROTOLUENE	410	U	
2-CHLORONAPHTHALENE	410	U	
2-CHLOROPHENOL	410	U	
2-METHYLNAPHTHALENE	410	U	
2-METHYLPHENOL	410	U	
2-NITROANILINE	410	U	
2-NITROPHENOL	410	U	
3,3'-DICHLOROBENZIDINE	410	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	410	U	
4-CHLORO-3-METHYLPHENOL	410	U	
4-CHLOROANILINE	410	U	
4-CHLOROPHENYL PHENYL ETHER	410	U	
4-METHYLPHENOL	410	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	410	U	
ACENAPHTHYLENE	410	U	
ACETOPHENONE	410	U	
ANTHRACENE	410	U	
ATRAZINE	410	U	
BENZALDEHYDE	410	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	410	U	
BENZO(A)PYRENE	410	U	
BENZO(B)FLUORANTHENE	410	U	
BENZO(G,H,I)PERYLENE	410	U	
BENZO(K)FLUORANTHENE	410	U	
BIS(2-CHLOROETHOXY)METHANE	410	U	
BIS(2-CHLOROETHYL)ETHER	410	U	
BIS(2-ETHYLHEXYL)PHTHALATE	47	U	A
BUTYL BENZYL PHTHALATE	410	U	
CAPROLACTAM	410	U	
CARBAZOLE	410	U	
CHRYSENE	410	U	
DIBENZO(A,H)ANTHRACENE	410	U	
DIBENZOFURAN	410	U	
DIETHYL PHTHALATE	410	U	
DIMETHYL PHTHALATE	410	U	
DI-N-BUTYL PHTHALATE	410	U	
DI-N-OCTYL PHTHALATE	410	U	
FLUORANTHENE	410	U	
FLUORENE	410	U	
HEXACHLOROBENZENE	410	U	
HEXACHLOROBUTADIENE	410	U	
HEXACHLOROCYCLOPENTADIENE	410	U	
HEXACHLOROETHANE	410	U	
INDENO(1,2,3-CD)PYRENE	410	U	
ISOPHORONE	410	U	
NAPHTHALENE	410	U	
NITROBENZENE	410	U	
N-NITROSO-DI-N-PROPYLAMINE	410	U	
N-NITROSODIPHENYLAMINE	410	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	410	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	410	U	
PYRENE	410	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	400	U	
1,2,4,5-TETRACHLORO BENZENE	400	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	400	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	400	U	
2,4-DICHLOROPHENOL	400	U	
2,4-DIMETHYLPHENOL	400	U	
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	400	U	
2,6-DINITROTOLUENE	400	U	
2-CHLORONAPHTHALENE	400	U	
2-CHLOROPHENOL	400	U	
2-METHYLNAPHTHALENE	400	U	
2-METHYLPHENOL	400	U	
2-NITROANILINE	400	U	
2-NITROPHENOL	400	U	
3,3'-DICHLORO BENZIDINE	400	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	400	U	
4-CHLORO-3-METHYLPHENOL	400	U	
4-CHLOROANILINE	400	U	
4-CHLOROPHENYL PHENYL ETHER	400	U	
4-METHYLPHENOL	400	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	400	U	
ACENAPHTHYLENE	400	U	
ACETOPHENONE	400	U	
ANTHRACENE	400	U	
ATRAZINE	400	U	
BENZALDEHYDE	400	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	400	U	
BENZO(A)PYRENE	400	U	
BENZO(B)FLUORANTHENE	400	U	
BENZO(G,H,I)PERYLENE	400	U	
BENZO(K)FLUORANTHENE	400	U	
BIS(2-CHLOROETHOXY)METHANE	400	U	
BIS(2-CHLOROETHYL)ETHER	400	U	
BIS(2-ETHYLHEXYL)PHTHALATE	400	U	
BUTYL BENZYL PHTHALATE	400	U	
CAPROLACTAM	400	U	
CARBAZOLE	400	U	
CHRYSENE	400	U	
DIBENZO(A,H)ANTHRACENE	400	U	
DIBENZOFURAN	400	U	
DIETHYL PHTHALATE	400	U	
DIMETHYL PHTHALATE	400	U	
DI-N-BUTYL PHTHALATE	400	U	
DI-N-OCTYL PHTHALATE	400	U	
FLUORANTHENE	400	U	
FLUORENE	400	U	
HEXACHLORO BENZENE	400	U	
HEXACHLOROBUTADIENE	400	U	
HEXACHLOROCYCLOPENTADIENE	400	U	
HEXACHLOROETHANE	400	U	
INDENO(1,2,3-CD)PYRENE	400	U	
ISOPHORONE	400	U	
NAPHTHALENE	400	U	
NITROBENZENE	400	U	
N-NITROSO-DI-N-PROPYLAMINE	400	U	
N-NITROSODIPHENYLAMINE	400	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	400	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	400	U	
PYRENE	400	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	390	U	
1,2,4,5-TETRACHLOROBENZENE	390	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	390	U	
2,4,5-TRICHLOROPHENOL	970	U	
2,4,6-TRICHLOROPHENOL	390	U	
2,4-DICHLOROPHENOL	390	U	
2,4-DIMETHYLPHENOL	390	U	
2,4-DINITROPHENOL	970	U	
2,4-DINITROTOLUENE	390	U	
2,6-DINITROTOLUENE	390	U	
2-CHLORONAPHTHALENE	390	U	
2-CHLOROPHENOL	390	U	
2-METHYLNAPHTHALENE	390	U	
2-METHYLPHENOL	390	U	
2-NITROANILINE	390	U	
2-NITROPHENOL	390	U	
3,3'-DICHLOROBENZIDINE	390	U	
3-NITROANILINE	970	U	
4,6-DINITRO-2-METHYLPHENOL	970	U	
4-BROMOPHENYL PHENYL ETHER	390	U	
4-CHLORO-3-METHYLPHENOL	390	U	
4-CHLOROANILINE	390	U	
4-CHLOROPHENYL PHENYL ETHER	390	U	
4-METHYLPHENOL	390	U	
4-NITROANILINE	970	U	
4-NITROPHENOL	970	U	
ACENAPHTHENE	390	U	
ACENAPHTHYLENE	390	U	
ACETOPHENONE	390	U	
ANTHRACENE	390	U	
ATRAZINE	390	U	
BENZALDEHYDE	390	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	390	U	
BENZO(A)PYRENE	390	U	
BENZO(B)FLUORANTHENE	78	J	P
BENZO(G,H,I)PERYLENE	390	U	
BENZO(K)FLUORANTHENE	390	U	
BIS(2-CHLOROETHOXY)METHANE	390	U	
BIS(2-CHLOROETHYL)ETHER	390	U	
BIS(2-ETHYLHEXYL)PHTHALATE	390	U	
BUTYL BENZYL PHTHALATE	390	U	
CAPROLACTAM	390	U	
CARBAZOLE	390	U	
CHRYSENE	390	U	
DIBENZO(A,H)ANTHRACENE	390	U	
DIBENZOFURAN	390	U	
DIETHYL PHTHALATE	390	U	
DIMETHYL PHTHALATE	390	U	
DI-N-BUTYL PHTHALATE	390	U	
DI-N-OCTYL PHTHALATE	390	U	
FLUORANTHENE	390	U	
FLUORENE	390	U	
HEXACHLOROBENZENE	390	U	
HEXACHLOROBUTADIENE	390	U	
HEXACHLOROCYCLOPENTADIENE	390	U	
HEXACHLOROETHANE	390	U	
INDENO(1,2,3-CD)PYRENE	390	U	
ISOPHORONE	390	U	
NAPHTHALENE	390	U	
NITROBENZENE	390	U	
N-NITROSO-DI-N-PROPYLAMINE	390	U	
N-NITROSODIPHENYLAMINE	390	U	
PENTACHLOROPHENOL	970	U	
PHENANTHRENE	390	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	390	U	
PYRENE	390	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	420	U	
1,2,4,5-TETRACHLOROBENZENE	420	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	420	U	
2,4,5-TRICHLOROPHENOL	1000	U	
2,4,6-TRICHLOROPHENOL	420	U	
2,4-DICHLOROPHENOL	420	U	
2,4-DIMETHYLPHENOL	420	U	
2,4-DINITROPHENOL	1000	U	
2,4-DINITROTOLUENE	420	U	
2,6-DINITROTOLUENE	420	U	
2-CHLORONAPHTHALENE	420	U	
2-CHLOROPHENOL	420	U	
2-METHYLNAPHTHALENE	420	U	
2-METHYLPHENOL	420	U	
2-NITROANILINE	420	U	
2-NITROPHENOL	420	U	
3,3'-DICHLOROBENZIDINE	420	U	
3-NITROANILINE	1000	U	
4,6-DINITRO-2-METHYLPHENOL	1000	U	
4-BROMOPHENYL PHENYL ETHER	420	U	
4-CHLORO-3-METHYLPHENOL	420	U	
4-CHLOROANILINE	420	U	
4-CHLOROPHENYL PHENYL ETHER	420	U	
4-METHYLPHENOL	420	U	
4-NITROANILINE	1000	U	
4-NITROPHENOL	1000	U	
ACENAPHTHENE	420	U	
ACENAPHTHYLENE	420	U	
ACETOPHENONE	420	U	
ANTHRACENE	420	U	
ATRAZINE	420	U	
BENZALDEHYDE	420	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	420	U	
BENZO(A)PYRENE	420	U	
BENZO(B)FLUORANTHENE	420	U	
BENZO(G,H,I)PERYLENE	420	U	
BENZO(K)FLUORANTHENE	420	U	
BIS(2-CHLOROETHOXY)METHANE	420	U	
BIS(2-CHLOROETHYL)ETHER	420	U	
BIS(2-ETHYLHEXYL)PHTHALATE	63	U	A
BUTYL BENZYL PHTHALATE	420	U	
CAPROLACTAM	420	U	
CARBAZOLE	420	U	
CHRYSENE	420	U	
DIBENZO(A,H)ANTHRACENE	420	U	
DIBENZOFURAN	420	U	
DIETHYL PHTHALATE	420	U	
DIMETHYL PHTHALATE	420	U	
DI-N-BUTYL PHTHALATE	53	J	P
DI-N-OCTYL PHTHALATE	420	U	
FLUORANTHENE	420	U	
FLUORENE	420	U	
HEXACHLOROBENZENE	420	U	
HEXACHLOROBUTADIENE	420	U	
HEXACHLOROCYCLOPENTADIENE	420	U	
HEXACHLOROETHANE	420	U	
INDENO(1,2,3-CD)PYRENE	420	U	
ISOPHORONE	420	U	
NAPHTHALENE	420	U	
NITROBENZENE	420	U	
N-NITROSO-DI-N-PROPYLAMINE	420	U	
N-NITROSODIPHENYLAMINE	420	U	
PENTACHLOROPHENOL	1000	U	
PHENANTHRENE	420	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	420	U	
PYRENE	420	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: OS

nsample 01SS06QT
 samp_date 8/14/2008
 lab_id 0808142-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.4
 DUP_OF:

nsample 01SS06QT
 samp_date 8/14/2008
 lab_id 0808142-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.4
 DUP_OF:

nsample 01SS06QT
 samp_date 8/14/2008
 lab_id 0808142-07
 qc_type NM
 units UG/KG
 Pct_Solids 89.4
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
1,1-BIPHENYL	370	U	
1,2,4,5-TETRACHLORO BENZENE	370	U	
2,2'-OXYBIS(1-CHLOROPROPANE)	370	U	
2,4,5-TRICHLOROPHENOL	930	U	
2,4,6-TRICHLOROPHENOL	370	U	
2,4-DICHLOROPHENOL	370	U	
2,4-DIMETHYLPHENOL	370	U	
2,4-DINITROPHENOL	930	U	
2,4-DINITROTOLUENE	370	U	
2,6-DINITROTOLUENE	370	U	
2-CHLORONAPHTHALENE	370	U	
2-CHLOROPHENOL	370	U	
2-METHYLNAPHTHALENE	370	U	
2-METHYLPHENOL	370	U	
2-NITROANILINE	370	U	
2-NITROPHENOL	370	U	
3,3'-DICHLOROBENZIDINE	370	U	
3-NITROANILINE	930	U	
4,6-DINITRO-2-METHYLPHENOL	930	U	
4-BROMOPHENYL PHENYL ETHER	370	U	
4-CHLORO-3-METHYLPHENOL	370	U	
4-CHLOROANILINE	370	U	
4-CHLOROPHENYL PHENYL ETHER	370	U	
4-METHYLPHENOL	370	U	
4-NITROANILINE	930	U	
4-NITROPHENOL	930	U	
ACENAPHTHENE	370	U	
ACENAPHTHYLENE	370	U	
ACETOPHENONE	370	U	
ANTHRACENE	370	U	
ATRAZINE	370	U	
BENZALDEHYDE	370	U	

Parameter	Result	Val Qual	Qual Code
BENZO(A)ANTHRACENE	370	U	
BENZO(A)PYRENE	370	U	
BENZO(B)FLUORANTHENE	370	U	
BENZO(G,H,I)PERYLENE	370	U	
BENZO(K)FLUORANTHENE	370	U	
BIS(2-CHLOROETHOXY)METHANE	370	U	
BIS(2-CHLOROETHYL)ETHER	370	U	
BIS(2-ETHYLHEXYL)PHTHALATE	41	U	A
BUTYL BENZYL PHTHALATE	370	U	
CAPROLACTAM	370	U	
CARBAZOLE	370	U	
CHRYSENE	370	U	
DIBENZO(A,H)ANTHRACENE	370	U	
DIBENZOFURAN	370	U	
DIETHYL PHTHALATE	370	U	
DIMETHYL PHTHALATE	370	U	
DI-N-BUTYL PHTHALATE	370	U	
DI-N-OCTYL PHTHALATE	370	U	
FLUORANTHENE	370	U	
FLUORENE	370	U	
HEXACHLORO BENZENE	370	U	
HEXACHLOROBUTADIENE	370	U	
HEXACHLOROCYCLOPENTADIENE	370	U	
HEXACHLOROETHANE	370	U	
INDENO(1,2,3-CD)PYRENE	370	U	
ISOPHORONE	370	U	
NAPHTHALENE	370	U	
NITROBENZENE	370	U	
N-NITROSO-DI-N-PROPYLAMINE	370	U	
N-NITROSODIPHENYLAMINE	370	U	
PENTACHLOROPHENOL	930	U	
PHENANTHRENE	370	U	

Parameter	Result	Val Qual	Qual Code
PHENOL	370	U	
PYRENE	370	U	

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.76	U	
4,4'-DDE	0.76	U	
4,4'-DDT	0.76	U	
ALDRIN	0.38	U	
ALPHA-BHC	0.38	U	
ALPHA-CHLORDANE	0.38	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.38	U	
DELTA-BHC	0.38	U	
DIELDRIN	0.76	U	
ENDOSULFAN I	0.38	U	
ENDOSULFAN II	0.76	U	
ENDOSULFAN SULFATE	0.76	U	
ENDRIN	0.76	U	
ENDRIN ALDEHYDE	0.76	U	
ENDRIN KETONE	0.76	UJ	C
GAMMA-BHC (LINDANE)	0.38	U	
GAMMA-CHLORDANE	0.38	U	
HEPTACHLOR	0.38	U	
HEPTACHLOR EPOXIDE	0.38	U	
METHOXYCHLOR	0.38	U	
TOXAPHENE	38	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.76	U	
4,4'-DDE	0.76	U	
4,4'-DDT	0.76	U	
ALDRIN	0.38	U	
ALPHA-BHC	0.38	U	
ALPHA-CHLORDANE	0.38	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.38	U	
DELTA-BHC	0.38	U	
DIELDRIN	0.76	U	
ENDOSULFAN I	0.38	U	
ENDOSULFAN II	0.76	U	
ENDOSULFAN SULFATE	0.76	U	
ENDRIN	0.76	U	
ENDRIN ALDEHYDE	0.76	U	
ENDRIN KETONE	0.76	UJ	C
GAMMA-BHC (LINDANE)	0.38	U	
GAMMA-CHLORDANE	0.38	U	
HEPTACHLOR	0.38	U	
HEPTACHLOR EPOXIDE	0.38	U	
METHOXYCHLOR	0.38	U	
TOXAPHENE	38	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.82	U	
4,4'-DDE	0.82	U	
4,4'-DDT	0.82	U	
ALDRIN	0.41	U	
ALPHA-BHC	0.41	U	
ALPHA-CHLORDANE	0.41	U	
AROCLOR-1016	21	U	
AROCLOR-1221	21	U	
AROCLOR-1232	21	U	
AROCLOR-1242	21	U	
AROCLOR-1248	21	U	
AROCLOR-1254	21	U	
AROCLOR-1260	21	U	
BETA-BHC	0.41	U	
DELTA-BHC	0.41	U	
DIELDRIN	0.82	U	
ENDOSULFAN I	0.41	U	
ENDOSULFAN II	0.82	U	
ENDOSULFAN SULFATE	0.82	U	
ENDRIN	0.82	U	
ENDRIN ALDEHYDE	0.82	U	
ENDRIN KETONE	0.82	UJ	C
GAMMA-BHC (LINDANE)	0.41	U	
GAMMA-CHLORDANE	0.41	U	
HEPTACHLOR	0.41	U	
HEPTACHLOR EPOXIDE	0.41	U	
METHOXYCHLOR	0.41	U	
TOXAPHENE	41	UJ	C

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.8	U	
4,4'-DDE	0.8	U	
4,4'-DDT	0.8	U	
ALDRIN	0.4	U	
ALPHA-BHC	0.4	U	
ALPHA-CHLORDANE	0.4	U	
AROCLOR-1016	20	U	
AROCLOR-1221	20	U	
AROCLOR-1232	20	U	
AROCLOR-1242	20	U	
AROCLOR-1248	20	U	
AROCLOR-1254	20	U	
AROCLOR-1260	20	U	
BETA-BHC	0.16	J	P
DELTA-BHC	0.4	U	
DIELDRIN	0.8	U	
ENDOSULFAN I	0.4	U	
ENDOSULFAN II	0.8	U	
ENDOSULFAN SULFATE	0.8	U	
ENDRIN	0.8	U	
ENDRIN ALDEHYDE	0.8	U	
ENDRIN KETONE	0.8	UJ	C
GAMMA-BHC (LINDANE)	0.4	U	
GAMMA-CHLORDANE	0.4	U	
HEPTACHLOR	0.4	U	
HEPTACHLOR EPOXIDE	0.4	U	
METHOXYCHLOR	0.4	U	
TOXAPHENE	40	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.78	U	
4,4'-DDE	0.58	J	P
4,4'-DDT	1.5		
ALDRIN	0.39	U	
ALPHA-BHC	0.39	U	
ALPHA-CHLORDANE	0.39	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.39	U	
DELTA-BHC	0.39	U	
DIELDRIN	0.22	R	PU
ENDOSULFAN I	0.39	U	
ENDOSULFAN II	0.78	U	
ENDOSULFAN SULFATE	0.78	U	
ENDRIN	0.78	U	
ENDRIN ALDEHYDE	0.78	U	
ENDRIN KETONE	0.78	UJ	C
GAMMA-BHC (LINDANE)	0.39	U	
GAMMA-CHLORDANE	0.39	U	
HEPTACHLOR	0.39	U	
HEPTACHLOR EPOXIDE	0.39	U	
METHOXYCHLOR	0.39	U	
TOXAPHENE	39	UJ	C

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.84	U	
4,4'-DDE	0.84	U	
4,4'-DDT	0.84	U	
ALDRIN	0.42	U	
ALPHA-BHC	0.26	J	P
ALPHA-CHLORDANE	0.42	U	
AROCLOR-1016	21	U	
AROCLOR-1221	21	U	
AROCLOR-1232	21	U	
AROCLOR-1242	21	U	
AROCLOR-1248	21	U	
AROCLOR-1254	21	U	
AROCLOR-1260	21	U	
BETA-BHC	0.22	J	P
DELTA-BHC	0.42	U	
DIELDRIN	0.84	U	
ENDOSULFAN I	0.42	U	
ENDOSULFAN II	0.84	U	
ENDOSULFAN SULFATE	0.84	U	
ENDRIN	0.84	U	
ENDRIN ALDEHYDE	0.84	U	
ENDRIN KETONE	0.84	UJ	C
GAMMA-BHC (LINDANE)	0.42	U	
GAMMA-CHLORDANE	0.42	U	
HEPTACHLOR	0.42	U	
HEPTACHLOR EPOXIDE	0.42	U	
METHOXYCHLOR	0.42	U	
TOXAPHENE	42	UJ	C

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SS06QT
samp_date 8/14/2008
lab_id 0808142-07
qc_type NM
units UG/KG
Pct_Solids 89.4
DUP_OF:

Parameter	Result	Val Qual	Qual Code
4,4'-DDD	0.74	U	
4,4'-DDE	0.74	U	
4,4'-DDT	0.74	U	
ALDRIN	0.37	U	
ALPHA-BHC	0.37	U	
ALPHA-CHLORDANE	0.37	U	
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	
BETA-BHC	0.37	U	
DELTA-BHC	0.37	U	
DIELDRIN	0.74	U	
ENDOSULFAN I	0.37	U	
ENDOSULFAN II	0.74	U	
ENDOSULFAN SULFATE	0.74	U	
ENDRIN	0.74	U	
ENDRIN ALDEHYDE	0.31	J	PU
ENDRIN KETONE	0.74	UJ	C
GAMMA-BHC (LINDANE)	0.37	U	
GAMMA-CHLORDANE	0.37	U	
HEPTACHLOR	0.37	U	
HEPTACHLOR EPOXIDE	0.37	U	
METHOXYCHLOR	0.37	U	
TOXAPHENE	37	UJ	C

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS01QT
 samp_date 8/14/2008
 lab_id 0808142-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.3
 DUP_OF:

nsample 01SS01QTDUP
 samp_date 8/14/2008
 lab_id 0808142-02
 qc_type NM
 units UG/KG
 Pct_Solids 87.6
 DUP_OF: 01SS01QT

nsample 01SS02QT
 samp_date 8/14/2008
 lab_id 0808142-03
 qc_type NM
 units UG/KG
 Pct_Solids 80.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	
2,4-DB	19	UJ	C
DALAPON	48	U	
DICAMBA	1.9	U	
DICHLOROPROP	19	U	
DINOSEB	9.5	U	
MCPA	1900	UJ	C
MCPP	1900	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	
2,4-DB	19	UJ	C
DALAPON	48	U	
DICAMBA	1.9	U	
DICHLOROPROP	19	U	
DINOSEB	9.5	U	
MCPA	1900	UJ	C
MCPP	1900	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2.1	U	
2,4,5-TP (SILVEX)	2.1	U	
2,4-D	21	U	
2,4-DB	21	UJ	C
DALAPON	52	U	
DICAMBA	2.1	U	
DICHLOROPROP	21	U	
DINOSEB	10	U	
MCPA	2100	UJ	C
MCPP	2100	UJ	C

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS03QT
 samp_date 8/14/2008
 lab_id 0808142-04
 qc_type NM
 units UG/KG
 Pct_Solids 83.4
 DUP_OF:

nsample 01SS04QT
 samp_date 8/14/2008
 lab_id 0808142-05
 qc_type NM
 units UG/KG
 Pct_Solids 85.8
 DUP_OF:

nsample 01SS05QT
 samp_date 8/14/2008
 lab_id 0808142-06
 qc_type NM
 units UG/KG
 Pct_Solids 79.1
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2	U	
2,4,5-TP (SILVEX)	2	U	
2,4-D	20	U	
2,4-DB	30	R	CU
DALAPON	50	U	
DICAMBA	2	U	
DICHLOROPROP	20	U	
DINOSEB	8.8	J	PU
MCPA	2000	UJ	C
MCPP	2000	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	
2,4-DB	30	R	CU
DALAPON	48	U	
DICAMBA	1.9	U	
DICHLOROPROP	19	U	
DINOSEB	9.7	U	
MCPA	1900	UJ	C
MCPP	1900	UJ	C

Parameter	Result	Val Qual	Qual Code
2,4,5-T	2.1	U	
2,4,5-TP (SILVEX)	2.1	U	
2,4-D	21	U	
2,4-DB	21	UJ	C
DALAPON	53	U	
DICAMBA	2.1	U	
DICHLOROPROP	21	U	
DINOSEB	10	U	
MCPA	2100	UJ	C
MCPP	2100	UJ	C

PROJ_NO: 00700

SDG: GULFPORT009 MEDIA: SOIL DATA FRACTION: HERB

nsample 01SS06QT
samp_date 8/14/2008
lab_id 0808142-07
qc_type NM
units UG/KG
Pct_Solids 89.4
DUP_OF:

Parameter	Result	Val Qual	Qual Code
2,4,5-T	1.9	U	
2,4,5-TP (SILVEX)	1.9	U	
2,4-D	19	U	
2,4-DB	19	UJ	C
DALAPON	47	U	
DICAMBA	1.9	U	
DICHLOROPROP	19	U	
DINOSEB	9.3	U	
MCPA	1900	UJ	C
MCPP	1900	UJ	C

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0814201A

Level: (low/med) LOW Date Sampled: 08/14/08 12:45

% Moisture: not dec. 13 Date Analyzed: 08/15/08 13:37

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	ug/Kg) CONC	
67-64-1-----	Acetone	2.1	11		U
71-43-2-----	Benzene	0.50	11		U
74-97-5-----	Bromochloromethane	0.44	11		U
75-27-4-----	Bromodichloromethane	0.32	11		U
75-25-2-----	Bromoform	1.1	11		U
74-83-9-----	Bromomethane	0.76	11		U
78-93-3-----	2-Butanone	1.5	11		U
75-15-0-----	Carbon disulfide	1.4	11		U
56-23-5-----	Carbon tetrachloride	0.93	11		U
108-90-7-----	Chlorobenzene	0.36	11		U
75-00-3-----	Chloroethane	1.2	11		U
67-66-3-----	Chloroform	0.58	11		U
74-87-3-----	Chloromethane	0.55	11		U
110-82-7-----	Cyclohexane	0.57	11		U
124-48-1-----	Dibromochloromethane	0.36	11		U
106-93-4-----	1,2-Dibromoethane	0.46	11		U
75-34-3-----	1,1-Dichloroethane	0.57	11		U
107-06-2-----	1,2-Dichloroethane	0.49	11		U
75-35-4-----	1,1-Dichloroethene	1.3	11		U
156-59-2-----	cis-1,2-Dichloroethene	1.3	11		U
156-60-5-----	trans-1,2-Dichloroethene	1.2	11		U
540-59-0-----	1,2-Dichloroethene (total)	1.3	11		U
78-87-5-----	1,2-Dichloropropane	0.49	11		U
10061-01-5-----	cis-1,3-Dichloropropene	0.53	11		U
10061-02-6-----	trans-1,3-Dichloropropene	0.34	11		U
100-41-4-----	Ethylbenzene	0.80	11		U
591-78-6-----	2-Hexanone	2.4	11		U
98-82-8-----	Isopropylbenzene	0.93	11		U
79-20-9-----	Methyl acetate	1.7	11		U
108-87-2-----	Methyl cyclohexane	0.32	11		U
75-09-2-----	Methylene chloride	0.66	11	0.99	JB
108-10-1-----	4-Methyl-2-pentanone	0.62	11		U
1634-04-4-----	Methyl tert-butyl ether	0.34	11		U
100-42-5-----	Styrene	0.37	11		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.46	11		U
127-18-4-----	Tetrachloroethene	1.0	11		U
108-88-3-----	Toluene	0.91	11		U
87-61-6-----	1,2,3-Trichlorobenzene	0.44	11		U
120-82-1-----	1,2,4-Trichlorobenzene	0.19	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0814201A

Level: (low/med) LOW Date Sampled: 08/14/08 12:45

% Moisture: not dec. 13 Date Analyzed: 08/15/08 13:37

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
71-55-6-----	1,1,1-Trichloroethane _____	0.95	11		U
79-00-5-----	1,1,2-Trichloroethane _____	0.37	11		U
79-01-6-----	Trichloroethene _____	0.90	11		U
76-13-1-----	Trichlorotrifluoroethane _____	0.58	11		U
75-01-4-----	Vinyl chloride _____	1.2	11		U
1330-20-7----	Xylene (total) _____	0.74	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QTDUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-02

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0814202A

Level: (low/med) LOW Date Sampled: 08/14/08 12:45

% Moisture: not dec. 12 Date Analyzed: 08/15/08 14:16

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	2.1	10		U
71-43-2	Benzene	0.50	10		U
74-97-5	Bromochloromethane	0.44	10		U
75-27-4	Bromodichloromethane	0.32	10		U
75-25-2	Bromoform	1.0	10		U
74-83-9	Bromomethane	0.76	10		U
78-93-3	2-Butanone	1.5	10		U
75-15-0	Carbon disulfide	1.4	10		U
56-23-5	Carbon tetrachloride	0.93	10		U
108-90-7	Chlorobenzene	0.36	10		U
75-00-3	Chloroethane	1.2	10		U
67-66-3	Chloroform	0.58	10		U
74-87-3	Chloromethane	0.55	10		U
110-82-7	Cyclohexane	0.57	10		U
124-48-1	Dibromochloromethane	0.36	10		U
106-93-4	1,2-Dibromoethane	0.45	10		U
75-34-3	1,1-Dichloroethane	0.57	10		U
107-06-2	1,2-Dichloroethane	0.49	10		U
75-35-4	1,1-Dichloroethene	1.3	10		U
156-59-2	cis-1,2-Dichloroethene	1.3	10		U
156-60-5	trans-1,2-Dichloroethene	1.2	10		U
540-59-0	1,2-Dichloroethene (total)	1.3	10		U
78-87-5	1,2-Dichloropropane	0.49	10		U
10061-01-5	cis-1,3-Dichloropropene	0.53	10		U
10061-02-6	trans-1,3-Dichloropropene	0.34	10		U
100-41-4	Ethylbenzene	0.79	10		U
591-78-6	2-Hexanone	2.4	10		U
98-82-8	Isopropylbenzene	0.93	10		U
79-20-9	Methyl acetate	1.7	10		U
108-87-2	Methyl cyclohexane	0.32	10		U
75-09-2	Methylene chloride	0.66	10	1.1	JB
108-10-1	4-Methyl-2-pentanone	0.61	10		U
1634-04-4	Methyl tert-butyl ether	0.34	10		U
100-42-5	Styrene	0.37	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.45	10		U
127-18-4	Tetrachloroethene	1.0	10		U
108-88-3	Toluene	0.91	10		U
87-61-6	1,2,3-Trichlorobenzene	0.44	10		U
120-82-1	1,2,4-Trichlorobenzene	0.19	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0814203A

Level: (low/med) LOW Date Sampled: 08/14/08 12:50

% Moisture: not dec. 19 Date Analyzed: 08/15/08 14:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	2.3	11		U
71-43-2	Benzene	0.54	11		U
74-97-5	Bromochloromethane	0.48	11		U
75-27-4	Bromodichloromethane	0.34	11		U
75-25-2	Bromoform	1.1	11		U
74-83-9	Bromomethane	0.82	11		U
78-93-3	2-Butanone	1.6	11		U
75-15-0	Carbon disulfide	1.5	11		U
56-23-5	Carbon tetrachloride	1.0	11		U
108-90-7	Chlorobenzene	0.39	11		U
75-00-3	Chloroethane	1.3	11		U
67-66-3	Chloroform	0.63	11		U
74-87-3	Chloromethane	0.60	11		U
110-82-7	Cyclohexane	0.62	11		U
124-48-1	Dibromochloromethane	0.39	11		U
106-93-4	1,2-Dibromoethane	0.49	11		U
75-34-3	1,1-Dichloroethane	0.62	11		U
107-06-2	1,2-Dichloroethane	0.53	11		U
75-35-4	1,1-Dichloroethene	1.4	11		U
156-59-2	cis-1,2-Dichloroethene	1.4	11		U
156-60-5	trans-1,2-Dichloroethene	1.3	11		U
540-59-0	1,2-Dichloroethene (total)	1.4	11		U
78-87-5	1,2-Dichloropropane	0.53	11		U
10061-01-5	cis-1,3-Dichloropropene	0.57	11		U
10061-02-6	trans-1,3-Dichloropropene	0.37	11		U
100-41-4	Ethylbenzene	0.86	11		U
591-78-6	2-Hexanone	2.6	11		U
98-82-8	Isopropylbenzene	1.0	11		U
79-20-9	Methyl acetate	1.8	11		U
108-87-2	Methyl cyclohexane	0.34	11		U
75-09-2	Methylene chloride	0.71	11	1.2	JB
108-10-1	4-Methyl-2-pentanone	0.66	11		U
1634-04-4	Methyl tert-butyl ether	0.37	11		U
100-42-5	Styrene	0.40	11		U
79-34-5	1,1,2,2-Tetrachloroethane	0.49	11		U
127-18-4	Tetrachloroethene	1.1	11		U
108-88-3	Toluene	0.98	11		U
87-61-6	1,2,3-Trichlorobenzene	0.48	11		U
120-82-1	1,2,4-Trichlorobenzene	0.21	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03

Sample wt/vol: 5.4 (g/mL) G Lab File ID: 0814203A

Level: (low/med) LOW Date Sampled: 08/14/08 12:50

% Moisture: not dec. 19 Date Analyzed: 08/15/08 14:55

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	1.0	11		U
79-00-5-----	1,1,2-Trichloroethane	0.40	11		U
79-01-6-----	Trichloroethene	0.97	11		U
76-13-1-----	Trichlorotrifluoroethane	0.63	11		U
75-01-4-----	Vinyl chloride	1.3	11		U
1330-20-7-----	Xylene (total)	0.80	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04
 Sample wt/vol: 6.2 (g/mL) G Lab File ID: 0814204A
 Level: (low/med) LOW Date Sampled: 08/14/08 12:40
 % Moisture: not dec. 17 Date Analyzed: 08/15/08 15:35
 GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	1.9	9.7		U
71-43-2	Benzene	0.45	9.7		U
74-97-5	Bromochloromethane	0.41	9.7		U
75-27-4	Bromodichloromethane	0.29	9.7		U
75-25-2	Bromoform	0.97	9.7		U
74-83-9	Bromomethane	0.70	9.7		U
78-93-3	2-Butanone	1.4	9.7		U
75-15-0	Carbon disulfide	1.2	9.7		U
56-23-5	Carbon tetrachloride	0.85	9.7		U
108-90-7	Chlorobenzene	0.33	9.7		U
75-00-3	Chloroethane	1.1	9.7		U
67-66-3	Chloroform	0.53	9.7		U
74-87-3	Chloromethane	0.50	9.7		U
110-82-7	Cyclohexane	0.52	9.7		U
124-48-1	Dibromochloromethane	0.33	9.7		U
106-93-4	1,2-Dibromoethane	0.42	9.7		U
75-34-3	1,1-Dichloroethane	0.52	9.7		U
107-06-2	1,2-Dichloroethane	0.44	9.7		U
75-35-4	1,1-Dichloroethene	1.2	9.7		U
156-59-2	cis-1,2-Dichloroethene	1.2	9.7		U
156-60-5	trans-1,2-Dichloroethene	1.1	9.7		U
540-59-0	1,2-Dichloroethene (total)	1.2	9.7		U
78-87-5	1,2-Dichloropropane	0.44	9.7		U
10061-01-5	cis-1,3-Dichloropropene	0.48	9.7		U
10061-02-6	trans-1,3-Dichloropropene	0.31	9.7		U
100-41-4	Ethylbenzene	0.72	9.7		U
591-78-6	2-Hexanone	2.2	9.7		U
98-82-8	Isopropylbenzene	0.85	9.7		U
79-20-9	Methyl acetate	1.5	9.7		U
108-87-2	Methyl cyclohexane	0.29	9.7		U
75-09-2	Methylene chloride	0.60	9.7	1.1	JB
108-10-1	4-Methyl-2-pentanone	0.56	9.7		U
1634-04-4	Methyl tert-butyl ether	0.31	9.7		U
100-42-5	Styrene	0.34	9.7		U
79-34-5	1,1,2,2-Tetrachloroethane	0.42	9.7		U
127-18-4	Tetrachloroethene	0.94	9.7		U
108-88-3	Toluene	0.83	9.7		U
87-61-6	1,2,3-Trichlorobenzene	0.41	9.7		U
120-82-1	1,2,4-Trichlorobenzene	0.17	9.7		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04

Sample wt/vol: 6.2 (g/mL) G Lab File ID: 0814204A

Level: (low/med) LOW Date Sampled: 08/14/08 12:40

% Moisture: not dec. 17 Date Analyzed: 08/15/08 15:35

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		
		MDL	RL	CONC Q
71-55-6-----	1,1,1-Trichloroethane _____	0.87	9.7	U
79-00-5-----	1,1,2-Trichloroethane _____	0.34	9.7	U
79-01-6-----	Trichloroethene _____	0.82	9.7	U
76-13-1-----	Trichlorotrifluoroethane _____	0.53	9.7	U
75-01-4-----	Vinyl chloride _____	1.1	9.7	U
1330-20-7----	Xylene(total) _____	0.68	9.7	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 0814205A

Level: (low/med) LOW Date Sampled: 08/14/08 12:35

% Moisture: not dec. 14 Date Analyzed: 08/15/08 16:14

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
67-64-1	Acetone	2.1	10			U
71-43-2	Benzene	0.50	10			U
74-97-5	Bromochloromethane	0.44	10			U
75-27-4	Bromodichloromethane	0.32	10			U
75-25-2	Bromoform	1.0	10			U
74-83-9	Bromomethane	0.76	10			U
78-93-3	2-Butanone	1.5	10			U
75-15-0	Carbon disulfide	1.4	10			U
56-23-5	Carbon tetrachloride	0.93	10			U
108-90-7	Chlorobenzene	0.36	10			U
75-00-3	Chloroethane	1.2	10			U
67-66-3	Chloroform	0.58	10			U
74-87-3	Chloromethane	0.55	10			U
110-82-7	Cyclohexane	0.57	10			U
124-48-1	Dibromochloromethane	0.36	10			U
106-93-4	1,2-Dibromoethane	0.46	10			U
75-34-3	1,1-Dichloroethane	0.57	10			U
107-06-2	1,2-Dichloroethane	0.49	10			U
75-35-4	1,1-Dichloroethene	1.3	10			U
156-59-2	cis-1,2-Dichloroethene	1.3	10			U
156-60-5	trans-1,2-Dichloroethene	1.2	10			U
540-59-0	1,2-Dichloroethene (total)	1.3	10			U
78-87-5	1,2-Dichloropropane	0.49	10			U
10061-01-5	cis-1,3-Dichloropropene	0.53	10			U
10061-02-6	trans-1,3-Dichloropropene	0.34	10			U
100-41-4	Ethylbenzene	0.79	10			U
591-78-6	2-Hexanone	2.4	10			U
98-82-8	Isopropylbenzene	0.93	10			U
79-20-9	Methyl acetate	1.7	10			U
108-87-2	Methyl cyclohexane	0.32	10			U
75-09-2	Methylene chloride	0.66	10		1.1	JB
108-10-1	4-Methyl-2-pentanone	0.61	10			U
1634-04-4	Methyl tert-butyl ether	0.34	10			U
100-42-5	Styrene	0.37	10			U
79-34-5	1,1,2,2-Tetrachloroethane	0.46	10			U
127-18-4	Tetrachloroethene	1.0	10			U
108-88-3	Toluene	0.91	10			U
87-61-6	1,2,3-Trichlorobenzene	0.44	10			U
120-82-1	1,2,4-Trichlorobenzene	0.19	10			U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 5.5 (g/mL) G Lab File ID: 0814205A

Level: (low/med) LOW Date Sampled: 08/14/08 12:35

% Moisture: not dec. 14 Date Analyzed: 08/15/08 16:14

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		
		MDL	RL	CONC Q
71-55-6-----	1,1,1-Trichloroethane	0.95	10	U
79-00-5-----	1,1,2-Trichloroethane	0.37	10	U
79-01-6-----	Trichloroethene	0.90	10	U
76-13-1-----	Trichlorotrifluoroethane	0.58	10	U
75-01-4-----	Vinyl chloride	1.2	10	U
1330-20-7-----	Xylene (total)	0.74	10	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 0814206A

Level: (low/med) LOW Date Sampled: 08/14/08 12:55

% Moisture: not dec. 21 Date Analyzed: 08/15/08 16:54

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
67-64-1-----	Acetone	2.2	11	U
71-43-2-----	Benzene	0.51	11	U
74-97-5-----	Bromochloromethane	0.46	11	U
75-27-4-----	Bromodichloromethane	0.33	11	U
75-25-2-----	Bromoform	1.1	11	U
74-83-9-----	Bromomethane	0.78	11	U
78-93-3-----	2-Butanone	1.5	11	U
75-15-0-----	Carbon disulfide	1.4	11	U
56-23-5-----	Carbon tetrachloride	0.96	11	U
108-90-7-----	Chlorobenzene	0.37	11	U
75-00-3-----	Chloroethane	1.2	11	U
67-66-3-----	Chloroform	0.60	11	U
74-87-3-----	Chloromethane	0.57	11	U
110-82-7-----	Cyclohexane	0.59	11	U
124-48-1-----	Dibromochloromethane	0.37	11	U
106-93-4-----	1,2-Dibromoethane	0.47	11	U
75-34-3-----	1,1-Dichloroethane	0.59	11	U
107-06-2-----	1,2-Dichloroethane	0.50	11	U
75-35-4-----	1,1-Dichloroethene	1.3	11	U
156-59-2-----	cis-1,2-Dichloroethene	1.3	11	U
156-60-5-----	trans-1,2-Dichloroethene	1.2	11	U
540-59-0-----	1,2-Dichloroethene (total)	1.3	11	U
78-87-5-----	1,2-Dichloropropane	0.50	11	U
10061-01-5----	cis-1,3-Dichloropropene	0.54	11	U
10061-02-6----	trans-1,3-Dichloropropene	0.35	11	U
100-41-4-----	Ethylbenzene	0.82	11	U
591-78-6-----	2-Hexanone	2.5	11	U
98-82-8-----	Isopropylbenzene	0.96	11	U
79-20-9-----	Methyl acetate	1.7	11	U
108-87-2-----	Methyl cyclohexane	0.33	11	U
75-09-2-----	Methylene chloride	0.68	11	1.2 JB
108-10-1-----	4-Methyl-2-pentanone	0.63	11	U
1634-04-4-----	Methyl tert-butyl ether	0.35	11	U
100-42-5-----	Styrene	0.38	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.47	11	U
127-18-4-----	Tetrachloroethene	1.0	11	U
108-88-3-----	Toluene	0.94	11	U
87-61-6-----	1,2,3-Trichlorobenzene	0.46	11	U
120-82-1-----	1,2,4-Trichlorobenzene	0.20	11	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 5.8 (g/mL) G Lab File ID: 0814206A

Level: (low/med) LOW Date Sampled: 08/14/08 12:55

% Moisture: not dec. 21 Date Analyzed: 08/15/08 16:54

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

71-55-6-----	1,1,1-Trichloroethane	0.98	11		U
79-00-5-----	1,1,2-Trichloroethane	0.38	11		U
79-01-6-----	Trichloroethene	0.93	11		U
76-13-1-----	Trichlorotrifluoroethane	0.60	11		U
75-01-4-----	Vinyl chloride	1.2	11		U
1330-20-7----	Xylene (total)	0.76	11		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-07

Sample wt/vol: 6.1 (g/mL) G Lab File ID: 0814207A

Level: (low/med) LOW Date Sampled: 08/14/08 13:00

% Moisture: not dec. 11 Date Analyzed: 08/15/08 17:33

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
67-64-1-----	Acetone	1.8	9.2		U
71-43-2-----	Benzene	0.43	9.2		U
74-97-5-----	Bromochloromethane	0.38	9.2		U
75-27-4-----	Bromodichloromethane	0.28	9.2		U
75-25-2-----	Bromoform	0.92	9.2		U
74-83-9-----	Bromomethane	0.66	9.2		U
78-93-3-----	2-Butanone	1.3	9.2		U
75-15-0-----	Carbon disulfide	1.2	9.2		U
56-23-5-----	Carbon tetrachloride	0.81	9.2		U
108-90-7-----	Chlorobenzene	0.31	9.2		U
75-00-3-----	Chloroethane	1.0	9.2		U
67-66-3-----	Chloroform	0.50	9.2		U
74-87-3-----	Chloromethane	0.48	9.2		U
110-82-7-----	Cyclohexane	0.50	9.2		U
124-48-1-----	Dibromochloromethane	0.31	9.2		U
106-93-4-----	1,2-Dibromoethane	0.39	9.2		U
75-34-3-----	1,1-Dichloroethane	0.50	9.2		U
107-06-2-----	1,2-Dichloroethane	0.42	9.2		U
75-35-4-----	1,1-Dichloroethene	1.1	9.2		U
156-59-2-----	cis-1,2-Dichloroethene	1.1	9.2		U
156-60-5-----	trans-1,2-Dichloroethene	1.0	9.2		U
540-59-0-----	1,2-Dichloroethene (total)	1.1	9.2		U
78-87-5-----	1,2-Dichloropropane	0.42	9.2		U
10061-01-5----	cis-1,3-Dichloropropene	0.46	9.2		U
10061-02-6----	trans-1,3-Dichloropropene	0.29	9.2		U
100-41-4-----	Ethylbenzene	0.69	9.2		U
591-78-6-----	2-Hexanone	2.1	9.2		U
98-82-8-----	Isopropylbenzene	0.81	9.2		U
79-20-9-----	Methyl acetate	1.5	9.2		U
108-87-2-----	Methyl cyclohexane	0.28	9.2		U
75-09-2-----	Methylene chloride	0.57	9.2	1.0	JB
108-10-1-----	4-Methyl-2-pentanone	0.53	9.2		U
1634-04-4----	Methyl tert-butyl ether	0.29	9.2		U
100-42-5-----	Styrene	0.32	9.2		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.39	9.2		U
127-18-4-----	Tetrachloroethene	0.89	9.2		U
108-88-3-----	Toluene	0.79	9.2		U
87-61-6-----	1,2,3-Trichlorobenzene	0.38	9.2		U
120-82-1-----	1,2,4-Trichlorobenzene	0.16	9.2		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-07

Sample wt/vol: 6.1 (g/mL) G Lab File ID: 0814207A

Level: (low/med) LOW Date Sampled: 08/14/08 13:00

% Moisture: not dec. 11 Date Analyzed: 08/15/08 17:33

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
71-55-6-----	1,1,1-Trichloroethane	0.82	9.2		U
79-00-5-----	1,1,2-Trichloroethane	0.32	9.2		U
79-01-6-----	Trichloroethene	0.78	9.2		U
76-13-1-----	Trichlorotrifluoroethane	0.50	9.2		U
75-01-4-----	Vinyl chloride	1.0	9.2		U
1330-20-7-----	Xylene (total)	0.64	9.2		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB 8-14-08-01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) WATER Lab Sample ID: 0808142-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0814208

Level: (low/med) LOW Date Sampled: 08/14/08 :

% Moisture: not dec. _____ Date Analyzed: 08/15/08 12:54

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/L CONC	Q
		MDL	RL	CONC		
67-64-1-----	Acetone	1.1	5.0		U	
71-43-2-----	Benzene	0.11	1.0		U	
74-97-5-----	Bromochloromethane	0.31	1.0		U	
75-27-4-----	Bromodichloromethane	0.086	1.0		U	
75-25-2-----	Bromoform	0.24	1.0		U	
74-83-9-----	Bromomethane	0.33	1.0		U	
78-93-3-----	2-Butanone	1.2	5.0		U	
75-15-0-----	Carbon disulfide	0.13	1.0		U	
56-23-5-----	Carbon tetrachloride	0.14	1.0		U	
108-90-7-----	Chlorobenzene	0.28	1.0		U	
75-00-3-----	Chloroethane	0.38	1.0		U	
67-66-3-----	Chloroform	0.10	1.0		U	
74-87-3-----	Chloromethane	0.40	1.0		U	
110-82-7-----	Cyclohexane	0.18	1.0		U	
124-48-1-----	Dibromochloromethane	0.080	1.0		U	
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U	
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U	
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U	
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U	
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U	
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U	
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U	
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U	
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U	
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U	
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U	
10061-01-5----	cis-1,3-Dichloropropene	0.13	1.0		U	
10061-02-6----	trans-1,3-Dichloropropene	0.22	1.0		U	
100-41-4-----	Ethylbenzene	0.14	1.0		U	
591-78-6-----	2-Hexanone	0.83	5.0		U	
98-82-8-----	Isopropylbenzene	0.034	1.0		U	
79-20-9-----	Methyl acetate	0.87	1.0		U	
108-87-2-----	Methyl cyclohexane	0.20	1.0		U	
75-09-2-----	Methylene chloride	0.26	2.0		U	
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U	
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U	
100-42-5-----	Styrene	0.22	1.0		U	
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U	
127-18-4-----	Tetrachloroethene	0.14	1.0		U	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB 8-14-08-01

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) WATER Lab Sample ID: 0808142-08

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 0814208

Level: (low/med) LOW Date Sampled: 08/14/08 :

% Moisture: not dec. _____ Date Analyzed: 08/15/08 12:54

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/L CONC	Q
		MDL	RL		
108-88-3-----	Toluene	0.18	1.0		U
87-61-6-----	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1-----	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6-----	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5-----	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6-----	Trichloroethene	0.28	1.0		U
76-13-1-----	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4-----	Trichlorofluoromethane	0.15	5.0		U
75-01-4-----	Vinyl chloride	0.19	1.0		U
1330-20-7-----	Xylene (total)	0.21	1.0		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814201

% Moisture: 13 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 13:37

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	30	380		U
208-96-8	Acenaphthylene	22	380		U
98-86-2	Acetophenone	47	380		U
120-12-7	Anthracene	31	380		U
1912-24-9	Atrazine	32	380		U
100-52-7	Benzaldehyde	64	380		U
56-55-3	Benzo (a) anthracene	42	380		U
205-99-2	Benzo (b) fluoranthene	36	380		U
207-08-9	Benzo (k) fluoranthene	45	380		U
191-24-2	Benzo (g, h, i) perylene	81	380		U
50-32-8	Benzo (a) pyrene	26	380		U
111-91-1	bis (2-Chloroethoxy) methane	35	380		U
92-52-4	1,1'-Biphenyl	34	380		U
111-44-4	bis (2-Chloroethyl) ether	47	380		U
108-60-1	bis (2-Chloroisopropyl) ether	59	380		U
117-81-7	Bis (2-ethylhexyl) phthalate	41	380		U
101-55-3	4-Bromophenyl-phenylether	30	380		U
85-68-7	Butylbenzylphthalate	34	380		U
86-74-8	Carbazole	41	380		U
106-47-8	4-Chloroaniline	55	380		U
105-60-2	Caprolactam	77	380		U
59-50-7	4-Chloro-3-methylphenol	32	380		U
91-58-7	2-Chloronaphthalene	37	380		U
95-57-8	2-Chlorophenol	47	380		U
7005-72-3	4-Chlorophenyl-phenylether	35	380		U
218-01-9	Chrysene	35	380		U
53-70-3	Dibenz (a, h) anthracene	69	380		U
132-64-9	Dibenzofuran	28	380		U
91-94-1	3,3'-Dichlorobenzidine	36	380		U
120-83-2	2,4-Dichlorophenol	22	380		U
84-66-2	Diethylphthalate	39	380		U
105-67-9	2,4-Dimethylphenol	24	380		U
131-11-3	Dimethylphthalate	35	380		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814201

% Moisture: 13 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted:08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 13:37

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	35	380		U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	950		U
51-28-5-----	2,4-Dinitrophenol	150	950		U
121-14-2-----	2,4-Dinitrotoluene	28	380		U
606-20-2-----	2,6-Dinitrotoluene	43	380		U
117-84-0-----	Di-n-octylphthalate	31	380		U
206-44-0-----	Fluoranthene	61	380		U
86-73-7-----	Fluorene	30	380		U
118-74-1-----	Hexachlorobenzene	40	380		U
87-68-3-----	Hexachlorobutadiene	38	380		U
77-47-4-----	Hexachlorocyclopentadiene	70	380		U
67-72-1-----	Hexachloroethane	45	380		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	53	380		U
78-59-1-----	Isophorone	32	380		U
91-57-6-----	2-Methylnaphthalene	40	380		U
95-48-7-----	2-Methylphenol	44	380		U
106-44-5-----	4-Methylphenol	30	380		U
91-20-3-----	Naphthalene	37	380		U
88-74-4-----	2-Nitroaniline	37	380		U
99-09-2-----	3-Nitroaniline	54	950		U
100-01-6-----	4-Nitroaniline	120	950		U
98-95-3-----	Nitrobenzene	40	380		U
88-75-5-----	2-Nitrophenol	25	380		U
100-02-7-----	4-Nitrophenol	93	950		U
86-30-6-----	N-Nitrosodiphenylamine (1)	37	380		U
621-64-7-----	N-Nitroso-di-n-propylamine	63	380		U
87-86-5-----	Pentachlorophenol	39	950		U
85-01-8-----	Phenanthrene	26	380		U
108-95-2-----	Phenol	41	380		U
129-00-0-----	Pyrene	46	380		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	380		U
95-95-4-----	2,4,5-Trichlorophenol	31	950		U
88-06-2-----	2,4,6-Trichlorophenol	40	380		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QTDUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814202

% Moisture: 12 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 14:14

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

83-32-9-----	Acenaphthene	30	380		U
208-96-8-----	Acenaphthylene	22	380		U
98-86-2-----	Acetophenone	47	380		U
120-12-7-----	Anthracene	31	380		U
1912-24-9-----	Atrazine	32	380		U
100-52-7-----	Benzaldehyde	63	380		U
56-55-3-----	Benzo (a) anthracene	42	380		U
205-99-2-----	Benzo (b) fluoranthene	36	380		U
207-08-9-----	Benzo (k) fluoranthene	45	380		U
191-24-2-----	Benzo (g, h, i) perylene	80	380		U
50-32-8-----	Benzo (a) pyrene	26	380		U
111-91-1-----	bis (2-Chloroethoxy) methane	35	380		U
92-52-4-----	1,1'-Biphenyl	34	380		U
111-44-4-----	bis (2-Chloroethyl) ether	46	380		U
108-60-1-----	bis (2-Chloroisopropyl) ether	58	380		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	41	380		U
101-55-3-----	4-Bromophenyl-phenylether	30	380		U
85-68-7-----	Butylbenzylphthalate	34	380		U
86-74-8-----	Carbazole	41	380		U
106-47-8-----	4-Chloroaniline	55	380		U
105-60-2-----	Caprolactam	77	380		U
59-50-7-----	4-Chloro-3-methylphenol	32	380		U
91-58-7-----	2-Chloronaphthalene	36	380		U
95-57-8-----	2-Chlorophenol	46	380		U
7005-72-3-----	4-Chlorophenyl-phenylether	35	380		U
218-01-9-----	Chrysene	35	380		U
53-70-3-----	Dibenz (a, h) anthracene	69	380		U
132-64-9-----	Dibenzofuran	28	380		U
91-94-1-----	3,3'-Dichlorobenzidine	36	380		U
120-83-2-----	2,4-Dichlorophenol	22	380		U
84-66-2-----	Diethylphthalate	39	380		U
105-67-9-----	2,4-Dimethylphenol	24	380		U
131-11-3-----	Dimethylphthalate	35	380		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QTDUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814202

% Moisture: 12 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 14:14

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

84-74-2-----	Di-n-butylphthalate	35	380		U
534-52-1-----	4,6-Dinitro-2-methylphenol	25	950		U
51-28-5-----	2,4-Dinitrophenol	150	950		U
121-14-2-----	2,4-Dinitrotoluene	27	380		U
606-20-2-----	2,6-Dinitrotoluene	43	380		U
117-84-0-----	Di-n-octylphthalate	31	380		U
206-44-0-----	Fluoranthene	61	380		U
86-73-7-----	Fluorene	30	380		U
118-74-1-----	Hexachlorobenzene	40	380		U
77-68-3-----	Hexachlorobutadiene	37	380		U
77-47-4-----	Hexachlorocyclopentadiene	70	380		U
67-72-1-----	Hexachloroethane	45	380		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	53	380		U
78-59-1-----	Isophorone	32	380		U
91-57-6-----	2-Methylnaphthalene	40	380		U
95-48-7-----	2-Methylphenol	44	380		U
106-44-5-----	4-Methylphenol	30	380		U
91-20-3-----	Naphthalene	37	380		U
88-74-4-----	2-Nitroaniline	37	380		U
99-09-2-----	3-Nitroaniline	54	950		U
100-01-6-----	4-Nitroaniline	110	950		U
98-95-3-----	Nitrobenzene	39	380		U
88-75-5-----	2-Nitrophenol	25	380		U
100-02-7-----	4-Nitrophenol	92	950		U
86-30-6-----	N-Nitrosodiphenylamine (1)	36	380		U
621-64-7-----	N-Nitroso-di-n-propylamine	63	380		U
87-86-5-----	Pentachlorophenol	38	950		U
85-01-8-----	Phenanthrene	26	380		U
108-95-2-----	Phenol	41	380		U
129-00-0-----	Pyrene	45	380		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	380		U
95-95-4-----	2,4,5-Trichlorophenol	30	950		U
88-06-2-----	2,4,6-Trichlorophenol	40	380		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814203

% Moisture: 19 decanted: (Y/N) N Date Sampled: 08/14/08 12:50

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 14:51

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	UG/KG	Q
83-32-9	Acenaphthene	33	410			U
208-96-8	Acenaphthylene	24	410			U
98-86-2	Acetophenone	51	410			U
120-12-7	Anthracene	34	410			U
1912-24-9	Atrazine	35	410			U
100-52-7	Benzaldehyde	69	410			U
56-55-3	Benzo(a)anthracene	45	410			U
205-99-2	Benzo(b)fluoranthene	39	410			U
207-08-9	Benzo(k)fluoranthene	49	410			U
191-24-2	Benzo(g,h,i)perylene	87	410			U
50-32-8	Benzo(a)pyrene	28	410			U
111-91-1	bis(2-Chloroethoxy)methane	38	410			U
92-52-4	1,1'-Biphenyl	36	410			U
111-44-4	bis(2-Chloroethyl)ether	50	410			U
108-60-1	bis(2-Chloroisopropyl)ether	63	410			U
117-81-7	Bis(2-ethylhexyl)phthalate	45	410			U
101-55-3	4-Bromophenyl-phenylether	32	410		47	JB
85-68-7	Butylbenzylphthalate	37	410			U
86-74-8	Carbazole	45	410			U
106-47-8	4-Chloroaniline	59	410			U
105-60-2	Caprolactam	83	410			U
59-50-7	4-Chloro-3-methylphenol	34	410			U
91-58-7	2-Chloronaphthalene	40	410			U
95-57-8	2-Chlorophenol	50	410			U
7005-72-3	4-Chlorophenyl-phenylether	38	410			U
218-01-9	Chrysene	38	410			U
53-70-3	Dibenz(a,h)anthracene	74	410			U
132-64-9	Dibenzofuran	30	410			U
91-94-1	3,3'-Dichlorobenzidine	39	410			U
120-83-2	2,4-Dichlorophenol	23	410			U
84-66-2	Diethylphthalate	42	410			U
105-67-9	2,4-Dimethylphenol	26	410			U
131-11-3	Dimethylphthalate	38	410			U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814203

% Moisture: 19 decanted: (Y/N) N Date Sampled: 08/14/08 12:50

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 14:51

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2-----	Di-n-butylphthalate	38	410		U
534-52-1-----	4,6-Dinitro-2-methylphenol	27	1000		U
51-28-5-----	2,4-Dinitrophenol	160	1000		U
121-14-2-----	2,4-Dinitrotoluene	30	410		U
606-20-2-----	2,6-Dinitrotoluene	47	410		U
117-84-0-----	Di-n-octylphthalate	33	410		U
206-44-0-----	Fluoranthene	66	410		U
86-73-7-----	Fluorene	32	410		U
118-74-1-----	Hexachlorobenzene	43	410		U
87-68-3-----	Hexachlorobutadiene	40	410		U
77-47-4-----	Hexachlorocyclopentadiene	76	410		U
67-72-1-----	Hexachloroethane	49	410		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	57	410		U
78-59-1-----	Isophorone	35	410		U
91-57-6-----	2-Methylnaphthalene	43	410		U
95-48-7-----	2-Methylphenol	48	410		U
106-44-5-----	4-Methylphenol	33	410		U
91-20-3-----	Naphthalene	40	410		U
88-74-4-----	2-Nitroaniline	40	410		U
99-09-2-----	3-Nitroaniline	58	1000		U
100-01-6-----	4-Nitroaniline	120	1000		U
98-95-3-----	Nitrobenzene	43	410		U
88-75-5-----	2-Nitrophenol	27	410		U
100-02-7-----	4-Nitrophenol	100	1000		U
86-30-6-----	N-Nitrosodiphenylamine (1)	40	410		U
621-64-7-----	N-Nitroso-di-n-propylamine	68	410		U
87-86-5-----	Pentachlorophenol	42	1000		U
85-01-8-----	Phenanthrene	28	410		U
108-95-2-----	Phenol	45	410		U
129-00-0-----	Pyrene	49	410		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	410		U
95-95-4-----	2,4,5-Trichlorophenol	33	1000		U
88-06-2-----	2,4,6-Trichlorophenol	43	410		U

(1) - Cannot be separated from Diphenylamine
FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814204

% Moisture: 17 decanted: (Y/N) N Date Sampled: 08/14/08 12:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 15:28

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9-----	Acenaphthene	32	400		U
208-96-8-----	Acenaphthylene	24	400		U
98-86-2-----	Acetophenone	49	400		U
120-12-7-----	Anthracene	33	400		U
1912-24-9-----	Atrazine	34	400		U
100-52-7-----	Benzaldehyde	66	400		U
56-55-3-----	Benzo (a) anthracene	44	400		U
205-99-2-----	Benzo (b) fluoranthene	38	400		U
207-08-9-----	Benzo (k) fluoranthene	47	400		U
191-24-2-----	Benzo (g, h, i) perylene	85	400		U
50-32-8-----	Benzo (a) pyrene	27	400		U
111-91-1-----	bis (2-Chloroethoxy) methane	37	400		U
92-52-4-----	1,1'-Biphenyl	35	400		U
111-44-4-----	bis (2-Chloroethyl) ether	49	400		U
108-60-1-----	bis (2-Chloroisopropyl) ether	61	400		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	43	400		U
101-55-3-----	4-Bromophenyl-phenylether	31	400		U
85-68-7-----	Butylbenzylphthalate	36	400		U
86-74-8-----	Carbazole	43	400		U
106-47-8-----	4-Chloroaniline	57	400		U
105-60-2-----	Caprolactam	81	400		U
59-50-7-----	4-Chloro-3-methylphenol	33	400		U
91-58-7-----	2-Chloronaphthalene	38	400		U
95-57-8-----	2-Chlorophenol	49	400		U
7005-72-3-----	4-Chlorophenyl-phenylether	37	400		U
218-01-9-----	Chrysene	37	400		U
53-70-3-----	Dibenz (a, h) anthracene	72	400		U
132-64-9-----	Dibenzofuran	29	400		U
91-94-1-----	3,3'-Dichlorobenzidine	38	400		U
120-83-2-----	2,4-Dichlorophenol	22	400		U
84-66-2-----	Diethylphthalate	41	400		U
105-67-9-----	2,4-Dimethylphenol	26	400		U
131-11-3-----	Dimethylphthalate	36	400		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814204

% Moisture: 17 decanted: (Y/N) N Date Sampled: 08/14/08 12:40

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 15:28

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

84-74-2-----	Di-n-butylphthalate	36	400		U
534-52-1-----	4,6-Dinitro-2-methylphenol	26	1000		U
51-28-5-----	2,4-Dinitrophenol	160	1000		U
121-14-2-----	2,4-Dinitrotoluene	29	400		U
606-20-2-----	2,6-Dinitrotoluene	45	400		U
117-84-0-----	Di-n-octylphthalate	32	400		U
206-44-0-----	Fluoranthene	64	400		U
86-73-7-----	Fluorene	31	400		U
118-74-1-----	Hexachlorobenzene	42	400		U
87-68-3-----	Hexachlorobutadiene	39	400		U
77-47-4-----	Hexachlorocyclopentadiene	73	400		U
67-72-1-----	Hexachloroethane	47	400		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	55	400		U
78-59-1-----	Isophorone	34	400		U
91-57-6-----	2-Methylnaphthalene	42	400		U
95-48-7-----	2-Methylphenol	46	400		U
106-44-5-----	4-Methylphenol	32	400		U
91-20-3-----	Naphthalene	39	400		U
88-74-4-----	2-Nitroaniline	38	400		U
99-09-2-----	3-Nitroaniline	57	1000		U
100-01-6-----	4-Nitroaniline	120	1000		U
98-95-3-----	Nitrobenzene	41	400		U
88-75-5-----	2-Nitrophenol	26	400		U
100-02-7-----	4-Nitrophenol	97	1000		U
86-30-6-----	N-Nitrosodiphenylamine (1)	38	400		U
621-64-7-----	N-Nitroso-di-n-propylamine	66	400		U
87-86-5-----	Pentachlorophenol	40	1000		U
85-01-8-----	Phenanthrene	27	400		U
108-95-2-----	Phenol	43	400		U
129-00-0-----	Pyrene	48	400		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	120	400		U
95-95-4-----	2,4,5-Trichlorophenol	32	1000		U
88-06-2-----	2,4,6-Trichlorophenol	42	400		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814205

% Moisture: 14 decanted: (Y/N) N Date Sampled: 08/14/08 12:35

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 16:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
83-32-9	Acenaphthene	31	390		U
208-96-8	Acenaphthylene	23	390		U
98-86-2	Acetophenone	48	390		U
120-12-7	Anthracene	32	390		U
1912-24-9	Atrazine	33	390		U
100-52-7	Benzaldehyde	65	390		U
56-55-3	Benzo (a) anthracene	42	390		U
205-99-2	Benzo (b) fluoranthene	37	390	78	J
207-08-9	Benzo (k) fluoranthene	46	390		U
191-24-2	Benzo (g, h, i) perylene	82	390		U
50-32-8	Benzo (a) pyrene	27	390		U
111-91-1	bis (2-Chloroethoxy) methane	36	390		U
92-52-4	1,1'-Biphenyl	34	390		U
111-44-4	bis (2-Chloroethyl) ether	48	390		U
108-60-1	bis (2-Chloroisopropyl) ether	60	390		U
117-81-7	Bis (2-ethylhexyl) phthalate	42	390		U
101-55-3	4-Bromophenyl-phenylether	30	390		U
85-68-7	Butylbenzylphthalate	35	390		U
86-74-8	Carbazole	42	390		U
106-47-8	4-Chloroaniline	56	390		U
105-60-2	Caprolactam	78	390		U
59-50-7	4-Chloro-3-methylphenol	32	390		U
91-58-7	2-Chloronaphthalene	37	390		U
95-57-8	2-Chlorophenol	48	390		U
7005-72-3	4-Chlorophenyl-phenylether	36	390		U
218-01-9	Chrysene	36	390		U
53-70-3	Dibenz (a, h) anthracene	70	390		U
132-64-9	Dibenzofuran	28	390		U
91-94-1	3,3'-Dichlorobenzidine	37	390		U
120-83-2	2,4-Dichlorophenol	22	390		U
84-66-2	Diethylphthalate	40	390		U
105-67-9	2,4-Dimethylphenol	25	390		U
131-11-3	Dimethylphthalate	36	390		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814205

% Moisture: 14 decanted: (Y/N) N Date Sampled: 08/14/08 12:35

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 16:05

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
84-74-2	Di-n-butylphthalate	35	390		U
534-52-1	4,6-Dinitro-2-methylphenol	25	970		U
51-28-5	2,4-Dinitrophenol	160	970		U
121-14-2	2,4-Dinitrotoluene	28	390		U
606-20-2	2,6-Dinitrotoluene	44	390		U
117-84-0	Di-n-octylphthalate	31	390		U
206-44-0	Fluoranthene	62	390		U
86-73-7	Fluorene	30	390		U
118-74-1	Hexachlorobenzene	40	390		U
87-68-3	Hexachlorobutadiene	38	390		U
77-47-4	Hexachlorocyclopentadiene	71	390		U
67-72-1	Hexachloroethane	46	390		U
193-39-5	Indeno(1,2,3-cd)pyrene	54	390		U
78-59-1	Isophorone	33	390		U
91-57-6	2-Methylnaphthalene	41	390		U
95-48-7	2-Methylphenol	45	390		U
106-44-5	4-Methylphenol	31	390		U
91-20-3	Naphthalene	38	390		U
88-74-4	2-Nitroaniline	37	390		U
99-09-2	3-Nitroaniline	55	970		U
100-01-6	4-Nitroaniline	120	970		U
98-95-3	Nitrobenzene	40	390		U
88-75-5	2-Nitrophenol	26	390		U
100-02-7	4-Nitrophenol	94	970		U
86-30-6	N-Nitrosodiphenylamine (1)	37	390		U
621-64-7	N-Nitroso-di-n-propylamine	64	390		U
87-86-5	Pentachlorophenol	39	970		U
85-01-8	Phenanthrene	27	390		U
108-95-2	Phenol	42	390		U
129-00-0	Pyrene	46	390		U
95-94-3	1,2,4,5-Tetrachlorobenzene	120	390		U
95-95-4	2,4,5-Trichlorophenol	31	970		U
88-06-2	2,4,6-Trichlorophenol	41	390		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814206

% Moisture: 21 decanted: (Y/N) N Date Sampled: 08/14/08 12:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 16:42

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or ug/Kg) RL	CONC	
83-32-9	Acenaphthene	33	420		U
208-96-8	Acenaphthylene	25	420		U
98-86-2	Acetophenone	52	420		U
120-12-7	Anthracene	34	420		U
1912-24-9	Atrazine	36	420		U
100-52-7	Benzaldehyde	70	420		U
56-55-3	Benzo (a) anthracene	46	420		U
205-99-2	Benzo (b) fluoranthene	40	420		U
207-08-9	Benzo (k) fluoranthene	50	420		U
191-24-2	Benzo (g, h, i) perylene	89	420		U
50-32-8	Benzo (a) pyrene	29	420		U
111-91-1	bis (2-Chloroethoxy) methane	39	420		U
92-52-4	1, 1'-Biphenyl	37	420		U
111-44-4	bis (2-Chloroethyl) ether	52	420		U
108-60-1	bis (2-Chloroisopropyl) ether	65	420		U
117-81-7	Bis (2-ethylhexyl) phthalate	46	420	63	JB
101-55-3	4-Bromophenyl-phenylether	33	420		U
85-68-7	Butylbenzylphthalate	38	420		U
86-74-8	Carbazole	46	420		U
106-47-8	4-Chloroaniline	60	420		U
105-60-2	Caprolactam	85	420		U
59-50-7	4-Chloro-3-methylphenol	35	420		U
91-58-7	2-Chloronaphthalene	40	420		U
95-57-8	2-Chlorophenol	52	420		U
7005-72-3	4-Chlorophenyl-phenylether	39	420		U
218-01-9	Chrysene	39	420		U
53-70-3	Dibenz (a, h) anthracene	76	420		U
132-64-9	Dibenzofuran	31	420		U
91-94-1	3, 3'-Dichlorobenzidine	40	420		U
120-83-2	2, 4-Dichlorophenol	24	420		U
84-66-2	Diethylphthalate	43	420		U
105-67-9	2, 4-Dimethylphenol	27	420		U
131-11-3	Dimethylphthalate	38	420		U

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814206

% Moisture: 21 decanted: (Y/N) N Date Sampled: 08/14/08 12:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 16:42

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG	Q
		MDL	(ug/L or ug/Kg) RL CONC		
84-74-2-----	Di-n-butylphthalate	38	420	53	J
534-52-1-----	4,6-Dinitro-2-methylphenol	28	1000		U
51-28-5-----	2,4-Dinitrophenol	170	1000		U
121-14-2-----	2,4-Dinitrotoluene	30	420		U
606-20-2-----	2,6-Dinitrotoluene	48	420		U
117-84-0-----	Di-n-octylphthalate	34	420		U
206-44-0-----	Fluoranthene	68	420		U
86-73-7-----	Fluorene	33	420		U
118-74-1-----	Hexachlorobenzene	44	420		U
87-68-3-----	Hexachlorobutadiene	41	420		U
77-47-4-----	Hexachlorocyclopentadiene	77	420		U
67-72-1-----	Hexachloroethane	50	420		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	58	420		U
78-59-1-----	Isophorone	36	420		U
91-57-6-----	2-Methylnaphthalene	44	420		U
95-48-7-----	2-Methylphenol	49	420		U
106-44-5-----	4-Methylphenol	34	420		U
91-20-3-----	Naphthalene	41	420		U
88-74-4-----	2-Nitroaniline	40	420		U
99-09-2-----	3-Nitroaniline	60	1000		U
100-01-6-----	4-Nitroaniline	130	1000		U
98-95-3-----	Nitrobenzene	44	420		U
88-75-5-----	2-Nitrophenol	28	420		U
100-02-7-----	4-Nitrophenol	100	1000		U
86-30-6-----	N-Nitrosodiphenylamine (1)	40	420		U
621-64-7-----	N-Nitroso-di-n-propylamine	69	420		U
87-86-5-----	Pentachlorophenol	43	1000		U
85-01-8-----	Phenanthrene	29	420		U
108-95-2-----	Phenol	46	420		U
129-00-0-----	Pyrene	50	420		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	130	420		U
95-95-4-----	2,4,5-Trichlorophenol	34	1000		U
88-06-2-----	2,4,6-Trichlorophenol	44	420		U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-07

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 0814207

% Moisture: 11 decanted: (Y/N) N Date Sampled: 08/14/08 13:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 17:19

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

84-74-2-----	Di-n-butylphthalate	34	370		U
534-52-1-----	4,6-Dinitro-2-methylphenol	24	930		U
51-28-5-----	2,4-Dinitrophenol	150	930		U
121-14-2-----	2,4-Dinitrotoluene	27	370		U
606-20-2-----	2,6-Dinitrotoluene	42	370		U
117-84-0-----	Di-n-octylphthalate	30	370		U
206-44-0-----	Fluoranthene	60	370		U
86-73-7-----	Fluorene	29	370		U
118-74-1-----	Hexachlorobenzene	39	370		U
87-68-3-----	Hexachlorobutadiene	37	370		U
77-47-4-----	Hexachlorocyclopentadiene	68	370		U
67-72-1-----	Hexachloroethane	44	370		U
193-39-5-----	Indeno(1,2,3-cd)pyrene	52	370		U
78-59-1-----	Isophorone	32	370		U
91-57-6-----	2-Methylnaphthalene	39	370		U
95-48-7-----	2-Methylphenol	43	370		U
106-44-5-----	4-Methylphenol	30	370		U
91-20-3-----	Naphthalene	36	370		U
88-74-4-----	2-Nitroaniline	36	370		U
99-09-2-----	3-Nitroaniline	53	930		U
100-01-6-----	4-Nitroaniline	110	930		U
98-95-3-----	Nitrobenzene	39	370		U
88-75-5-----	2-Nitrophenol	25	370		U
100-02-7-----	4-Nitrophenol	90	930		U
86-30-6-----	N-Nitrosodiphenylamine (1)	36	370		U
621-64-7-----	N-Nitroso-di-n-propylamine	61	370		U
87-86-5-----	Pentachlorophenol	38	930		U
85-01-8-----	Phenanthrene	26	370		U
108-95-2-----	Phenol	40	370		U
129-00-0-----	Pyrene	44	370		U
95-94-3-----	1,2,4,5-Tetrachlorobenzene	110	370		U
95-95-4-----	2,4,5-Trichlorophenol	30	930		U
88-06-2-----	2,4,6-Trichlorophenol	39	370		U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 036F3601

% Moisture: 13 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 06:34

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.13	0.38	U
319-84-6-----	Alpha-BHC	0.13	0.38	U
5103-71-9-----	Alpha-Chlordane	0.13	0.38	U
319-85-7-----	Beta-BHC	0.13	0.38	U
72-54-8-----	4,4'-DDD	0.19	0.76	U
72-55-9-----	4,4'-DDE	0.19	0.76	U
50-29-3-----	4,4'-DDT	0.19	0.76	U
319-86-8-----	Delta-BHC	0.13	0.38	U
60-57-1-----	Dieldrin	0.19	0.76	U
959-98-8-----	Endosulfan I	0.13	0.38	U
33213-65-9---	Endosulfan II	0.19	0.76	U
1031-07-8-----	Endosulfan Sulfate	0.19	0.76	U
72-20-8-----	Endrin	0.19	0.76	U
7421-93-4-----	Endrin Aldehyde	0.19	0.76	U
53494-70-5----	Endrin Ketone	0.19	0.76	U
58-89-9-----	Gamma-BHC	0.13	0.38	U
5103-74-2-----	Gamma-Chlordane	0.13	0.38	U
76-44-8-----	Heptachlor	0.13	0.38	U
1024-57-3-----	Heptachlor Epoxide	0.13	0.38	U
72-43-5-----	Methoxychlor	0.13	0.38	U
8001-35-2-----	Toxaphene	13	38	U
12674-11-2----	PCB-1016	4.8	19	U
11104-28-2----	PCB-1221	4.8	19	U
11141-16-5----	PCB-1232	4.8	19	U
53469-21-9----	PCB-1242	4.8	19	U
12672-29-6----	PCB-1248	4.8	19	U
11097-69-1----	PCB-1254	4.8	19	U
11096-82-5----	PCB-1260	4.8	19	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QTDUP

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-02

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 037F3701

% Moisture: 12 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 06:53

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:			UG/KG Q
		MDL	(ug/L or RL	ug/Kg) CONC	
309-00-2-----	Aldrin	0.12	0.38		U
319-84-6-----	Alpha-BHC	0.12	0.38		U
5103-71-9-----	Alpha-Chlordane	0.12	0.38		U
319-85-7-----	Beta-BHC	0.12	0.38		U
72-54-8-----	4,4'-DDD	0.19	0.76		U
72-55-9-----	4,4'-DDE	0.19	0.76		U
50-29-3-----	4,4'-DDT	0.19	0.76		U
319-86-8-----	Delta-BHC	0.12	0.38		U
60-57-1-----	Dieldrin	0.19	0.76		U
959-98-8-----	Endosulfan I	0.12	0.38		U
33213-65-9-----	Endosulfan II	0.19	0.76		U
1031-07-8-----	Endosulfan Sulfate	0.19	0.76		U
72-20-8-----	Endrin	0.19	0.76		U
7421-93-4-----	Endrin Aldehyde	0.19	0.76		U
53494-70-5-----	Endrin Ketone	0.19	0.76		U
58-89-9-----	Gamma-BHC	0.12	0.38		U
5103-74-2-----	Gamma-Chlordane	0.12	0.38		U
76-44-8-----	Heptachlor	0.12	0.38		U
1024-57-3-----	Heptachlor Epoxide	0.12	0.38		U
72-43-5-----	Methoxychlor	0.12	0.38		U
8001-35-2-----	Toxaphene	12	38		U
12674-11-2-----	PCB-1016	4.8	19		U
11104-28-2-----	PCB-1221	4.8	19		U
11141-16-5-----	PCB-1232	4.8	19		U
53469-21-9-----	PCB-1242	4.8	19		U
12672-29-6-----	PCB-1248	4.8	19		U
11097-69-1-----	PCB-1254	4.8	19		U
11096-82-5-----	PCB-1260	4.8	19		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 038F3801

% Moisture: 19 decanted: (Y/N) N Date Sampled: 08/14/08 12:50

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 07:11

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.14	0.41	U
319-84-6-----	Alpha-BHC	0.14	0.41	U
5103-71-9-----	Alpha-Chlordane	0.14	0.41	U
319-85-7-----	Beta-BHC	0.14	0.41	U
72-54-8-----	4,4'-DDD	0.21	0.82	U
72-55-9-----	4,4'-DDE	0.21	0.82	U
50-29-3-----	4,4'-DDT	0.21	0.82	U
319-86-8-----	Delta-BHC	0.14	0.41	U
60-57-1-----	Dieldrin	0.21	0.82	U
959-98-8-----	Endosulfan I	0.14	0.41	U
33213-65-9----	Endosulfan II	0.21	0.82	U
1031-07-8-----	Endosulfan Sulfate	0.21	0.82	U
72-20-8-----	Endrin	0.21	0.82	U
7421-93-4-----	Endrin Aldehyde	0.21	0.82	U
53494-70-5----	Endrin Ketone	0.21	0.82	U
58-89-9-----	Gamma-BHC	0.14	0.41	U
5103-74-2-----	Gamma-Chlordane	0.14	0.41	U
76-44-8-----	Heptachlor	0.14	0.41	U
1024-57-3-----	Heptachlor Epoxide	0.14	0.41	U
72-43-5-----	Methoxychlor	0.14	0.41	U
8001-35-2-----	Toxaphene	14	41	U
12674-11-2----	PCB-1016	5.2	21	U
11104-28-2----	PCB-1221	5.2	21	U
11141-16-5----	PCB-1232	5.2	21	U
53469-21-9----	PCB-1242	5.2	21	U
12672-29-6----	PCB-1248	5.2	21	U
11097-69-1----	PCB-1254	5.2	21	U
11096-82-5----	PCB-1260	5.2	21	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 039F3901

% Moisture: 17 decanted: (Y/N) N Date Sampled: 08/14/08 12:40

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 07:30

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.13	0.40	U
319-84-6-----	Alpha-BHC	0.13	0.40	U
5103-71-9-----	Alpha-Chlordane	0.13	0.40	U
319-85-7-----	Beta-BHC	0.13	0.40	0.16 J
72-54-8-----	4,4'-DDD	0.20	0.80	U
72-55-9-----	4,4'-DDE	0.20	0.80	U
50-29-3-----	4,4'-DDT	0.20	0.80	U
319-86-8-----	Delta-BHC	0.13	0.40	U
60-57-1-----	Dieldrin	0.20	0.80	U
959-98-8-----	Endosulfan I	0.13	0.40	U
33213-65-9----	Endosulfan II	0.20	0.80	U
1031-07-8-----	Endosulfan Sulfate	0.20	0.80	U
72-20-8-----	Endrin	0.20	0.80	U
7421-93-4-----	Endrin Aldehyde	0.20	0.80	U
53494-70-5----	Endrin Ketone	0.20	0.80	U
58-89-9-----	Gamma-BHC	0.13	0.40	U
5103-74-2-----	Gamma-Chlordane	0.13	0.40	U
76-44-8-----	Heptachlor	0.13	0.40	U
1024-57-3-----	Heptachlor Epoxide	0.13	0.40	U
72-43-5-----	Methoxychlor	0.13	0.40	U
8001-35-2-----	Toxaphene	13	40	U
12674-11-2----	PCB-1016	5.0	20	U
11104-28-2----	PCB-1221	5.0	20	U
11141-16-5----	PCB-1232	5.0	20	U
53469-21-9----	PCB-1242	5.0	20	U
12672-29-6----	PCB-1248	5.0	20	U
11097-69-1----	PCB-1254	5.0	20	U
11096-82-5----	PCB-1260	5.0	20	U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 040F4001

% Moisture: 14 decanted: (Y/N) N Date Sampled: 08/14/08 12:35

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 07:49

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG	
		MDL	(ug/L or ug/Kg) RL CONC			Q
309-00-2-----	Aldrin	0.13	0.39		U
319-84-6-----	Alpha-BHC	0.13	0.39		U
5103-71-9-----	Alpha-Chlordane	0.13	0.39		U
319-85-7-----	Beta-BHC	0.13	0.39		U
72-54-8-----	4,4'-DDD	0.19	0.78		U
72-55-9-----	4,4'-DDE	0.19	0.78	0.58	J
50-29-3-----	4,4'-DDT	0.19	0.78	1.5	
319-86-8-----	Delta-BHC	0.13	0.39		U
60-57-1-----	Dieldrin	0.19	0.78	0.22	JPM
959-98-8-----	Endosulfan I	0.13	0.39		U
33213-65-9----	Endosulfan II	0.19	0.78		U
1031-07-8-----	Endosulfan Sulfate	0.19	0.78		U
72-20-8-----	Endrin	0.19	0.78		U
7421-93-4-----	Endrin Aldehyde	0.19	0.78		U
53494-70-5----	Endrin Ketone	0.19	0.78		U
58-89-9-----	Gamma-BHC	0.13	0.39		U
5103-74-2-----	Gamma-Chlordane	0.13	0.39		U
76-44-8-----	Heptachlor	0.13	0.39		U
1024-57-3-----	Heptachlor Epoxide	0.13	0.39		U
72-43-5-----	Methoxychlor	0.13	0.39		U
8001-35-2-----	Toxaphene	13	39		U
12674-11-2----	PCB-1016	4.8	19		U
11104-28-2----	PCB-1221	4.8	19		U
11141-16-5----	PCB-1232	4.8	19		U
53469-21-9----	PCB-1242	4.8	19		U
12672-29-6----	PCB-1248	4.8	19		U
11097-69-1----	PCB-1254	4.8	19		U
11096-82-5----	PCB-1260	4.8	19		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 041F4101

% Moisture: 21 decanted: (Y/N) N Date Sampled: 08/14/08 12:55

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 08:07

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

309-00-2-----	Aldrin	0.14	0.42		U
319-84-6-----	Alpha-BHC	0.14	0.42	0.26	J
5103-71-9-----	Alpha-Chlordane	0.14	0.42		U
319-85-7-----	Beta-BHC	0.14	0.42	0.22	J
72-54-8-----	4,4'-DDD	0.21	0.84		U
72-55-9-----	4,4'-DDE	0.21	0.84		U
50-29-3-----	4,4'-DDT	0.21	0.84		U
319-86-8-----	Delta-BHC	0.14	0.42		U
60-57-1-----	Diieldrin	0.21	0.84		U
959-98-8-----	Endosulfan I	0.14	0.42		U
33213-65-9----	Endosulfan II	0.21	0.84		U
1031-07-8-----	Endosulfan Sulfate	0.21	0.84		U
72-20-8-----	Endrin	0.21	0.84		U
7421-93-4-----	Endrin Aldehyde	0.21	0.84		U
53494-70-5----	Endrin Ketone	0.21	0.84		U
58-89-9-----	Gamma-BHC	0.14	0.42		U
5103-74-2-----	Gamma-Chlordane	0.14	0.42		U
76-44-8-----	Heptachlor	0.14	0.42		U
1024-57-3-----	Heptachlor Epoxide	0.14	0.42		U
72-43-5-----	Methoxychlor	0.14	0.42		U
8001-35-2-----	Toxaphene	14	42		U
12674-11-2----	PCB-1016	5.3	21		U
11104-28-2----	PCB-1221	5.3	21		U
11141-16-5----	PCB-1232	5.3	21		U
53469-21-9----	PCB-1242	5.3	21		U
12672-29-6----	PCB-1248	5.3	21		U
11097-69-1----	PCB-1254	5.3	21		U
11096-82-5----	PCB-1260	5.3	21		U

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 042F4201

% Moisture: 11 decanted: (Y/N) N Date Sampled: 08/14/08 13:00

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 08:26

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.12	0.37	U
319-84-6-----	Alpha-BHC	0.12	0.37	U
5103-71-9-----	Alpha-Chlordane	0.12	0.37	U
319-85-7-----	Beta-BHC	0.12	0.37	U
72-54-8-----	4,4'-DDD	0.19	0.74	U
72-55-9-----	4,4'-DDE	0.19	0.74	U
50-29-3-----	4,4'-DDT	0.19	0.74	U
319-86-8-----	Delta-BHC	0.12	0.37	U
60-57-1-----	Dieldrin	0.19	0.74	U
959-98-8-----	Endosulfan I	0.12	0.37	U
33213-65-9---	Endosulfan II	0.19	0.74	U
1031-07-8-----	Endosulfan Sulfate	0.19	0.74	U
72-20-8-----	Endrin	0.19	0.74	U
7421-93-4-----	Endrin Aldehyde	0.19	0.74	0.31 J
53494-70-5----	Endrin Ketone	0.19	0.74	U
58-89-9-----	Gamma-BHC	0.12	0.37	U
5103-74-2-----	Gamma-Chlordane	0.12	0.37	U
76-44-8-----	Heptachlor	0.12	0.37	U
1024-57-3-----	Heptachlor Epoxide	0.12	0.37	U
72-43-5-----	Methoxychlor	0.12	0.37	U
8001-35-2-----	Toxaphene	12	37	U
12674-11-2----	PCB-1016	4.7	19	U
11104-28-2----	PCB-1221	4.7	19	U
11141-16-5----	PCB-1232	4.7	19	U
53469-21-9----	PCB-1242	4.7	19	U
12672-29-6----	PCB-1248	4.7	19	U
11097-69-1----	PCB-1254	4.7	19	U
11096-82-5----	PCB-1260	4.7	19	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-01

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 006F0101

% Moisture: 13 decanted: (Y/N) N Date Sampled: 08/14/08 12:45

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 18:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	9.5	19	U
94-82-6-----	2,4-DB	9.5	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.95	1.9	U
93-76-5-----	2,4,5-T	0.95	1.9	U
75-99-0-----	Dalapon	24	48	U
1918-00-9-----	Dicamba	0.95	1.9	U
120-36-5-----	Dichloroprop	9.5	19	U
88-85-7-----	Dinoseb	4.8	9.5	U
94-74-6-----	MCPA	950	1900	U
93-65-2-----	MCPP	950	1900	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS01QTDUP

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009
 Matrix: (soil/water) SOIL Lab Sample ID: 0808142-02
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 007F0101
 % Moisture: 12 decanted: (Y/N) N Date Sampled: 08/14/08 12:45
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted:08/18/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 18:53
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	9.5	19	U
94-82-6-----	2,4-DB	9.5	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.95	1.9	U
93-76-5-----	2,4,5-T	0.95	1.9	U
75-99-0-----	Dalapon	24	48	U
1918-00-9-----	Dicamba	0.95	1.9	U
120-36-5-----	Dichloroprop	9.5	19	U
88-85-7-----	Dinoseb	4.8	9.5	U
94-74-6-----	MCPA	950	1900	U
93-65-2-----	MCPP	950	1900	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS02QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009
 Matrix: (soil/water) SOIL Lab Sample ID: 0808142-03
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: 008F0101
 % Moisture: 19 decanted: (Y/N) N Date Sampled: 08/14/08 12:50
 Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08
 Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 19:32
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	21	U
94-82-6-----	2,4-DB	10	21	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.1	U
93-76-5-----	2,4,5-T	1.0	2.1	U
75-99-0-----	Dalapon	26	52	U
1918-00-9----	Dicamba	1.0	2.1	U
120-36-5-----	Dichloroprop	10	21	U
88-85-7-----	Dinoseb	5.2	10	U
94-74-6-----	MCPA	1000	2100	U
93-65-2-----	MCPP	1000	2100	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-04

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 009F0101

% Moisture: 17 decanted: (Y/N) N Date Sampled: 08/14/08 12:40

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 20:11

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
94-75-7-----	2,4-D	10	20		U
94-82-6-----	2,4-DB	10	20	30	PM
93-72-1-----	2,4,5-TP (Silvex)	1.00	2.0		U
93-76-5-----	2,4,5-T	1.00	2.0		U
75-99-0-----	Dalapon	25	50		U
1918-00-9-----	Dicamba	1.00	2.0		U
120-36-5-----	Dichloroprop	10	20		U
88-85-7-----	Dinoseb	5.0	10	8.8	J
94-74-6-----	MCPA	1000	2000		U
93-65-2-----	MCPA	1000	2000		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-05

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 010F0101

% Moisture: 14 decanted: (Y/N) N Date Sampled: 08/14/08 12:35

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 20:50

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

94-75-7-----	2,4-D	9.7	19		U
94-82-6-----	2,4-DB	9.7	19	30	PM
93-72-1-----	2,4,5-TP (Silvex)	0.97	1.9		U
93-76-5-----	2,4,5-T	0.97	1.9		U
75-99-0-----	Dalapon	24	48		U
1918-00-9-----	Dicamba	0.97	1.9		U
120-36-5-----	Dichloroprop	9.7	19		U
88-85-7-----	Dinoseb	4.8	9.7		U
94-74-6-----	MCPA	970	1900		U
93-65-2-----	MCP	970	1900		U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-06

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 011F0101

% Moisture: 21 decanted: (Y/N) N Date Sampled: 08/14/08 12:55

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 21:29

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
94-75-7-----	2,4-D	10	21	U
94-82-6-----	2,4-DB	10	21	U
93-72-1-----	2,4,5-TP (Silvex)	1.0	2.1	U
93-76-5-----	2,4,5-T	1.0	2.1	U
75-99-0-----	Dalapon	26	53	U
1918-00-9-----	Dicamba	1.0	2.1	U
120-36-5-----	Dichloroprop	10	21	U
88-85-7-----	Dinoseb	5.3	10	U
94-74-6-----	MCPA	1000	2100	U
93-65-2-----	MCPA	1000	2100	U

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: 0808142-07

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 012F0101

% Moisture: 11 decanted: (Y/N) N Date Sampled: 08/14/08 13:00

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 22:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	9.3	19	U
94-82-6-----	2,4-DB	9.3	19	U
93-72-1-----	2,4,5-TP (Silvex)	0.93	1.9	U
93-76-5-----	2,4,5-T	0.93	1.9	U
75-99-0-----	Dalapon	23	47	U
1918-00-9----	Dicamba	0.93	1.9	U
120-36-5-----	Dichloroprop	9.3	19	U
88-85-7-----	Dinoseb	4.7	9.3	U
94-74-6-----	MCPA	930	1900	U
93-65-2-----	MCPP	930	1900	U

APPENDIX C

SUPPORT DOCUMENTATION

HOLDTIME

SDG GULFPORT00

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	%	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	%	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HERB	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/19/2008	4	1	5
HG	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HG	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
HG	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
M	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/18/2008	1	3	4
CN	MG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
CN	MG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/18/2008	8/18/2008	4	0	4
OS	%	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	%	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OS	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/19/2008	1	4	5
OV	%	TB 8-14-08-01	0808142-08	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
OV	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	%	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
OV	UG/L	TB 8-14-08-01	0808142-08	NM	8/14/2008	8/15/2008	8/15/2008	1	0	1
PCB	%	01SS03QT	0808142-04	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	%	01SS06QT	0808142-07	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	%	01SS04QT	0808142-05	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	%	01SS01QT	0808142-01	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	%	01SS02QT	0808142-03	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	%	01SS05QT	0808142-06	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PCB	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS01QT	0808142-01	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS06QT	0808142-07	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS05QT	0808142-06	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS04QT	0808142-05	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS03QT	0808142-04	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS01QTDUP	0808142-02	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	%	01SS02QT	0808142-03	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS06QT	0808142-07	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PEST	UG/KG	01SS01QT	0808142-01	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS01QTDUP	0808142-02	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS02QT	0808142-03	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS03QT	0808142-04	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS04QT	0808142-05	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12
PEST	UG/KG	01SS05QT	0808142-06	NM	8/14/2008	8/20/2008	8/26/2008	6	6	12

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-009
Workorder: 0808142

Date Sampled	Date Received	Lab ID	Client ID
8/14/2008	8/15/2008	0808142-01	01SS01QT
8/14/2008	8/15/2008	0808142-02	01SS01QTDUP
8/14/2008	8/15/2008	0808142-03	01SS02QT
8/14/2008	8/15/2008	0808142-04	01SS03QT
8/14/2008	8/15/2008	0808142-05	01SS04QT
8/14/2008	8/15/2008	0808142-06	01SS05QT
8/14/2008	8/15/2008	0808142-07	01SS06QT
8/14/2008	8/15/2008	0808142-08	TB 8-14-08-01

Volatiles

Method: The samples were extracted/analyzed by USEPA SW-846 Methods 5035/8260B (EnCore field sampling with lab preservation followed by purge and trap then capillary column GC/MS) for soils or 5030B/8260B (purge and trap followed by capillary column GC/MS) for waters upon receipt to the laboratory in satisfactory condition.

Comments: The volatile analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following note/exceptions:

- The soil method blank associated with these samples has a reported concentration of methylene chloride at a concentration less than 1/2 the quantitation limit. Reported concentrations in the associated samples are qualified with a "B".

Semivolatiles

Method: The samples were analyzed by USEPA SW-846 Methods 3541/8270C (automated soxhlet extraction followed by capillary column GC/MS) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- In the initial calibration verification, 3,3'-dichlorobenzidine exceeded 25% difference with a positive bias. It was not detected in the associated samples.
- Bis(2-ethylhexyl)phthalate was detected in the method blank at a concentration less than 1/2 the quantitation limit. Reported concentrations in the associated samples are qualified with a "B".

Pesticides/PCBs

Method: The samples were analyzed by USEPA SW-846 Methods 3550C/8081A/8082 (sonication extraction followed by capillary column GC/ECD) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Analyses of the samples were completed using full calibration for 1016/1260. As no other aroclor patterns were identified, no other aroclor calibration checks were performed.
- Some analytes in the continuing calibration verifications (CCVs) exceeded the 20%D limit with a positive bias. In most cases, the analyte was not detected above the quantitation limit and surrogate recoveries were determined not to have been biased into control by the exceedences. For the reported concentration of

4,4'-DDT in sample 01SS04QT, the higher concentration came from the column that met criteria. No further action was deemed necessary.

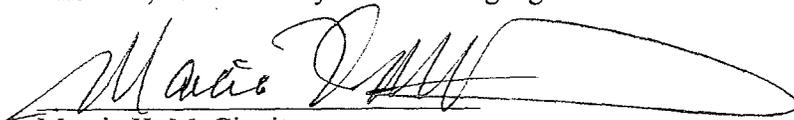
Herbicide Samples

Method: The samples were analyzed by USEPA SW-846 Methods 8151A (sonication and separatory funnel extraction then esterification and capillary column GC/ECD) for soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Some analytes in the initial calibration verification (ICV) or continuing calibration verifications (CCVs) exceeded the 20 %D limit with a high bias. No target analytes were detected in the associated samples.
- In spike samples HS1BLK0818LCS/LCSD, recoveries of MCPA exceeded the limit of 115% at (114%)/120%. All other recoveries were within limits.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.

A handwritten signature in black ink, appearing to read "Marcia K. McGinnity", written over a horizontal line.

Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

EMPIRICAL LABORATORIES COOLER RECEIPT FORM

LIMS Number: 0808142 COC ID(s): 41347

Client Tetra Tech Project Gulfport

Sample Custodian Will Schwab Today's Date 8-15-08

Date/Time Samples Received 8-15-08 9:00

Courier & Airbill Number FX 0042

Cooler Opened: Date 8-15-08

Custody seals intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Chain of custody provided?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Sample labels present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Bottle labels correspond w/COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Preservation at correct levels?	<input type="radio"/> Yes	<input checked="" type="radio"/> No <u>N/A</u>

Number of Custody Seals on Cooler(s): 2 Seal Date(s): 8-14-08

Type of coolant used Ice

Coolant condition: Melted _____ Partially melted/frozen
Frozen _____

of Coolers 1 Temp. of Coolers 2.8°C

Condition of Bottles in Shipment: Broken Leaking Intact Missing

If broken, leaking, or missing, list sample ID#s and bottle types affected:

Comments:

FORM 2
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Level: (low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
	=====	=====	=====	=====	=====	=====
01	V1BLK0815LCS	111	107	95	97	0
02	V1BLK0815	112	98	98	102	0
03	01SS01QT	113	105	98	104	0
04	01SS01QIDUP	107	112	98	101	0
05	01SS02QT	108	111	97	100	0
06	01SS03QT	107	102	96	97	0
07	01SS04QT	107	113	98	96	0
08	01SS05QT	105	110	95	96	0
09	01SS06QT	109	115	96	103	0
10	V1BLK0815LCS	108	102	92	96	0
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	EL QC LIMITS	SPIKE CONC (ug/Kg)
SMC1 (DFM) = Dibromofluoromethane	(80-125)	30
SMC2 (DCE) = 1,2-Dichloroethane-d4	(75-140)	30
SMC3 (TOL) = Toluene-d8	(80-120)	30
SMC4 (BFB) = Bromofluorobenzene	(80-125)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 2
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

	CLIENT SAMPLE NO.	SMC1 (DFM) #	SMC2 (DCE) #	SMC3 (TOL) #	SMC4 (BFB) #	TOT OUT
01	V4BLK0815LCS	102	101	107	107	0
02	V4BLK0815	98	89	107	103	0
03	TB 8-14-08-0	104	104	113	105	0
04	V4BLK0815LCS	106	91	98	100	0
05						
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		EL	SPIKE
		QC LIMITS	CONC (ug/L)
SMC1	(DFM) = Dibromofluoromethane	(85-120)	30
SMC2	(DCE) = 1,2-Dichloroethane-d4	(80-135)	30
SMC3	(TOL) = Toluene-d8	(85-115)	30
SMC4	(BFB) = Bromofluorobenzene	(85-120)	30

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate results reported from a diluted analysis

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V1BLK0815 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	98.87	99	20-160
Benzene	50.00	0.0000	46.33	93	75-125
Bromochloromethane	50.00	0.0000	52.72	105	70-125
Bromodichloromethane	50.00	0.0000	54.18	108	70-130
Bromoform	50.00	0.0000	52.10	104	55-135
Bromomethane	50.00	0.0000	51.65	103	30-160
2-Butanone	100.0	0.0000	95.40	95	30-160
Carbon disulfide	50.00	0.0000	55.89	112	45-160
Carbon tetrachloride	50.00	0.0000	56.97	114	65-135
Chlorobenzene	50.00	0.0000	42.49	85	75-125
Chloroethane	50.00	0.0000	43.03	86	40-155
Chloroform	50.00	0.0000	54.07	108	70-125
Chloromethane	50.00	0.0000	42.02	84	50-130
Cyclohexane	50.00	0.0000	51.23	102	65-140
Dibromochloromethane	50.00	0.0000	44.86	90	65-130
1,2-Dibromoethane	50.00	0.0000	43.55	87	70-125
1,1-Dichloroethane	50.00	0.0000	47.22	94	75-125
1,2-Dichloroethane	50.00	0.0000	56.71	113	70-125
1,1-Dichloroethene	50.00	0.0000	48.35	97	65-135
cis-1,2-Dichloroethene	50.00	0.0000	48.31	97	65-125
trans-1,2-Dichloroethene	50.00	0.0000	46.09	92	65-135
1,2-Dichloropropane	50.00	0.0000	47.35	95	70-120
cis-1,3-Dichloropropene	50.00	0.0000	50.14	100	70-125
trans-1,3-Dichloropropane	50.00	0.0000	51.08	102	65-125
Ethylbenzene	50.00	0.0000	42.91	86	75-125
2-Hexanone	100.0	0.0000	102.5	102	45-145
Isopropylbenzene	50.00	0.0000	45.64	91	75-130
Methyl acetate	50.00	0.0000	57.45	115	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V1BLK0815 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Methyl cyclohexane	50.00	0.0000	48.65	97	65-135
Methylene chloride	50.00	1.294	42.53	82	55-140
4-Methyl-2-pentanone	100.0	0.0000	108.4	108	45-145
Methyl tert-butyl ether	50.00	0.0000	50.11	100	55-150
Styrene	50.00	0.0000	41.19	82	75-125
1,1,2,2-Tetrachloroetha	50.00	0.0000	53.31	107	55-130
Tetrachloroethene	50.00	0.0000	44.27	88	65-140
Toluene	50.00	0.0000	47.74	95	70-125
1,2,3-Trichlorobenzene	50.00	0.0000	44.22	88	60-135
1,2,4-Trichlorobenzene	50.00	0.0000	43.28	86	65-130
1,1,1-Trichloroethane	50.00	0.0000	54.29	108	70-135
1,1,2-Trichloroethane	50.00	0.0000	46.56	93	60-125
Trichloroethene	50.00	0.0000	52.93	106	75-125
Trichlorotrifluoroethan	50.00	0.0000	57.68	115	60-140
Vinyl chloride	50.00	0.0000	43.06	86	60-125
Xylene (total)	150.0	0.0000	133.4	89	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Matrix Spike - Client Sample No.: V1BLK0815 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	96.80	97	2	30	20-160
Benzene	50.00	47.17	94	2	30	75-125
Bromochloromethane	50.00	52.04	104	1	30	70-125
Bromodichloromethane	50.00	54.10	108	0	30	70-130
Bromoform	50.00	48.37	97	7	30	55-135
Bromomethane	50.00	49.87	100	4	30	30-160
2-Butanone	100.0	89.50	90	6	30	30-160
Carbon disulfide	50.00	54.02	108	3	30	45-160
Carbon tetrachloride	50.00	56.13	112	1	30	65-135
Chlorobenzene	50.00	42.53	85	0	30	75-125
Chloroethane	50.00	40.94	82	5	30	40-155
Chloroform	50.00	53.10	106	2	30	70-125
Chloromethane	50.00	40.75	82	3	30	50-130
Cyclohexane	50.00	50.61	101	1	30	65-140
Dibromochloromethane	50.00	44.46	89	1	30	65-130
1,2-Dibromoethane	50.00	42.02	84	4	30	70-125
1,1-Dichloroethane	50.00	49.53	99	5	30	75-125
1,2-Dichloroethane	50.00	57.16	114	1	30	70-125
1,1-Dichloroethene	50.00	45.78	92	5	30	65-135
cis-1,2-Dichloroethene	50.00	46.92	94	3	30	65-125
trans-1,2-Dichloroethen	50.00	46.20	92	0	30	65-135
1,2-Dichloropropane	50.00	48.64	97	3	30	70-120
cis-1,3-Dichloropropene	50.00	48.51	97	3	30	70-125
trans-1,3-Dichloroprope	50.00	47.10	94	8	30	65-125
Ethylbenzene	50.00	42.36	85	1	30	75-125
2-Hexanone	100.0	90.97	91	12	30	45-145
Isopropylbenzene	50.00	44.75	90	2	30	75-130
Methyl acetate	50.00	50.44	101	13	30	45-265

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Matrix Spike - Client Sample No.: V1BLK0815 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Methyl cyclohexane	50.00	48.18	96	1	30	65-135
Methylene chloride	50.00	41.19	80	3	30	55-140
4-Methyl-2-pentanone	100.0	103.3	103	5	30	45-145
Methyl tert-butyl ether	50.00	51.30	103	2	30	55-150
Styrene	50.00	40.77	82	1	30	75-125
1,1,2,2-Tetrachloroetha	50.00	49.96	100	6	30	55-130
Tetrachloroethene	50.00	42.04	84	5	30	65-140
Toluene	50.00	46.80	94	2	30	70-125
1,2,3-Trichlorobenzene	50.00	43.58	87	1	30	60-135
1,2,4-Trichlorobenzene	50.00	40.73	81	6	30	65-130
1,1,1-Trichloroethane	50.00	54.89	110	1	30	70-135
1,1,2-Trichloroethane	50.00	46.05	92	1	30	60-125
Trichloroethene	50.00	50.32	101	5	30	75-125
Trichlorotrifluoroethan	50.00	54.76	110	5	30	60-140
Vinyl chloride	50.00	41.36	83	4	30	60-125
Xylene (total)	150.0	131.1	87	2	30	70-120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 44 outside limits

Spike Recovery: 0 out of 88 outside limits

COMMENTS: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: V1BLK0815

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 08/15/08 12:18

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
67-64-1	Acetone	2.0	10		U
71-43-2	Benzene	0.47	10		U
74-97-5	Bromochloromethane	0.42	10		U
75-27-4	Bromodichloromethane	0.30	10		U
75-25-2	Bromoform	1.0	10		U
74-83-9	Bromomethane	0.72	10		U
78-93-3	2-Butanone	1.4	10		U
75-15-0	Carbon disulfide	1.3	10		U
56-23-5	Carbon tetrachloride	0.88	10		U
108-90-7	Chlorobenzene	0.34	10		U
75-00-3	Chloroethane	1.1	10		U
67-66-3	Chloroform	0.55	10		U
74-87-3	Chloromethane	0.52	10		U
110-82-7	Cyclohexane	0.54	10		U
124-48-1	Dibromochloromethane	0.34	10		U
106-93-4	1,2-Dibromoethane	0.43	10		U
75-34-3	1,1-Dichloroethane	0.54	10		U
107-06-2	1,2-Dichloroethane	0.46	10		U
75-35-4	1,1-Dichloroethene	1.2	10		U
156-59-2	cis-1,2-Dichloroethene	1.2	10		U
156-60-5	trans-1,2-Dichloroethene	1.1	10		U
540-59-0	1,2-Dichloroethene (total)	1.2	10		U
78-87-5	1,2-Dichloropropane	0.46	10		U
10061-01-5	cis-1,3-Dichloropropene	0.50	10		U
10061-02-6	trans-1,3-Dichloropropene	0.32	10		U
100-41-4	Ethylbenzene	0.75	10		U
591-78-6	2-Hexanone	2.3	10		U
98-82-8	Isopropylbenzene	0.88	10		U
79-20-9	Methyl acetate	1.6	10		U
108-87-2	Methyl cyclohexane	0.30	10		U
75-09-2	Methylene chloride	0.62	10	1.3	J
108-10-1	4-Methyl-2-pentanone	0.58	10		U
1634-04-4	Methyl tert-butyl ether	0.32	10		U
100-42-5	Styrene	0.35	10		U
79-34-5	1,1,2,2-Tetrachloroethane	0.43	10		U
127-18-4	Tetrachloroethene	0.97	10		U
108-88-3	Toluene	0.86	10		U
87-61-6	1,2,3-Trichlorobenzene	0.42	10		U
120-82-1	1,2,4-Trichlorobenzene	0.18	10		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V1BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: V1BLK0815

Sample wt/vol: 5.0 (g/mL) G Lab File ID: V1BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. 0 Date Analyzed: 08/15/08 12:18

GC Column: RTX-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		
		MDL	RL	CONC Q
71-55-6-----	1,1,1-Trichloroethane	0.90	10	U
79-00-5-----	1,1,2-Trichloroethane	0.35	10	U
79-01-6-----	Trichloroethene	0.85	10	U
76-13-1-----	Trichlorotrifluoroethane	0.55	10	U
75-01-4-----	Vinyl chloride	1.1	10	U
1330-20-7----	Xylene (total)	0.70	10	U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V1BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Lab File ID: V1BLK01 Lab Sample ID: V1BLK0815

Date Analyzed: 08/15/08 Time Analyzed: 1218

Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) Y

Instrument ID: VOA1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V1BLK0815LCS	V1BLK0815LCS	V1LCS01	1020
02	01SS01QT	0808142-01	0814201A	1337
03	01SS01QTDUP	0808142-02	0814202A	1416
04	01SS02QT	0808142-03	0814203A	1455
05	01SS03QT	0808142-04	0814204A	1535
06	01SS04QT	0808142-05	0814205A	1614
07	01SS05QT	0808142-06	0814206A	1654
08	01SS06QT	0808142-07	0814207A	1733
09	V1BLK0815LCS	V1BLK0815LCSD	V1LCSD01	1812
10				
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COMMENTS:

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V4BLK0815

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Acetone	100.0	0.0000	87.46	87	40-140
Benzene	50.00	0.0000	44.89	90	80-120
Bromochloromethane	50.00	0.0000	48.51	97	65-130
Bromodichloromethane	50.00	0.0000	46.83	94	75-120
Bromoform	50.00	0.0000	52.83	106	70-130
Bromomethane	50.00	0.0000	44.54	89	30-145
2-Butanone	150.0	0.0000	165.4	110	30-150
Carbon disulfide	50.00	0.0000	51.98	104	35-160
Carbon tetrachloride	50.00	0.0000	47.58	95	65-140
Chlorobenzene	50.00	0.0000	48.46	97	80-120
Chloroethane	50.00	0.0000	46.19	92	60-135
Chloroform	50.00	0.0000	43.36	87	65-135
Chloromethane	50.00	0.0000	57.14	114	40-125
Cyclohexane	50.00	0.0000	53.26	106	60-130
Dibromochloromethane	50.00	0.0000	53.83	108	60-135
1,2-Dibromo-3-chloropro	50.00	0.0000	37.56	75	50-130
1,2-Dibromoethane	50.00	0.0000	50.35	101	80-120
1,2-Dichlorobenzene	50.00	0.0000	44.59	89	70-120
1,3-Dichlorobenzene	50.00	0.0000	42.43	85	75-125
1,4-Dichlorobenzene	50.00	0.0000	43.43	87	75-125
Dichlorodifluoromethane	50.00	0.0000	53.11	106	30-155
1,1-Dichloroethane	50.00	0.0000	45.10	90	70-135
1,2-Dichloroethane	50.00	0.0000	49.63	99	70-130
1,1-Dichloroethene	50.00	0.0000	49.11	98	70-130
cis-1,2-Dichloroethene	50.00	0.0000	45.38	91	70-125
1,2-Dichloropropane	50.00	0.0000	45.49	91	75-125
cis-1,3-Dichloropropene	50.00	0.0000	49.57	99	70-130
trans-1,3-Dichloroprope	50.00	0.0000	55.45	111	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V4BLK0815

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Ethylbenzene	50.00	0.0000	49.03	98	75-125
2-Hexanone	100.0	0.0000	104.4	104	55-130
Isopropylbenzene	50.00	0.0000	54.07	108	75-125
Methyl acetate	50.00	0.0000	47.52	95	55-150
Methyl cyclohexane	50.00	0.0000	52.36	105	60-125
Methylene chloride	50.00	0.0000	45.00	90	55-140
Methyl tert-butyl ether	50.00	0.0000	48.42	97	65-125
4-Methyl-2-pentanone	100.0	0.0000	98.87	99	60-135
Styrene	50.00	0.0000	54.39	109	65-135
1,1,2,2-Tetrachloroetha	50.00	0.0000	43.78	88	65-130
Tetrachloroethene	55.00	0.0000	59.10	107	45-150
Toluene	50.00	0.0000	47.43	95	75-120
1,2,3-Trichlorobenzene	50.00	0.0000	40.64	81	55-140
1,2,4-Trichlorobenzene	50.00	0.0000	39.43	79	65-135
1,1,1-Trichloroethane	50.00	0.0000	45.35	91	65-130
1,1,2-Trichloroethane	50.00	0.0000	50.98	102	75-125
Trichloroethene	50.00	0.0000	44.07	88	70-125
Trichlorotrifluoroethan	50.00	0.0000	58.27	116	60-130
Trichlorofluoromethane	50.00	0.0000	50.80	102	60-145
Vinyl chloride	50.00	0.0000	49.01	98	50-145
Xylene (total)	150.0	0.0000	142.4	95	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V4BLK0815

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acetone	100.0	118.8	119	30	30	40-140
Benzene	50.00	41.89	84	7	30	80-120
Bromochloromethane	50.00	47.09	94	3	30	65-130
Bromodichloromethane	50.00	46.97	94	0	30	75-120
Bromoform	50.00	49.48	99	6	30	70-130
Bromomethane	50.00	42.94	86	4	30	30-145
2-Butanone	150.0	176.8	118	7	30	30-150
Carbon disulfide	50.00	51.18	102	2	30	35-160
Carbon tetrachloride	50.00	50.47	101	6	30	65-140
Chlorobenzene	50.00	45.87	92	5	30	80-120
Chloroethane	50.00	42.62	85	8	30	60-135
Chloroform	50.00	45.30	91	4	30	65-135
Chloromethane	50.00	53.58	107	6	30	40-125
Cyclohexane	50.00	52.77	106	1	30	60-130
Dibromochloromethane	50.00	52.00	104	3	30	60-135
1,2-Dibromo-3-chloropro	50.00	40.30	81	7	30	50-130
1,2-Dibromoethane	50.00	49.77	100	1	30	80-120
1,2-Dichlorobenzene	50.00	44.48	89	0	30	70-120
1,3-Dichlorobenzene	50.00	43.52	87	2	30	75-125
1,4-Dichlorobenzene	50.00	40.31	81	7	30	75-125
Dichlorodifluoromethane	50.00	56.74	113	7	30	30-155
1,1-Dichloroethane	50.00	45.76	92	1	30	70-135
1,2-Dichloroethane	50.00	53.37	107	7	30	70-130
1,1-Dichloroethene	50.00	47.58	95	3	30	70-130
cis-1,2-Dichloroethene	50.00	44.61	89	2	30	70-125
1,2-Dichloropropane	50.00	44.07	88	3	30	75-125
cis-1,3-Dichloropropene	50.00	49.41	99	0	30	70-130
trans-1,3-Dichloropropene	50.00	51.35	103	8	30	55-140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER VOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: V4BLK0815

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Ethylbenzene	50.00	45.52	91	7	30	75-125
2-Hexanone	100.0	108.9	109	4	30	55-130
Isopropylbenzene	50.00	50.38	101	7	30	75-125
Methyl acetate	50.00	49.74	99	4	30	55-150
Methyl cyclohexane	50.00	51.15	102	2	30	60-125
Methylene chloride	50.00	44.29	88	2	30	55-140
Methyl tert-butyl ether	50.00	48.71	97	0	30	65-125
4-Methyl-2-pentanone	100.0	108.7	109	9	30	60-135
Styrene	50.00	48.62	97	11	30	65-135
1,1,2,2-Tetrachloroetha	50.00	44.38	89	1	30	65-130
Tetrachloroethene	55.00	51.01	93	15	30	45-150
Toluene	50.00	40.72	81	15	30	75-120
1,2,3-Trichlorobenzene	50.00	40.29	80	1	30	55-140
1,2,4-Trichlorobenzene	50.00	38.76	78	2	30	65-135
1,1,1-Trichloroethane	50.00	48.96	98	8	30	65-130
1,1,2-Trichloroethane	50.00	46.32	93	10	30	75-125
Trichloroethene	50.00	43.74	87	1	30	70-125
Trichlorotrifluoroethan	50.00	56.94	114	2	30	60-130
Trichlorofluoromethane	50.00	53.68	107	6	30	60-145
Vinyl chloride	50.00	50.69	101	3	30	50-145
Xylene (total)	150.0	134.7	90	6	30	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 49 outside limits

Spike Recovery: 0 out of 98 outside limits

COMMENTS: _____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Matrix: (soil/water) WATER Lab Sample ID: V4BLK0815
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01
 Level: (low/med) LOW Date Sampled: _____
 % Moisture: not dec. _____ Date Analyzed: 08/15/08 12:24
 GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			Q
		MDL	RL	CONC	
67-64-1-----	Acetone	1.1	5.0		U
71-43-2-----	Benzene	0.11	1.0		U
74-97-5-----	Bromochloromethane	0.31	1.0		U
75-27-4-----	Bromodichloromethane	0.086	1.0		U
75-25-2-----	Bromoform	0.24	1.0		U
74-83-9-----	Bromomethane	0.33	1.0		U
78-93-3-----	2-Butanone	1.2	5.0		U
75-15-0-----	Carbon disulfide	0.13	1.0		U
56-23-5-----	Carbon tetrachloride	0.14	1.0		U
108-90-7-----	Chlorobenzene	0.28	1.0		U
75-00-3-----	Chloroethane	0.38	1.0		U
67-66-3-----	Chloroform	0.10	1.0		U
74-87-3-----	Chloromethane	0.40	1.0		U
110-82-7-----	Cyclohexane	0.18	1.0		U
124-48-1-----	Dibromochloromethane	0.080	1.0		U
96-12-8-----	1,2-Dibromo-3-chloropropane	0.28	2.0		U
106-93-4-----	1,2-Dibromoethane	0.070	1.0		U
95-50-1-----	1,2-Dichlorobenzene	0.17	1.0		U
541-73-1-----	1,3-Dichlorobenzene	0.21	1.0		U
106-46-7-----	1,4-Dichlorobenzene	0.12	1.0		U
75-71-8-----	Dichlorodifluoromethane	0.24	1.0		U
75-34-3-----	1,1-Dichloroethane	0.15	1.0		U
107-06-2-----	1,2-Dichloroethane	0.15	1.0		U
75-35-4-----	1,1-Dichloroethene	0.42	1.0		U
156-59-2-----	cis-1,2-Dichloroethene	0.44	1.0		U
78-87-5-----	1,2-Dichloropropane	0.18	1.0		U
10061-01-5-----	cis-1,3-Dichloropropene	0.13	1.0		U
10061-02-6-----	trans-1,3-Dichloropropene	0.22	1.0		U
100-41-4-----	Ethylbenzene	0.14	1.0		U
591-78-6-----	2-Hexanone	0.83	5.0		U
98-82-8-----	Isopropylbenzene	0.034	1.0		U
79-20-9-----	Methyl acetate	0.87	1.0		U
108-87-2-----	Methyl cyclohexane	0.20	1.0		U
75-09-2-----	Methylene chloride	0.26	2.0		U
1634-04-4-----	Methyl tert-butyl ether	0.17	1.0		U
108-10-1-----	4-Methyl-2-pentanone	1.4	5.0		U
100-42-5-----	Styrene	0.22	1.0		U
79-34-5-----	1,1,2,2-Tetrachloroethane	0.070	1.0		U
127-18-4-----	Tetrachloroethene	0.14	1.0		U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

V4BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) WATER Lab Sample ID: V4BLK0815

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: V4BLK01

Level: (low/med) LOW Date Sampled: _____

% Moisture: not dec. _____ Date Analyzed: 08/15/08 12:24

GC Column: DB-VRX ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L
MDL RL CONC Q

CAS NO.	COMPOUND	MDL	RL	CONC	Q
108-88-3	Toluene	0.18	1.0		U
87-61-6	1,2,3-Trichlorobenzene	0.16	1.0		U
120-82-1	1,2,4-Trichlorobenzene	0.14	1.0		U
71-55-6	1,1,1-Trichloroethane	0.15	1.0		U
79-00-5	1,1,2-Trichloroethane	0.17	1.0		U
79-01-6	Trichloroethene	0.28	1.0		U
76-13-1	Trichlorotrifluoroethane	0.22	1.0		U
75-69-4	Trichlorofluoromethane	0.15	5.0		U
75-01-4	Vinyl chloride	0.19	1.0		U
1330-20-7	Xylene (total)	0.21	1.0		U

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

V4BLK0815

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009

Lab File ID: V4BLK01 Lab Sample ID: V4BLK0815

Date Analyzed: 08/15/08 Time Analyzed: 1224

Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

Instrument ID: VOA4

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	V4BLK0815LCS	V4BLK0815LCS	V4LCS01	1058
02	TB 8-14-08-0	0808142-08	0814208	1254
03	V4BLK0815LCS	V4BLK0815LCSD	V4LCSD01	1422
04				
05				
06				
07				
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11				
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30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA90517

Lab File ID: V1BFB01 BFB Injection Date: 07/15/08

Instrument ID: VOA1 BFB Injection Time: 1237

GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 60.0% of mass 95	48.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	67.3
175	5.0 - 9.0% of mass 174	4.8 (7.1)1
176	95.0 - 101.0% of mass 174	64.4 (95.8)1
177	5.0 - 9.0% of mass 176	4.5 (7.0)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	V1STD200PPB	V1STD200PPB	V1STD07	07/15/08	1349
02	V1STD100PPB	V1STD100PPB	V1STD06	07/15/08	1428
03	V1STD50PPB	V1STD50PPB	V1STD05	07/15/08	1508
04	V1BLK0715LCS	V1BLK0715LCS	V1ICV01	07/15/08	1548
05	V1STD10PPB	V1STD10PPB	V1STD03	07/15/08	1707
06	V1STD5PPB	V1STD5PPB	V1STD02	07/15/08	1747
07	V1STD2PPB	V1STD2PPB	V1STD01	07/15/08	1826
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF2: V1STD01 RF5: V1STD02 RF10: V1STD03
RF20: V1STD04 RF50: V1STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
Acetone	0.317	0.223	0.221		0.179
Acrolein	0.100	0.107	0.106		0.093
Acrylonitrile	0.137	0.136	0.138		0.115
Benzene	1.395	1.459	1.479		1.303
Bromobenzene	0.965	0.953	1.014		0.959
Bromochloromethane	0.135	0.154	0.154		0.148
Bromodichloromethane	0.428	0.482	0.478		0.423
Bromoform	0.411	0.498	0.544		0.553
Bromomethane	0.250	0.241	0.270		0.252
2-Butanone	0.268	0.250	0.264		0.231
n-Butylbenzene	4.069	3.637	3.819		3.599
sec-Butylbenzene	4.378	4.540	4.700		4.546
tert-Butylbenzene	2.655	2.710	2.929		2.812
Carbon disulfide	1.120	1.109	1.148		1.028
Carbon tetrachloride	0.311	0.330	0.365		0.325
Chlorobenzene	1.841	1.841	1.948		1.799
Chloroethane	0.302	0.300	0.324		0.295
2-Chloroethyl vinyl ether	0.007	0.008	0.008		0.009
Chloroform	0.571	0.580	0.610		0.533
1-Chlorohexane	1.260	1.238	1.250		1.210
Chloromethane	0.710	0.672	0.691		0.615
2-Chlorotoluene	3.042	3.390	3.191		2.742
4-Chlorotoluene	4.055	3.569	3.750		3.427
Cyclohexane	0.690	0.688	0.736		0.658
Dibromochloromethane	0.618	0.674	0.680		0.666
1,2-Dibromo-3-chloropropane	0.186	0.172	0.190		0.211
1,2-Dibromoethane	0.585	0.620	0.650		0.618
Dibromomethane	0.184	0.197	0.204		0.186
1,2-Dichlorobenzene	1.717	1.732	1.719		1.661
1,3-Dichlorobenzene	2.214	1.951	1.908		1.966
1,4-Dichlorobenzene	1.935	1.794	1.934		1.751
Dichlorodifluoromethane	0.349	0.336	0.394		0.384
1,1-Dichloroethane	0.676	0.691	0.732		0.645
1,2-Dichloroethane	0.450	0.437	0.452		0.388
1,1-Dichloroethene	0.373	0.311	0.307		0.281
cis-1,2-Dichloroethene	0.370	0.391	0.397		0.348
trans-1,2-Dichloroethene	0.425	0.350	0.364		0.330

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF2: V1STD01 RF5: V1STD02 RF10: V1STD03
RF20: V1STD04 RF50: V1STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
1,2-Dichloroethene (total)	0.397	0.370	0.381		0.339
1,2-Dichloropropane	0.396	0.390	0.415		0.367
1,3-Dichloropropane	1.231	1.279	1.390		1.220
2,2-Dichloropropane	0.464	0.453	0.491		0.446
1,1-Dichloropropene	0.526	0.504	0.527		0.477
cis-1,3-Dichloropropene	0.565	0.578	0.606		0.557
trans-1,3-Dichloropropene	1.040	1.070	1.127		1.058
Ethylbenzene	3.662	3.562	3.682		3.354
Ethyl methacrylate	1.008	1.065	1.059		1.010
Hexachlorobutadiene	0.530	0.515	0.546		0.565
2-Hexanone	0.720	0.703	0.737		0.734
Iodomethane	0.228	0.243	0.260		0.245
Isopropylbenzene	2.717	2.736	2.933		2.776
p-Isopropyltoluene	3.548	3.520	3.636		3.379
Methyl acetate	0.437	0.368	0.346		0.282
Methyl cyclohexane	0.591	0.596	0.649		0.577
Methylene chloride	1.622	1.166	0.789		0.427
Methyl methacrylate	0.392	0.390	0.365		0.328
4-Methyl-2-pentanone	0.434	0.402	0.427		0.382
MTBE	0.822	0.847	0.920		0.818
Naphthalene	3.126	2.804	2.771		2.592
n-Propylbenzene	5.108	5.206	5.357		5.106
Styrene	2.172	2.109	2.302		2.142
1,1,1,2-Tetrachloroethane	0.578	0.646	0.683		0.630
1,1,2,2-Tetrachloroethane	1.259	1.140	1.142		1.094
Tetrachloroethene	0.619	0.670	0.691		0.676
Tetrahydrofuran	0.166	0.147	0.128		0.118
Toluene	2.347	2.135	2.180		1.844
1,2,3-Trichlorobenzene	1.031	1.034	1.024		1.049
1,2,4-Trichlorobenzene	1.173	1.110	1.121		1.126
1,1,1-Trichloroethane	0.408	0.422	0.436		0.407
1,1,2-Trichloroethane	0.455	0.547	0.574		0.542
Trichloroethene	0.339	0.327	0.348		0.314
Trichlorofluoromethane	0.414	0.440	0.458		0.419
Trichlorotrifluoroethane	0.264	0.259	0.298		0.260
1,2,3-Trichloropropane	0.248	0.253	0.257		0.242
1,2,4-Trimethylbenzene	3.377	3.350	3.446		3.267

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF2: V1STD01 RF5: V1STD02 RF10: V1STD03
RF20: V1STD04 RF50: V1STD05

COMPOUND	RF2	RF5	RF10	RF20	RF50
=====	=====	=====	=====	=====	=====
1,3,5-Trimethylbenzene	3.275	3.190	3.309		3.161
Vinyl acetate	0.785	0.833	0.876		0.792
Vinyl chloride	0.470	0.516	0.534		0.522
m,p-Xylene	2.615	2.528	2.634		2.361
Xylene (total)	2.527	2.538	2.665		2.472
=====	=====	=====	=====	=====	=====
Dibromofluoromethane	0.246	0.246	0.246		0.232
1,2-Dichloroethane-d4	0.065	0.066	0.067		0.067
Toluene-d8	2.070	2.081	2.089		2.085
Bromofluorobenzene	0.817	0.830	0.838		0.817

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 . 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF100: V1STD06 RF200: V1STD07

COMPOUND	RF100	RF200
Acetone	0.170	0.167
Acrolein	0.090	0.086
Acrylonitrile	0.108	0.102
Benzene	1.212	1.167
Bromobenzene	0.919	0.878
Bromochloromethane	0.138	0.134
Bromodichloromethane	0.410	0.390
Bromoform	0.540	0.512
Bromomethane	0.263	0.251
2-Butanone	0.222	0.213
n-Butylbenzene	3.419	3.169
sec-Butylbenzene	4.363	4.071
tert-Butylbenzene	2.718	2.563
Carbon disulfide	0.980	0.945
Carbon tetrachloride	0.312	0.305
Chlorobenzene	1.679	1.524
Chloroethane	0.302	0.294
2-Chloroethyl vinyl ether	0.009	0.008
Chloroform	0.507	0.487
1-Chlorohexane	1.130	1.019
Chloromethane	0.579	0.552
2-Chlorotoluene	2.930	2.769
4-Chlorotoluene	3.372	3.191
Cyclohexane	0.623	0.603
Dibromochloromethane	0.612	0.567
1,2-Dibromo-3-chloropropane	0.201	0.195
1,2-Dibromoethane	0.568	0.520
Dibromomethane	0.180	0.172
1,2-Dichlorobenzene	1.574	1.511
1,3-Dichlorobenzene	1.786	1.684
1,4-Dichlorobenzene	1.747	1.657
Dichlorodifluoromethane	0.372	0.361
1,1-Dichloroethane	0.613	0.596
1,2-Dichloroethane	0.379	0.364
1,1-Dichloroethene	0.267	0.262
cis-1,2-Dichloroethene	0.333	0.328
trans-1,2-Dichloroethene	0.315	0.304

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF100: V1STD06 RF200: V1STD07

COMPOUND	RF100	RF200
1,2-Dichloroethene (total)	0.324	0.316
1,2-Dichloropropane	0.347	0.334
1,3-Dichloropropane	1.122	1.022
2,2-Dichloropropane	0.440	0.428
1,1-Dichloropropene	0.453	0.439
cis-1,3-Dichloropropene	0.531	0.524
trans-1,3-Dichloropropene	0.990	0.918
Ethylbenzene	3.054	2.731
Ethyl methacrylate	0.925	0.829
Hexachlorobutadiene	0.582	0.569
2-Hexanone	0.666	0.586
Iodomethane	0.248	0.286
Isopropylbenzene	2.563	2.320
p-Isopropyltoluene	3.226	3.023
Methyl acetate	0.260	0.243
Methyl cyclohexane	0.556	0.541
Methylene chloride	0.364	0.341
Methyl methacrylate	0.320	0.311
4-Methyl-2-pentanone	0.358	0.334
MTBE	0.774	0.750
Naphthalene	2.565	2.372
n-Propylbenzene	4.902	4.550
Styrene	2.015	1.849
1,1,1,2-Tetrachloroethane	0.578	0.538
1,1,2,2-Tetrachloroethane	1.025	0.942
Tetrachloroethene	0.627	0.581
Tetrahydrofuran	0.110	0.107
Toluene	1.724	1.564
1,2,3-Trichlorobenzene	1.050	0.988
1,2,4-Trichlorobenzene	1.147	1.105
1,1,1-Trichloroethane	0.389	0.372
1,1,2-Trichloroethane	0.497	0.447
Trichloroethene	0.306	0.287
Trichlorofluoromethane	0.399	0.387
Trichlorotrifluoroethane	0.252	0.245
1,2,3-Trichloropropane	0.225	0.204
1,2,4-Trimethylbenzene	3.181	2.937

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 . 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

LAB FILE ID: RF100: V1STD06 RF200: V1STD07

COMPOUND	RF100	RF200
1,3,5-Trimethylbenzene	3.053	2.861
Vinyl acetate	0.754	0.715
Vinyl chloride	0.515	0.498
m,p-Xylene	2.128	1.879
Xylene (total)	2.254	2.029
Dibromofluoromethane	0.231	0.234
1,2-Dichloroethane-d4	0.065	0.064
Toluene-d8	2.028	1.922
Bromofluorobenzene	0.794	0.779

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
Acetone	LINR	0.00000000	0.16867200		0.999
Acrolein	AVRG		9.715e-002		8.8
Acrylonitrile	AVRG		0.12266200		13.2
Benzene	AVRG		1.33587687		9.7
Bromobenzene	AVRG		0.94794697		4.8
Bromochloromethane	AVRG		0.14380220		6.4
Bromodichloromethane	AVRG		0.43509742		8.6
Bromoform	AVRG		0.50984111		10.3
Bromomethane	AVRG		0.25459401		4.1
2-Butanone	AVRG		0.24154135		9.5
n-Butylbenzene	AVRG		3.61865967		8.6
sec-Butylbenzene	AVRG		4.43290996		4.9
tert-Butylbenzene	AVRG		2.73121674		4.6
Carbon disulfide	AVRG		1.05515651		7.8
Carbon tetrachloride	AVRG		0.32486819		6.8
Chlorobenzene	AVRG		1.77199232		8.4
Chloroethane	AVRG		0.30289460		3.6
2-Chloroethyl vinyl ether	AVRG		8.02e-003		8.7 NA
Chloroform	AVRG		0.54788372		8.6
1-Chlorohexane	AVRG		1.18483941		7.9
Chloromethane	AVRG		0.63660637		10.1
2-Chlorotoluene	AVRG		3.01071640		8.3
4-Chlorotoluene	AVRG		3.56083133		8.6
Cyclohexane	AVRG		0.66632072		7.3
Dibromochloromethane	AVRG		0.63606894		7.0
1,2-Dibromo-3-chloropropane	AVRG		0.19255214		7.0
1,2-Dibromoethane	AVRG		0.59341812		7.7
Dibromomethane	AVRG		0.18745901		6.2
1,2-Dichlorobenzene	AVRG		1.65260940		5.5
1,3-Dichlorobenzene	AVRG		1.91829586		9.4
1,4-Dichlorobenzene	AVRG		1.80294674		6.2
Dichlorodifluoromethane	AVRG		0.36598229		5.9
1,1-Dichloroethane	AVRG		0.65872275		7.7
1,2-Dichloroethane	AVRG		0.41181821		9.5
1,1-Dichloroethene	AVRG		0.30044052		13.6
cis-1,2-Dichloroethene	AVRG		0.36121839		8.2
trans-1,2-Dichloroethene	AVRG		0.34799935		12.5

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08
 Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,2-Dichloroethene (total)	AVRG		0.35460887		9.3
1,2-Dichloropropane	AVRG		0.37473122		8.3
1,3-Dichloropropane	AVRG		1.21093857		10.5
2,2-Dichloropropane	AVRG		0.45392947		4.8
1,1-Dichloropropene	AVRG		0.48750758		7.7
cis-1,3-Dichloropropene	AVRG		0.56027427		5.4
trans-1,3-Dichloropropene	AVRG		1.03397113		6.9
Ethylbenzene	AVRG		3.34080314		11.4
Ethyl methacrylate	AVRG		0.98262203		9.2
Hexachlorobutadiene	AVRG		0.55135670		4.6
2-Hexanone	AVRG		0.69124575		8.3
Iodomethane	AVRG		0.25164697		7.8
Isopropylbenzene	AVRG		2.67414890		7.8
p-Isopropyltoluene	AVRG		3.38886123		6.8
Methyl acetate	LINR	0.00000000	0.24887272		0.996
Methyl cyclohexane	AVRG		0.58511106		6.4
Methylene chloride	2ORDR	0.00000000	2.09759334	0.37931720	0.996
Methyl methacrylate	AVRG		0.35065631		10.2
4-Methyl-2-pentanone	AVRG		0.38948663		10.0
MTBE	AVRG		0.82199075		7.2
Naphthalene	AVRG		2.70510421		9.6
n-Propylbenzene	AVRG		5.03806141		5.6
Styrene	AVRG		2.09825928		7.3
1,1,1,2-Tetrachloroethane	AVRG		0.60894757		8.8
1,1,2,2-Tetrachloroethane	AVRG		1.10031995		9.9
Tetrachloroethene	AVRG		0.64414215		6.5
Tetrahydrofuran	LINR	0.00000000	0.10861936		0.999
Toluene	LINR	0.00000000	1.61432372		0.995
1,2,3-Trichlorobenzene	AVRG		1.02938180		2.2
1,2,4-Trichlorobenzene	AVRG		1.13030132		2.2
1,1,1-Trichloroethane	AVRG		0.40567891		5.6
1,1,2-Trichloroethane	AVRG		0.51052664		10.2
Trichloroethene	AVRG		0.32013960		7.0
Trichlorofluoromethane	AVRG		0.41959725		6.2
Trichlorotrifluoroethane	AVRG		0.26295622		6.9
1,2,3-Trichloropropane	AVRG		0.23802416		8.4
1,2,4-Trimethylbenzene	AVRG		3.25974582		5.6

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
1,3,5-Trimethylbenzene	AVRG		3.14162294		5.2
Vinyl acetate	AVRG		0.79262107		7.2
Vinyl chloride	AVRG		0.50928006		4.3
m,p-Xylene	AVRG		2.35776090		12.8
Xylene (total)	AVRG		2.41422843		9.6
Dibromofluoromethane	AVRG		0.23904864		3.1
1,2-Dichloroethane-d ₄	AVRG		6.567e-002		1.5
Toluene-d ₈	AVRG		2.04581326		3.2
Bromofluorobenzene	AVRG		0.81243215		2.7

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.213	0.181	100.0	107.3		LINR	7.3	25.0
Acrolein	0.097	0.094	250.0	242.7		AVRG	-2.9	25.0
Acrylonitrile	0.123	0.120	250.0	245.2		AVRG	-1.9	25.0
Benzene	1.336	1.297	50.00	48.55		AVRG	-2.9	25.0
Bromobenzene	0.948	0.895	50.00	47.21		AVRG	-5.6	25.0
Bromochloromethane	0.144	0.143	50.00	49.77		AVRG	-0.5	25.0
Bromodichloromethane	0.435	0.422	50.00	48.47		AVRG	-3.1	25.0
Bromoform	0.510	0.515	50.00	50.51	0.100	AVRG	1.0	25.0
Bromomethane	0.254	0.249	50.00	48.91		AVRG	-2.2	25.0
2-Butanone	0.241	0.229	100.0	94.98		AVRG	-5.0	25.0
n-Butylbenzene	3.619	3.564	50.00	49.24		AVRG	-1.5	25.0
sec-Butylbenzene	4.433	4.383	50.00	49.44		AVRG	-1.1	25.0
tert-Butylbenzene	2.731	2.810	50.00	51.45		AVRG	2.9	25.0
Carbon disulfide	1.055	1.210	50.00	57.34		AVRG	14.7	25.0
Carbon tetrachloride	0.325	0.324	50.00	49.96		AVRG	-0.1	25.0
Chlorobenzene	1.772	1.759	50.00	49.64	0.300	AVRG	-0.7	25.0
Chloroethane	0.303	0.307	50.00	50.69		AVRG	1.4	25.0
2-Chloroethyl vinyl ether	0.008	0.009	100.0	115.8		AVRG	15.8	25.0
Chloroform	0.548	0.525	50.00	47.92		AVRG	-4.2	25.0
1-Chlorohexane	1.184	1.198	50.00	50.56		AVRG	1.1	25.0
Chloromethane	0.636	0.651	50.00	51.13	0.100	AVRG	2.3	25.0
2-Chlorotoluene	3.011	3.087	50.00	51.27		AVRG	2.5	25.0
4-Chlorotoluene	3.561	3.394	50.00	47.66		AVRG	-4.7	25.0
Cyclohexane	0.666	0.710	50.00	53.31		AVRG	6.6	25.0
Dibromochloromethane	0.636	0.623	50.00	48.98		AVRG	-2.0	25.0
1,2-Dibromo-3-chloropropane	0.192	0.190	50.00	49.44		AVRG	-1.1	25.0
1,2-Dibromoethane	0.594	0.576	50.00	48.57		AVRG	-2.9	25.0
Dibromomethane	0.187	0.182	50.00	48.57		AVRG	-2.8	25.0
1,2-Dichlorobenzene	1.652	1.558	50.00	47.14		AVRG	-5.7	25.0
1,3-Dichlorobenzene	1.918	1.849	50.00	48.19		AVRG	-3.6	25.0
1,4-Dichlorobenzene	1.803	1.776	50.00	49.24		AVRG	-1.5	25.0
Dichlorodifluoromethane	0.366	0.416	50.00	56.79		AVRG	13.6	25.0
1,1-Dichloroethane	0.659	0.647	50.00	49.13	0.100	AVRG	-1.7	25.0
1,2-Dichloroethane	0.412	0.394	50.00	47.91		AVRG	-4.2	25.0
1,1-Dichloroethene	0.300	0.291	50.00	48.45		AVRG	-3.1	25.0
cis-1,2-Dichloroethene	0.361	0.339	50.00	46.91		AVRG	-6.2	25.0
trans-1,2-Dichloroethene	0.348	0.326	50.00	46.80		AVRG	-6.4	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.354	0.332	100.0	93.71		AVRG	-6.3	25.0
1,2-Dichloropropane	0.375	0.359	50.00	47.87		AVRG	-4.3	25.0
1,3-Dichloropropane	1.211	1.122	50.00	46.31		AVRG	-7.4	25.0
2,2-Dichloropropane	0.454	0.442	50.00	48.67		AVRG	-2.6	25.0
1,1-Dichloropropene	0.488	0.468	50.00	48.04		AVRG	-3.9	25.0
cis-1,3-Dichloropropene	0.560	0.556	50.00	49.64		AVRG	-0.7	25.0
trans-1,3-Dichloropropene	1.034	1.108	50.00	53.57		AVRG	7.1	25.0
Ethylbenzene	3.341	3.334	50.00	49.89		AVRG	-0.2	25.0
Ethyl methacrylate	0.983	1.007	50.00	51.23		AVRG	2.5	25.0
Hexachlorobutadiene	0.551	0.553	50.00	50.15		AVRG	0.3	25.0
2-Hexanone	0.691	0.707	100.0	102.2		AVRG	2.2	25.0
Iodomethane	0.252	0.260	50.00	51.66		AVRG	3.3	25.0
Isopropylbenzene	2.674	2.937	50.00	54.92		AVRG	9.8	25.0
p-Isopropyltoluene	3.389	3.447	50.00	50.86		AVRG	1.7	25.0
Methyl acetate	0.323	0.289	50.00	58.14		LINR	16.3	25.0
Methyl cyclohexane	0.585	0.620	50.00	52.96		AVRG	5.9	25.0
Methylene chloride	0.785	0.409	50.00	48.21		2ORDR	-3.6	25.0
Methyl methacrylate	0.351	0.340	50.00	48.54		AVRG	-2.9	25.0
4-Methyl-2-pentanone	0.390	0.383	100.0	98.23		AVRG	-1.8	25.0
MTBE	0.822	0.805	50.00	48.96		AVRG	-2.1	25.0
Naphthalene	2.705	2.469	50.00	45.64		AVRG	-8.7	25.0
n-Propylbenzene	5.038	5.131	50.00	50.92		AVRG	1.8	25.0
Styrene	2.098	2.128	50.00	50.71		AVRG	1.4	25.0
1,1,1,2-Tetrachloroethane	0.609	0.580	50.00	47.62		AVRG	-4.8	25.0
1,1,2,2-Tetrachloroethane	1.100	1.051	50.00	47.77	0.300	AVRG	-4.5	25.0
Tetrachloroethene	0.644	0.632	50.00	49.10		AVRG	-1.8	25.0
Tetrahydrofuran	0.129	0.121	50.00	55.61		LINR	11.2	25.0
Toluene	1.966	1.860	50.00	57.60		LINR	15.2	25.0
1,2,3-Trichlorobenzene	1.029	0.984	50.00	47.80		AVRG	-4.4	25.0
1,2,4-Trichlorobenzene	1.130	1.038	50.00	45.92		AVRG	-8.2	25.0
1,1,1-Trichloroethane	0.406	0.399	50.00	49.19		AVRG	-1.6	25.0
1,1,2-Trichloroethane	0.510	0.523	50.00	51.20		AVRG	2.4	25.0
Trichloroethene	0.320	0.297	50.00	46.39		AVRG	-7.2	25.0
Trichlorofluoromethane	0.420	0.425	50.00	50.68		AVRG	1.4	25.0
Trichlorotrifluoroethane	0.263	0.291	50.00	55.31		AVRG	10.6	25.0
1,2,3-Trichloropropane	0.238	0.226	50.00	47.54		AVRG	-4.9	25.0
1,2,4-Trimethylbenzene	3.260	3.224	50.00	49.45		AVRG	-1.1	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867
 Instrument ID: VOA1 Calibration Date: 07/15/08 Time: 1548
 Lab File ID: V1ICV01 Init. Calib. Date(s): 07/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1349 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	3.142	3.161	50.00	50.31		AVRG	0.6	25.0
Vinyl acetate	0.792	0.829	100.0	104.6		AVRG	4.6	25.0
Vinyl chloride	0.509	0.530	50.00	52.06		AVRG	4.1	25.0
m,p-Xylene	2.358	2.376	100.0	100.8		AVRG	0.8	25.0
Xylene (total)	2.414	2.526	150.0	150.7		AVRG	4.6	25.0
Dibromofluoromethane	0.239	0.233	30.00	29.22		AVRG	-2.6	25.0
1,2-Dichloroethane-d4	0.066	0.065	30.00	29.81		AVRG	-0.6	25.0
Toluene-d8	2.046	2.066	30.00	30.30		AVRG	1.0	25.0
Bromofluorobenzene	0.812	0.830	30.00	30.65		AVRG	2.2	25.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Instrument ID: VOA1 Calibration Date: 08/15/08 Time: 0924
 Lab File ID: V1CCV01 Init. Calib. Date(s): 02/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1015 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.213	0.142	100.0	84.51		LINR	-15.5	
Benzene	1.336	1.311	50.00	49.08		AVRG	-1.8	
Bromochloromethane	0.144	0.163	50.00	56.64		AVRG	13.3	
Bromodichloromethane	0.435	0.481	50.00	55.26		AVRG	10.5	
Bromoform	0.510	0.561	50.00	55.03	0.100	AVRG	10.1	
Bromomethane	0.254	0.290	50.00	56.99		AVRG	14.0	
2-Butanone	0.241	0.212	100.0	87.70		AVRG	-12.3	
Carbon disulfide	1.055	1.314	50.00	62.27		AVRG	24.5	
Carbon tetrachloride	0.325	0.387	50.00	59.61		AVRG	19.2	
Chlorobenzene	1.772	1.590	50.00	44.86	0.300	AVRG	-10.3	
Chloroethane	0.303	0.266	50.00	44.00		AVRG	-12.0	
Chloroform	0.548	0.625	50.00	57.01		AVRG	14.0	20.0
Chloromethane	0.636	0.540	50.00	42.41	0.100	AVRG	-15.2	
Cyclohexane	0.666	0.824	50.00	61.82		AVRG	23.6	
Dibromochloromethane	0.636	0.600	50.00	47.14		AVRG	-5.7	
1,2-Dibromoethane	0.594	0.540	50.00	45.49		AVRG	-9.0	
1,1-Dichloroethane	0.659	0.658	50.00	49.95	0.100	AVRG	-0.1	
1,2-Dichloroethane	0.412	0.478	50.00	57.98		AVRG	16.0	
1,1-Dichloroethene	0.300	0.299	50.00	49.80		AVRG	-0.4	20.0
cis-1,2-Dichloroethene	0.361	0.372	50.00	51.48		AVRG	3.0	
trans-1,2-Dichloroethene	0.348	0.347	50.00	49.89		AVRG	-0.2	
1,2-Dichloroethene (total)	0.354	0.360	100.0	101.4		AVRG	1.4	
1,2-Dichloropropane	0.375	0.372	50.00	49.63		AVRG	-0.7	20.0
cis-1,3-Dichloropropene	0.560	0.588	50.00	52.48		AVRG	5.0	
trans-1,3-Dichloropropene	1.034	1.005	50.00	48.59		AVRG	-2.8	
Ethylbenzene	3.341	2.970	50.00	44.45		AVRG	-11.1	20.0
2-Hexanone	0.691	0.649	100.0	93.95		AVRG	-6.0	
Isopropylbenzene	2.674	2.346	50.00	43.86		AVRG	-12.3	
Methyl acetate	0.323	0.322	50.00	64.72		LINR	29.4	
Methyl cyclohexane	0.585	0.694	50.00	59.30		AVRG	18.6	
Methylene chloride	0.785	0.389	50.00	45.54		2ORDR	-8.9	
4-Methyl-2-pentanone	0.390	0.404	100.0	103.8		AVRG	3.8	
Methyl tert-butyl ether	0.822	1.060	50.00	64.50		AVRG	29.0	
Styrene	2.098	1.730	50.00	41.23		AVRG	-17.5	
1,1,2,2-Tetrachloroethane	1.100	1.184	50.00	53.78	0.300	AVRG	7.6	
Tetrachloroethene	0.644	0.608	50.00	47.22		AVRG	-5.6	
Toluene	1.966	1.597	50.00	49.46		LINR	-1.1	20.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Instrument ID: VOA1 Calibration Date: 08/15/08 Time: 0924
 Lab File ID: V1CCV01 Init. Calib. Date(s): 02/15/08 07/15/08
 Heated Purge: (Y/N) Y Init. Calib. Times: 1015 1826
 GC Column: RTX-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2,3-Trichlorobenzene	1.029	0.926	50.00	44.96		AVRG	-10.1	
1,2,4-Trichlorobenzene	1.130	1.044	50.00	46.18		AVRG	-7.6	
1,1,1-Trichloroethane	0.406	0.483	50.00	59.53		AVRG	19.1	
1,1,2-Trichloroethane	0.510	0.499	50.00	48.87		AVRG	-2.3	
Trichloroethene	0.320	0.346	50.00	54.12		AVRG	8.2	
Trichlorotrifluoroethane	0.263	0.359	50.00	68.32		AVRG	36.6	
Vinyl chloride	0.509	0.443	50.00	43.47		AVRG	-13.0	20.0
Xylene (total)	2.414	2.192	150.0	135.2		AVRG	-9.2	
Dibromofluoromethane	0.239	0.258	30.00	32.44		AVRG	8.1	
1,2-Dichloroethane-d4	0.066	0.070	30.00	32.01		AVRG	6.7	
Toluene-d8	2.046	1.933	30.00	28.34		AVRG	-5.5	
Bromofluorobenzene	0.812	0.786	30.00	29.03		AVRG	-3.2	

NA

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Lab File ID: V4BFB01 BFB Injection Date: 07/15/08

Instrument ID: VOA4 BFB Injection Time: 2123

GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 60.0% of mass 95	50.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	67.3
175	5.0 - 9.0% of mass 174	4.9 (7.3)1
176	95.0 - 101.0% of mass 174	64.2 (95.4)1
177	5.0 - 9.0% of mass 176	4.2 (6.5)2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		V4STD200PPB	V4STD09	07/15/08	2222
02		V4STD100PPB	V4STD08	07/15/08	2251
03		V4STD50PPB	V4STD07	07/15/08	2321
04	V4BLK0715LCS	V4BLK0715LCS	V4ICV01	07/15/08	2350
05		V4STD20PPB	V4STD06	07/16/08	0020
06		V4STD10PPB	V4STD05	07/16/08	0049
07		V4STD2PPB	V4STD04	07/16/08	0119
08		V4STD1PPB	V4STD03	07/16/08	0148
09		V4STD0.5PPB	V4STD02	07/16/08	0217
10		V4STD0.25PPB	V4STD01	07/16/08	0247
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
Acetone			0.153	0.098	0.105
Acrolein		0.045	0.036	0.039	0.032
Acrylonitrile	0.093	0.104	0.116	0.111	0.099
Benzene	1.198	1.192	1.329	1.197	1.069
Bromobenzene	0.875	1.018	1.015	0.977	0.821
Bromochloromethane	0.194	0.166	0.187	0.172	0.163
Bromodichloromethane	0.447	0.472	0.514	0.444	0.420
Bromoform	0.413	0.440	0.469	0.457	0.461
Bromomethane	0.407	0.485	0.398	0.333	0.284
2-Butanone		0.163	0.126	0.110	0.124
n-Butylbenzene		2.227	2.534	2.201	1.872
sec-Butylbenzene	3.176	2.965	3.206	3.074	2.446
tert-Butylbenzene	2.305	2.000	2.253	1.941	1.663
Carbon disulfide	1.072	0.998	1.249	1.100	0.942
Carbon tetrachloride	0.474	0.369	0.438	0.387	0.350
Chlorobenzene	2.046	1.894	2.096	1.979	1.738
Chloroethane	0.352	0.277	0.363	0.275	0.270
2-Chloroethyl vinyl ether	0.166	0.195	0.177	0.183	0.163
Chloroform	0.672	0.573	0.753	0.642	0.541
1-Chlorohexane		1.182	1.166	0.999	0.823
Chloromethane	0.762	0.612	0.769	0.536	0.496
2-Chlorotoluene	3.241	2.792	3.023	2.551	2.253
4-Chlorotoluene	3.493	3.079	3.492	3.077	2.551
Cyclohexane	0.434	0.400	0.404	0.421	0.340
Dibromochloromethane	0.698	0.683	0.754	0.765	0.741
1,2-Dibromo-3-chloropropane		0.112	0.182	0.129	0.120
1,2-Dibromoethane	0.635	0.691	0.734	0.725	0.618
Dibromomethane	0.256	0.213	0.224	0.202	0.188
1,2-Dichlorobenzene	1.646	1.460	1.752	1.638	1.326
1,3-Dichlorobenzene	2.082	1.745	1.946	1.628	1.507
1,4-Dichlorobenzene	2.138	1.809	1.953	1.913	1.638
Dichlorodifluoromethane	0.444	0.465	0.440	0.435	0.382
1,1-Dichloroethane	0.545	0.650	0.732	0.609	0.570
1,2-Dichloroethane	0.414	0.417	0.559	0.422	0.413
1,1-Dichloroethene	0.288	0.276	0.334	0.291	0.257
cis-1,2-Dichloroethene	0.364	0.362	0.399	0.361	0.304
trans-1,2-Dichloroethene	0.309	0.373	0.395	0.324	0.303

FORM VI VOA

M 7/16/08

RW
7-16-08

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
1,2-Dichloroethene (total)	0.336	0.367	0.397	0.343	0.303
1,2-Dichloropropane	0.304	0.344	0.407	0.304	0.295
1,3-Dichloropropane	1.033	1.022	1.081	1.199	1.007
2,2-Dichloropropane	0.437	0.353	0.478	0.360	0.331
1,1-Dichloropropene	0.426	0.480	0.533	0.438	0.382
cis-1,3-Dichloropropene	0.359	0.454	0.541	0.529	0.466
trans-1,3-Dichloropropene	0.964	0.924	0.937	0.975	0.914
Ethylbenzene	3.359	3.088	3.548	3.372	3.006
Ethyl methacrylate	0.892	0.699	0.746	0.818	0.764
Hexachlorobutadiene	0.460	0.470	0.554	0.462	0.310
2-Hexanone	0.432	0.442	0.458	0.441	0.399
Iodomethane		0.278	0.414	0.327	0.398
Isopropylbenzene	2.528	2.461	3.237	2.598	2.376
p-Isopropyltoluene		2.621	2.753	2.351	2.009
Methyl acetate		0.207	0.300	0.258	0.247
Methyl cyclohexane		0.328	0.328	0.311	0.276
Methylene chloride		2.022	1.183	0.690	0.419
Methyl methacrylate	0.255	0.259	0.270	0.269	0.228
MTBE	0.604	0.646	0.829	0.794	0.709
4-Methyl-2-pentanone	0.292	0.269	0.273	0.249	0.237
Naphthalene	2.515	2.084	2.098	2.163	1.600
n-Propylbenzene	4.467	3.774	4.372	3.975	3.344
Styrene	2.115	2.224	2.088	1.966	1.897
1,1,1,2-Tetrachloroethane	0.621	0.658	0.679	0.699	0.635
1,1,2,2-Tetrachloroethane	0.899	0.774	0.836	0.902	0.718
Tetrachloroethene	0.817	0.644	0.815	0.710	0.642
Tetrahydrofuran			0.079	0.081	0.064
Toluene	2.056	1.778	1.973	1.817	1.574
1,2,3-Trichlorobenzene	1.024	1.101	0.977	0.930	0.706
1,2,4-Trichlorobenzene		1.053	1.016	0.967	0.725
1,1,1-Trichloroethane	0.484	0.356	0.584	0.432	0.407
1,1,2-Trichloroethane	0.304	0.508	0.508	0.501	0.518
Trichloroethene	0.386	0.326	0.415	0.340	0.293
Trichlorofluoromethane	0.561	0.539	0.578	0.547	0.496
Trichlorotrifluoroethane	0.210	0.275	0.263	0.288	0.251
1,2,3-Trichloropropane		0.255	0.193	0.166	0.214
1,2,4-Trimethylbenzene	2.983	2.687	3.178	2.836	2.418

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF0.25: V4STD01 RF0.5: V4STD02 RF1: V4STD03
RF2: V4STD04 RF10: V4STD05

COMPOUND	RF0.25	RF0.5	RF1	RF2	RF10
1,3,5-Trimethylbenzene	2.756	2.583	3.042	2.686	2.259
Vinyl acetate		0.529	0.603	0.645	0.579
Vinyl chloride	0.445	0.487	0.552	0.475	0.408
m,p-Xylene	2.678	2.629	2.982	2.570	2.368
Xylene (total)	2.737	2.769	2.912	2.608	2.505
Dibromofluoromethane	0.320	0.328	0.312	0.306	0.299
1,2-Dichloroethane-d4	0.064	0.062	0.066	0.064	0.058
Toluene-d8	1.986	2.057	2.024	2.127	2.143
Bromofluorobenzene	0.932	0.939	0.912	0.921	0.942

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
Acetone	0.109	0.118	0.125	0.134
Acrolein	0.030	0.032	0.031	0.034
Acrylonitrile	0.112	0.118	0.123	0.120
Benzene	1.176	1.204	1.192	1.136
Bromobenzene	0.911	0.880	0.899	0.859
Bromochloromethane	0.171	0.188	0.184	0.177
Bromodichloromethane	0.448	0.446	0.460	0.439
Bromoform	0.508	0.507	0.502	0.478
Bromomethane	0.320	0.352	0.363	0.342
2-Butanone	0.135	0.142	0.151	0.153
n-Butylbenzene	1.930	2.028	2.011	1.960
sec-Butylbenzene	2.525	2.619	2.639	2.545
tert-Butylbenzene	1.795	1.828	1.893	1.798
Carbon disulfide	0.950	1.045	1.070	1.021
Carbon tetrachloride	0.354	0.392	0.399	0.391
Chlorobenzene	1.788	1.761	1.619	1.438
Chloroethane	0.265	0.300	0.299	0.280
2-Chloroethyl vinyl ether	0.179	0.191	0.193	0.186
Chloroform	0.572	0.592	0.592	0.570
1-Chlorohexane	0.809	0.841	0.782	0.704
Chloromethane	0.506	0.515	0.487	0.478
2-Chlorotoluene	2.460	2.436	2.380	2.380
4-Chlorotoluene	2.672	2.686	2.653	2.612
Cyclohexane	0.352	0.418	0.432	0.417
Dibromochloromethane	0.792	0.765	0.727	0.681
1,2-Dibromo-3-chloropropane	0.154	0.160	0.168	0.186
1,2-Dibromoethane	0.670	0.650	0.615	0.585
Dibromomethane	0.209	0.220	0.223	0.217
1,2-Dichlorobenzene	1.413	1.441	1.416	1.400
1,3-Dichlorobenzene	1.487	1.504	1.562	1.449
1,4-Dichlorobenzene	1.688	1.508	1.550	1.516
Dichlorodifluoromethane	0.364	0.448	0.448	0.439
1,1-Dichloroethane	0.588	0.639	0.640	0.601
1,2-Dichloroethane	0.416	0.437	0.446	0.430
1,1-Dichloroethene	0.261	0.297	0.307	0.289
cis-1,2-Dichloroethene	0.338	0.347	0.346	0.338
trans-1,2-Dichloroethene	0.311	0.330	0.333	0.319

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
1,2-Dichloroethene (total)	0.324	0.338	0.340	0.329
1,2-Dichloropropane	0.311	0.335	0.330	0.322
1,3-Dichloropropane	1.085	1.023	0.946	0.892
2,2-Dichloropropane	0.349	0.382	0.394	0.395
1,1-Dichloropropene	0.388	0.422	0.426	0.404
cis-1,3-Dichloropropene	0.481	0.508	0.504	0.492
trans-1,3-Dichloropropene	0.971	0.955	0.897	0.833
Ethylbenzene	3.026	2.992	2.758	2.431
Ethyl methacrylate	0.864	0.841	0.800	0.759
Hexachlorobutadiene	0.320	0.335	0.357	0.329
2-Hexanone	0.430	0.420	0.415	0.402
Iodomethane	0.455	0.535	0.554	0.531
Isopropylbenzene	2.343	2.374	2.216	1.988
p-Isopropyltoluene	2.064	2.150	2.202	2.061
Methyl acetate	0.251	0.263	0.281	0.281
Methyl cyclohexane	0.261	0.314	0.325	0.310
Methylene chloride	0.422	0.413	0.412	0.386
Methyl methacrylate	0.242	0.263	0.269	0.281
MTBE	0.788	0.851	0.858	0.835
4-Methyl-2-pentanone	0.263	0.278	0.282	0.281
Naphthalene	1.809	1.815	2.029	2.016
n-Propylbenzene	3.545	3.555	3.443	3.313
Styrene	2.032	2.011	1.831	1.666
1,1,1,2-Tetrachloroethane	0.681	0.662	0.619	0.563
1,1,2,2-Tetrachloroethane	0.752	0.785	0.782	0.789
Tetrachloroethene	0.629	0.651	0.599	0.558
Tetrahydrofuran	0.072	0.078	0.080	0.079
Toluene	1.631	1.637	1.471	1.345
1,2,3-Trichlorobenzene	0.748	0.779	0.840	0.837
1,2,4-Trichlorobenzene	0.849	0.855	0.924	0.915
1,1,1-Trichloroethane	0.423	0.457	0.455	0.444
1,1,2-Trichloroethane	0.513	0.509	0.482	0.443
Trichloroethene	0.301	0.323	0.321	0.308
Trichlorofluoromethane	0.476	0.545	0.560	0.549
Trichlorotrifluoroethane	0.228	0.282	0.286	0.278
1,2,3-Trichloropropane	0.208	0.201	0.194	0.190
1,2,4-Trimethylbenzene	2.547	2.589	2.608	2.456

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

LAB FILE ID: RF20: V4STD06 RF50: V4STD07 RF100: V4STD08
RF200: V4STD09

COMPOUND	RF20	RF50	RF100	RF200
1,3,5-Trimethylbenzene	2.441	2.382	2.417	2.312
Vinyl acetate	0.630	0.721	0.740	0.708
Vinyl chloride	0.430	0.458	0.454	0.408
m,p-Xylene	2.401	2.370	2.106	1.783
Xylene (total)	2.464	2.420	2.201	1.973
Dibromofluoromethane	0.305	0.306	0.312	0.312
1,2-Dichloroethane-d4	0.061	0.063	0.064	0.060
Toluene-d8	2.095	1.946	1.865	1.815
Bromofluorobenzene	0.955	0.892	0.837	0.819

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
Acetone	LINR	0.00000000	0.13119072	0.998
Acrolein	LINR	0.00000000	3.332e-002	0.998 NA
Acrylonitrile	AVRG		0.11099945	9.1
Benzene	AVRG		1.18803682	5.7
Bromobenzene	AVRG		0.91723641	7.6
Bromochloromethane	AVRG		0.17824412	6.1
Bromodichloromethane	AVRG		0.45437649	5.8
Bromoform	AVRG		0.47069615	6.8
Bromomethane	LINR	0.00000000	0.34624661	0.999
2-Butanone	AVRG		0.13812948	12.6
n-Butylbenzene	AVRG		2.09540974	10.3
sec-Butylbenzene	AVRG		2.79933911	10.8
tert-Butylbenzene	AVRG		1.94164730	11.0
Carbon disulfide	AVRG		1.04969076	8.8
Carbon tetrachloride	AVRG		0.39498646	10.1
Chlorobenzene	AVRG		1.81773370	11.6
Chloroethane	AVRG		0.29785496	12.0
2-Chloroethyl vinyl ether	AVRG		0.18154198	6.3
Chloroform	AVRG		0.61182192	10.8
1-Chlorohexane	LINR	0.00000000	0.72897970	0.995
Chloromethane	LINR	0.00000000	0.48186451	1.000
2-Chlorotoluene	AVRG		2.61288443	12.8
4-Chlorotoluene	AVRG		2.92407537	12.8
Cyclohexane	AVRG		0.40216874	8.3
Dibromochloromethane	AVRG		0.73405326	5.4
1,2-Dibromo-3-chloropropane	LINR	0.00000000	0.18192321	0.996
1,2-Dibromoethane	AVRG		0.65814573	7.8
Dibromomethane	AVRG		0.21677268	8.6
1,2-Dichlorobenzene	AVRG		1.49904259	9.6
1,3-Dichlorobenzene	AVRG		1.65668579	13.5
1,4-Dichlorobenzene	AVRG		1.74585179	12.7
Dichlorodifluoromethane	AVRG		0.42966270	7.8
1,1-Dichloroethane	AVRG		0.61932484	8.8
1,2-Dichloroethane	AVRG		0.43941740	10.6
1,1-Dichloroethene	AVRG		0.28894246	8.1
cis-1,2-Dichloroethene	AVRG		0.35106237	7.4
trans-1,2-Dichloroethene	AVRG		0.33292729	9.3

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
1,2-Dichloroethene (total)	AVRG		0.34199483	7.8
1,2-Dichloropropane	AVRG		0.32807892	10.3
1,3-Dichloropropane	AVRG		1.03224837	8.4
2,2-Dichloropropane	AVRG		0.38660758	12.1
1,1-Dichloropropene	AVRG		0.43313408	11.0
cis-1,3-Dichloropropene	AVRG		0.48150154	11.2
trans-1,3-Dichloropropene	AVRG		0.93009433	4.9
Ethylbenzene	AVRG		3.06434516	11.1
Ethyl methacrylate	AVRG		0.79817579	7.8
Hexachlorobutadiene	LINR	0.00000000	0.33481727	0.998
2-Hexanone	AVRG		0.42649573	4.5
Iodomethane	LINR	0.00000000	0.53517234	0.999
Isopropylbenzene	AVRG		2.45792053	13.9
p-Isopropyltoluene	AVRG		2.27638551	12.2
Methyl acetate	AVRG		0.26100376	10.9
Methyl cyclohexane	AVRG		0.30668612	8.2
Methylene chloride	LINR	0.00000000	0.39287735	0.998
Methyl methacrylate	AVRG		0.25966907	6.2
MTBE	AVRG		0.76815210	12.1
4-Methyl-2-pentanone	AVRG		0.26935370	6.5
Naphthalene	AVRG		2.01453012	12.9
n-Propylbenzene	AVRG		3.75437162	11.5
Styrene	AVRG		1.98107346	8.4
1,1,1,2-Tetrachloroethane	AVRG		0.64645417	6.4
1,1,2,2-Tetrachloroethane	AVRG		0.80422641	7.8
Tetrachloroethene	AVRG		0.67387616	13.4
Tetrahydrofuran	AVRG		7.61e-002	8.0
Toluene	AVRG		1.69798784	13.6
1,2,3-Trichlorobenzene	LINR	0.00000000	0.83460597	0.999
1,2,4-Trichlorobenzene	AVRG		0.91313189	11.4
1,1,1-Trichloroethane	AVRG		0.44914093	13.8
1,1,2-Trichloroethane	AVRG		0.47636355	14.4
Trichloroethene	AVRG		0.33484198	12.1
Trichlorofluoromethane	AVRG		0.53902140	6.0
Trichlorotrifluoroethane	AVRG		0.26243266	10.4
1,2,3-Trichloropropane	AVRG		0.20269736	12.5
1,2,4-Trimethylbenzene	AVRG		2.70022024	9.4

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA34379

Instrument ID: VOA4 Calibration Date(s): 07/15/08 07/16/08

Column: DB-VRX ID: 0.25 (mm) Calibration Time(s): 2222 0247

COMPOUND	CURVE	COEFFICENTS		%RSD OR R ²
		A0	A1	
1,3,5-Trimethylbenzene	AVRG		2.54190535	9.9
Vinyl acetate	AVRG		0.64445693	11.5
Vinyl chloride	AVRG		0.45755750	9.8
m,p-Xylene	AVRG		2.43213126	14.2
Xylene (total)	AVRG		2.50994529	11.6
Dibromofluoromethane	AVRG		0.31136560	2.8
1,2-Dichloroethane-d4	AVRG		6.243e-002	3.7
Toluene-d8	AVRG		2.00653229	5.7
Bromofluorobenzene	AVRG		0.90547517	5.2

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA30743
 Instrument ID: VOA4 Calibration Date: 07/15/08 Time: 2350
 Lab File ID: V4ICV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.120	0.120	100.0	91.68		LINR	-8.3	25.0
Acrolein	0.035	0.038	250.0	286.4		LINR	14.5	25.0
Acrylonitrile	0.111	0.121	250.0	273.4		AVRG	9.4	25.0
Benzene	1.188	1.090	50.00	45.88		AVRG	-8.2	25.0
Bromobenzene	0.917	0.838	50.00	45.70		AVRG	-8.6	25.0
Bromochloromethane	0.178	0.170	50.00	47.82		AVRG	-4.4	25.0
Bromodichloromethane	0.454	0.440	50.00	48.37		AVRG	-3.2	25.0
Bromoform	0.470	0.468	50.00	49.69	0.100	AVRG	-0.6	25.0
Bromomethane	0.365	0.339	50.00	48.90		LINR	-2.2	25.0
2-Butanone	0.138	0.148	100.0	106.9		AVRG	6.9	25.0
n-Butylbenzene	2.095	1.953	50.00	46.60		AVRG	-6.8	25.0
sec-Butylbenzene	2.799	2.507	50.00	44.78		AVRG	-10.4	25.0
tert-Butylbenzene	1.942	1.812	50.00	46.66		AVRG	-6.7	25.0
Carbon disulfide	1.050	1.169	50.00	55.67		AVRG	11.3	25.0
Carbon tetrachloride	0.395	0.368	50.00	46.66		AVRG	-6.7	25.0
Chlorobenzene	1.818	1.691	50.00	46.53	0.300	AVRG	-6.9	25.0
Chloroethane	0.298	0.293	50.00	49.25		AVRG	-1.5	25.0
2-Chloroethyl vinyl ether	0.181	0.203	100.0	111.6		AVRG	11.6	25.0
Chloroform	0.612	0.551	50.00	45.04		AVRG	-9.9	25.0
1-Chlorohexane	0.913	0.822	50.00	56.38		LINR	12.8	25.0
Chloromethane	0.573	0.535	50.00	55.52	0.100	LINR	11.0	25.0
2-Chlorotoluene	2.613	2.297	50.00	43.95		AVRG	-12.1	25.0
4-Chlorotoluene	2.924	2.349	50.00	40.17		AVRG	-19.7	25.0
Cyclohexane	0.402	0.430	50.00	53.42		AVRG	6.8	25.0
Dibromochloromethane	0.734	0.759	50.00	51.73		AVRG	3.4	25.0
1,2-Dibromo-3-chloropropane	0.151	0.148	50.00	40.58		LINR	-18.8	25.0
1,2-Dibromoethane	0.658	0.610	50.00	46.33		AVRG	-7.3	25.0
Dibromomethane	0.217	0.209	50.00	48.24		AVRG	-3.5	25.0
1,2-Dichlorobenzene	1.499	1.367	50.00	45.60		AVRG	-8.8	25.0
1,3-Dichlorobenzene	1.657	1.398	50.00	42.20		AVRG	-15.6	25.0
1,4-Dichlorobenzene	1.746	1.513	50.00	43.33		AVRG	-13.3	25.0
Dichlorodifluoromethane	0.429	0.463	50.00	53.87		AVRG	7.7	25.0
1,1-Dichloroethane	0.619	0.599	50.00	48.34	0.100	AVRG	-3.3	25.0
1,2-Dichloroethane	0.439	0.421	50.00	47.92		AVRG	-4.2	25.0
1,1-Dichloroethene	0.289	0.287	50.00	49.64		AVRG	-0.7	25.0
cis-1,2-Dichloroethene	0.351	0.328	50.00	46.66		AVRG	-6.7	25.0
trans-1,2-Dichloroethene	0.333	0.312	50.00	46.95		AVRG	-6.1	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA30743
 Instrument ID: VOA4 Calibration Date: 07/15/08 Time: 2350
 Lab File ID: V4ICV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.342	0.320	100.0	93.60		AVRG	-6.4	25.0
1,2-Dichloropropane	0.328	0.306	50.00	46.66		AVRG	-6.7	25.0
1,3-Dichloropropane	1.032	0.903	50.00	43.74		AVRG	-12.5	25.0
2,2-Dichloropropane	0.386	0.360	50.00	46.53		AVRG	-6.9	25.0
1,1-Dichloropropene	0.433	0.394	50.00	45.47		AVRG	-9.0	25.0
cis-1,3-Dichloropropene	0.482	0.492	50.00	51.12		AVRG	2.2	25.0
trans-1,3-Dichloropropene	0.930	0.968	50.00	52.03		AVRG	4.1	25.0
Ethylbenzene	3.064	2.833	50.00	46.23		AVRG	-7.5	25.0
Ethyl methacrylate	0.798	0.789	50.00	49.40		AVRG	-1.2	25.0
Hexachlorobutadiene	0.400	0.295	50.00	44.06		LINR	-11.9	25.0
2-Hexanone	0.426	0.448	100.0	105.0		AVRG	5.0	25.0
Iodomethane	0.436	0.545	50.00	50.90		LINR	1.8	25.0
Isopropylbenzene	2.458	2.512	50.00	51.10		AVRG	2.2	25.0
p-Isopropyltoluene	2.276	2.177	50.00	47.82		AVRG	-4.3	25.0
Methyl acetate	0.261	0.278	50.00	53.32		AVRG	6.6	25.0
Methyl cyclohexane	0.307	0.319	50.00	52.03		AVRG	4.0	25.0
Methylene chloride	0.743	0.396	50.00	50.34		LINR	0.7	25.0
Methyl methacrylate	0.260	0.269	50.00	51.86		AVRG	3.7	25.0
MTBE	0.768	0.813	50.00	52.95		AVRG	5.9	25.0
4-Methyl-2-pentanone	0.269	0.279	100.0	103.5		AVRG	3.5	25.0
Naphthalene	2.014	1.748	50.00	43.39		AVRG	-13.2	25.0
n-Propylbenzene	3.754	3.546	50.00	47.23		AVRG	-5.5	25.0
Styrene	1.981	1.920	50.00	48.47		AVRG	-3.0	25.0
1,1,1,2-Tetrachloroethane	0.646	0.602	50.00	46.60		AVRG	-6.8	25.0
1,1,2,2-Tetrachloroethane	0.804	0.761	50.00	47.31	0.300	AVRG	-5.4	25.0
Tetrachloroethene	0.674	0.608	50.00	45.08		AVRG	-9.8	25.0
Tetrahydrofuran	0.076	0.077	50.00	50.42		AVRG	0.8	25.0
Toluene	1.698	1.543	50.00	45.45		AVRG	-9.1	25.0
1,2,3-Trichlorobenzene	0.882	0.728	50.00	43.61		LINR	-12.8	25.0
1,2,4-Trichlorobenzene	0.913	0.808	50.00	44.22		AVRG	-11.5	25.0
1,1,1-Trichloroethane	0.449	0.414	50.00	46.14		AVRG	-7.7	25.0
1,1,2-Trichloroethane	0.476	0.478	50.00	50.14		AVRG	0.3	25.0
Trichloroethene	0.335	0.299	50.00	44.64		AVRG	-10.7	25.0
Trichlorofluoromethane	0.539	0.539	50.00	50.04		AVRG	0.1	25.0
Trichlorotrifluoroethane	0.262	0.303	50.00	57.81		AVRG	15.6	25.0
1,2,3-Trichloropropane	0.203	0.191	50.00	47.15		AVRG	-5.7	25.0
1,2,4-Trimethylbenzene	2.700	2.485	50.00	46.01		AVRG	-8.0	25.0

VOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA30743
 Instrument ID: VOA4 Calibration Date: 07/15/08 Time: 2350
 Lab File ID: V4ICV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	2.542	2.395	50.00	47.10		AVRG	-5.8	25.0
Vinyl acetate	0.644	0.728	100.0	113.0		AVRG	13.0	25.0
Vinyl chloride	0.457	0.450	50.00	49.15		AVRG	-1.7	25.0
Xylene(total)	2.510	2.397	150.0	138.5		AVRG	-4.5	25.0
Dibromofluoromethane	0.311	0.312	30.00	30.02		AVRG	0.1	25.0
1,2-Dichloroethane-d4	0.062	0.061	30.00	29.31		AVRG	-2.3	25.0
Toluene-d8	2.006	2.044	30.00	30.56		AVRG	1.9	25.0
Bromofluorobenzene	0.905	0.921	30.00	30.52		AVRG	1.7	25.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TPM GROUP
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549
 Instrument ID: VOA4 Calibration Date: 08/15/08 Time: 0946
 Lab File ID: V4CCV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetone	0.120	0.150	100.0	114.1		LINR	14.1	
Acrolein	0.035	0.055	250.0	415.4		LINR	66.2	NA
Acrylonitrile	0.111	0.113	250.0	255.0		AVRG	2.0	
Benzene	1.188	1.061	50.00	44.65		AVRG	-10.7	
Bromobenzene	0.917	0.874	50.00	47.64		AVRG	-4.7	
Bromochloromethane	0.178	0.175	50.00	49.09		AVRG	-1.8	
Bromodichloromethane	0.454	0.428	50.00	47.13		AVRG	-5.7	
Bromoform	0.470	0.504	50.00	53.49	0.100	AVRG	7.0	
Bromomethane	0.365	0.306	50.00	44.21		LINR	-11.6	
2-Butanone	0.138	0.156	100.0	112.8		AVRG	12.8	
n-Butylbenzene	2.095	1.946	50.00	46.44		AVRG	-7.1	
sec-Butylbenzene	2.799	2.592	50.00	46.29		AVRG	-7.4	
tert-Butylbenzene	1.942	1.798	50.00	46.29		AVRG	-7.4	
Carbon disulfide	1.050	1.197	50.00	57.02		AVRG	14.0	
Carbon tetrachloride	0.395	0.384	50.00	48.66		AVRG	-2.7	
Chlorobenzene	1.818	1.754	50.00	48.24	0.300	AVRG	-3.5	
Chloroethane	0.298	0.270	50.00	45.29		AVRG	-9.4	
2-Chloroethyl vinyl ether	0.181	0.200	100.0	110.0		AVRG	10.0	
Chloroform	0.612	0.546	50.00	44.59		AVRG	-10.8	20.0
1-Chlorohexane	0.913	0.830	50.00	56.90		LINR	13.8	
Chloromethane	0.573	0.536	50.00	55.58	0.100	LINR	11.2	
2-Chlorotoluene	2.613	2.260	50.00	43.25		AVRG	-13.5	
4-Chlorotoluene	2.924	2.508	50.00	42.89		AVRG	-14.2	
Cyclohexane	0.402	0.492	50.00	61.21		AVRG	22.4	
Dibromochloromethane	0.734	0.794	50.00	54.11		AVRG	8.2	
1,2-Dibromo-3-chloropropane	0.151	0.149	50.00	40.92		LINR	-18.2	
1,2-Dibromoethane	0.658	0.685	50.00	52.03		AVRG	4.1	
Dibromomethane	0.217	0.212	50.00	48.98		AVRG	-2.0	
1,2-Dichlorobenzene	1.499	1.418	50.00	47.29		AVRG	-5.4	
1,3-Dichlorobenzene	1.657	1.696	50.00	51.19		AVRG	2.4	
1,4-Dichlorobenzene	1.746	1.605	50.00	45.98		AVRG	-8.0	
Dichlorodifluoromethane	0.429	0.433	50.00	50.42		AVRG	0.8	
1,1-Dichloroethane	0.619	0.600	50.00	48.41	0.100	AVRG	-3.2	
1,2-Dichloroethane	0.439	0.435	50.00	49.49		AVRG	-1.0	
1,1-Dichloroethene	0.289	0.280	50.00	48.41		AVRG	-3.2	20.0
cis-1,2-Dichloroethene	0.351	0.332	50.00	47.23		AVRG	-5.5	
trans-1,2-Dichloroethene	0.333	0.308	50.00	46.34		AVRG	-7.3	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TPM GROUP
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549
 Instrument ID: VOA4 Calibration Date: 08/15/08 Time: 0946
 Lab File ID: V4CCV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,2-Dichloroethene (total)	0.342	0.320	100.0	93.59		AVRG	-6.4	
1,2-Dichloropropane	0.328	0.300	50.00	45.77		AVRG	-8.5	20.0
1,3-Dichloropropane	1.032	0.972	50.00	47.10		AVRG	-5.8	
2,2-Dichloropropane	0.386	0.428	50.00	55.40		AVRG	10.8	
1,1-Dichloropropene	0.433	0.376	50.00	43.47		AVRG	-13.1	
cis-1,3-Dichloropropene	0.482	0.480	50.00	49.90		AVRG	-0.2	
trans-1,3-Dichloropropene	0.930	0.951	50.00	51.11		AVRG	2.2	
Ethylbenzene	3.064	2.944	50.00	48.04		AVRG	-3.9	20.0
Ethyl methacrylate	0.798	0.970	50.00	60.76		AVRG	21.5	
Hexachlorobutadiene	0.400	0.304	50.00	45.33		LINR	-9.3	
2-Hexanone	0.426	0.458	100.0	107.3		AVRG	7.3	
Iodomethane	0.436	0.593	50.00	55.41		LINR	10.8	
Isopropylbenzene	2.458	2.371	50.00	48.23		AVRG	-3.5	
p-Isopropyltoluene	2.276	2.175	50.00	47.78		AVRG	-4.4	
Methyl acetate	0.261	0.302	50.00	57.93		AVRG	15.8	
Methyl cyclohexane	0.307	0.377	50.00	61.46		AVRG	22.9	
Methylene chloride	0.743	0.375	50.00	47.74		LINR	-4.5	
Methyl methacrylate	0.260	0.318	50.00	61.15		AVRG	22.3	
MTBE	0.768	0.957	50.00	62.28		AVRG	24.6	
4-Methyl-2-pentanone	0.269	0.261	100.0	96.87		AVRG	-3.1	
Naphthalene	2.014	1.734	50.00	43.03		AVRG	-13.9	
n-Propylbenzene	3.754	3.530	50.00	47.01		AVRG	-6.0	
Styrene	1.981	2.060	50.00	52.00		AVRG	4.0	
1,1,1,2-Tetrachloroethane	0.646	0.656	50.00	50.77		AVRG	1.5	
1,1,2,2-Tetrachloroethane	0.804	0.757	50.00	47.05	0.300	AVRG	-5.9	
Tetrachloroethene	0.674	0.628	50.00	46.63		AVRG	-6.7	
Tetrahydrofuran	0.076	0.085	50.00	56.16		AVRG	12.3	
Toluene	1.698	1.550	50.00	45.64		AVRG	-8.7	20.0
1,2,3-Trichlorobenzene	0.882	0.715	50.00	42.81		LINR	-14.4	
1,2,4-Trichlorobenzene	0.913	0.788	50.00	43.17		AVRG	-13.6	
1,1,1-Trichloroethane	0.449	0.430	50.00	47.85		AVRG	-4.3	
1,1,2-Trichloroethane	0.476	0.488	50.00	51.25		AVRG	2.5	
Trichloroethene	0.335	0.298	50.00	44.54		AVRG	-10.9	
Trichlorofluoromethane	0.539	0.527	50.00	48.89		AVRG	-2.2	
Trichlorotrifluoroethane	0.262	0.358	50.00	68.12		AVRG	<u>36.2</u>	
1,2,3-Trichloropropane	0.203	0.206	50.00	50.84		AVRG	1.7	
1,2,4-Trimethylbenzene	2.700	2.509	50.00	46.46		AVRG	-7.1	

NA

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMPIRICAL LABS Contract: TPM GROUP
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA20549
 Instrument ID: VOA4 Calibration Date: 08/15/08 Time: 0946
 Lab File ID: V4CCV01 Init. Calib. Date(s): 07/15/08 07/16/08
 Heated Purge: (Y/N) N Init. Calib. Times: 2222 0247
 GC Column: DB-VRX ID: 0.25 (mm)

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
1,3,5-Trimethylbenzene	2.542	2.413	50.00	47.46		AVRG	-5.1	
Vinyl acetate	0.644	0.725	100.0	112.4		AVRG	12.4	
Vinyl chloride	0.457	0.464	50.00	50.68		AVRG	1.4	20.0
m,p-Xylene	2.432	2.248	100.0	92.41		AVRG	-7.6	
Xylene (total)	2.510	2.378	150.0	136.9		AVRG	-5.2	
Dibromofluoromethane	0.311	0.322	30.00	31.00		AVRG	3.3	
1,2-Dichloroethane-d4	0.062	0.063	30.00	30.16		AVRG	0.5	
Toluene-d8	2.006	2.029	30.00	30.33		AVRG	1.1	
Bromofluorobenzene	0.905	0.923	30.00	30.58		AVRG	1.9	

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Lab File ID (Standard): V1CCV01 Date Analyzed: 08/15/08
 Instrument ID: VOA1 Time Analyzed: 0924
 GC Column: RTX-VRX ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 (FLB)		IS2 (CBZ)		IS3 (DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	639728	16.11	306402	21.98	194234	26.51
UPPER LIMIT	1279456	16.61	612804	22.48	388468	27.01
LOWER LIMIT	319864	15.61	153201	21.48	97117	26.01
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V1BLK0815LCS	635531	16.11	305679	21.96	198715	26.51
02 V1BLK0815	606666	16.11	284024	21.95	186491	26.49
03 01SS01QT	604661	16.11	279496	21.97	195535	26.51
04 01SS01QTDUP	602464	16.11	283605	21.97	187675	26.49
05 01SS02QT	598186	16.11	281048	21.97	191915	26.49
06 01SS03QT	593382	16.11	282435	21.97	183271	26.51
07 01SS04QT	603608	16.11	288008	21.97	186503	26.51
08 01SS05QT	601531	16.11	284443	21.95	174451	26.50
09 01SS06QT	577568	16.11	273395	21.97	183119	26.51
10 V1BLK0815LCS	594469	16.11	295950	21.96	195151	26.49
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: GULFPORT-009
 Lab File ID (Standard): V4CCV01 Date Analyzed: 08/15/08
 Instrument ID: VOA4 Time Analyzed: 0946
 GC Column: DB-VRX ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1 (FLB)	RT #	IS2 (CBZ)	RT #	IS3 (DCB)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	725038	13.29	316922	16.62	290485	18.58
UPPER LIMIT	1450076	13.79	633844	17.12	580970	19.08
LOWER LIMIT	362519	12.79	158461	16.12	145243	18.08
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 V4BLK0815LCS	699890	13.29	302571	16.63	297766	18.59
02 V4BLK0815	646942	13.29	260291	16.63	224570	18.58
03 TB 8-14-08-0	610326	13.28	248447	16.63	226946	18.59
04 V4BLK0815LCS	572430	13.28	273628	16.62	261855	18.58
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (FLB) = Fluorobenzene
 IS2 (CBZ) = Chlorobenzene-d5
 IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\voal.i\081508V1.b\0814201A.D
 Lab Smp Id: 0808142-01 Client Smp ID: 01SS01QT
 Inj Date : 15-AUG-2008 13:37 MS Autotune Date: 13-AUG-2008 14:01
 Operator : JH Inst ID: voal.i
 Smp Info : 0808142-01;;5.40;;; a-vial
 Misc Info : tet.v08142;0;;;gm-all.sub;#5517
 Comment :
 Method : \\ELABNSH05\TARGET\chem\voal.i\081508V1.b\VSOIL1.m
 Meth Date : 18-Aug-2008 12:19 jhughes Quant Type: ISTD
 Cal Date : 15-FEB-2008 19:35 Cal File: V1ASTD1.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: gm-all.sub
 Target Version: 4.04
 Processing Host: TARGET03_VM

Concentration Formula: Amt * DF * 5*Uf/(Ws*(Solids/100))

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	unit correction factor
Ws	5.400	Weight of sample extracted (g)
Solids	87.300	Percent Solids

8-18-08

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/Kg)	FINAL (ug/Kg)
* 59 Fluorobenzene	96	16.110	16.114	(1.000)	604661	30.0000	
20 Methylene chloride	84	10.632	10.646	(0.660)	8912	0.92995	0.9863(a)
\$ 46 Dibromofluoromethane	111	13.901	13.903	(0.863)	163261	33.8848	35.94
\$ 50 1,2-Dichloroethane-d4	102	14.710	14.712	(0.913)	41840	31.6114	33.53(Q)
\$ 77 Toluene-d8	98	19.335	19.356	(0.880)	559231	29.3407	31.12
* 87 Chlorobenzene-d5	82	21.968	21.977	(1.000)	279496	30.0000	(Q)
\$ 101 Bromofluorobenzene	95	24.120	24.131	(1.098)	235745	31.1459	33.03
* 112 1,4-Dichlorobenzene-d4	152	26.506	26.506	(1.000)	195535	30.0000	(Q)

8-18-08

QC Flag Legend

- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

$$\text{Resp} = \frac{\text{Area analyte}}{\text{Area Int. Std}} = \frac{8912}{604661} = 0.01474$$

$$\text{Conc} = (\text{Resp}^2 \times A2 + \text{Resp} \times A1 + A0) \times \text{Conc. of Int. Std.}$$

$$= (0.01474^2 \times 0.3793 + 0.01474 \times 2.0976 + 0) \times 30$$

$$(0.00008241 + 0.0309186) \times 30 = 0.93003$$

FORM 6
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA97867

Instrument ID: VOA1 Calibration Date(s): 07/15/08 07/15/08

Column: RTX-VRX ID: 0.25 (mm) Calibration Time(s): 1349 1826

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R^2
		A0	A1	A2	
1,2-Dichloroethene (total)	AVRG		0.35460887		9.3
1,2-Dichloropropane	AVRG		0.37473122		8.3
1,3-Dichloropropane	AVRG		1.21093857		10.5
2,2-Dichloropropane	AVRG		0.45392947		4.8
1,1-Dichloropropene	AVRG		0.48750758		7.7
cis-1,3-Dichloropropene	AVRG		0.56027427		5.4
trans-1,3-Dichloropropene	AVRG		1.03397113		6.9
Ethylbenzene	AVRG		3.34080314		11.4
Ethyl methacrylate	AVRG		0.98262203		9.2
Hexachlorobutadiene	AVRG		0.55135670		4.6
2-Hexanone	AVRG		0.69124575		8.3
Iodomethane	AVRG		0.25164697		7.8
Isopropylbenzene	AVRG		2.67414890		7.8
p-Isopropyltoluene	AVRG		3.38886123		6.8
Methyl acetate	LINR	0.00000000	0.24887272		0.996
Methyl cyclohexane	AVRG		0.58511106		6.4
Methylene chloride	2ORDR	0.00000000	2.09759334	0.37931720	0.996
Methyl methacrylate	AVRG		0.35065631		10.2
4-Methyl-2-pentanone	AVRG		0.38948663		10.0
MTBE	AVRG		0.82199075		7.2
Naphthalene	AVRG		2.70510421		9.6
n-Propylbenzene	AVRG		5.03806141		5.6
Styrene	AVRG		2.09825928		7.3
1,1,1,2-Tetrachloroethane	AVRG		0.60894757		8.8
1,1,2,2-Tetrachloroethane	AVRG		1.10031995		9.9
Tetrachloroethene	AVRG		0.64414215		6.5
Tetrahydrofuran	LINR	0.00000000	0.10861936		0.999
Toluene	LINR	0.00000000	1.61432372		0.995
1,2,3-Trichlorobenzene	AVRG		1.02938180		2.2
1,2,4-Trichlorobenzene	AVRG		1.13030132		2.2
1,1,1-Trichloroethane	AVRG		0.40567891		5.6
1,1,2-Trichloroethane	AVRG		0.51052664		10.2
Trichloroethene	AVRG		0.32013960		7.0
Trichlorofluoromethane	AVRG		0.41959725		6.2
Trichlorotrifluoroethane	AVRG		0.26295622		6.9
1,2,3-Trichloropropane	AVRG		0.23802416		8.4
1,2,4-Trimethylbenzene	AVRG		3.25974582		5.6

7985
7-15-08
②

Comment: EPA 8260B
Operator: JH
Data Path: C:\HPCHEM\1\DATA\071508V1.b\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 QC	50	V1BFB01	V1BFB	V1BFB 25ng;;;;; 12:37 AM 7-15-08 ②
2 ICal	1	V1STD07A	VSOIL1	V1STD200ppb;;;;;
3 ICal	2	V1STD07	VSOIL1	V1STD200ppb;;;;;
4 ICal	3	V1STD06	VSOIL1	V1STD100ppb;;;;;
5 ICal	4	V1STD05	VSOIL1	V1STD50ppb;;;;;
6 Sample	5	V1ICV01	VSOIL1	V1BLK0715LCS;;;;; 50ppb
7 ICal	6	V1STD04	VSOIL1	V1STD20ppb;;;;; -NOT used
8 ICal	7	V1STD03	VSOIL1	V1STD10ppb;;;;;
9 ICal	8	V1STD02	VSOIL1	V1STD5ppb;;;;;
10 ICal	9	V1STD01	VSOIL1	V1STD2ppb;;;;;
11 Sample	10	V1LCS01	VSOIL1	V1BLK0715LCS;;;;; 50ppb
12 Sample	11	BLANK01	VSOIL1	V1BLK;;;;;
13 Sample	12	V1BLK01	VSOIL1	V1BLK0715;;;;; 8:25 PM 7-15-08 ②
14 Sample	13	S0711301	VSOIL1	0807113-01;;5.00;;; 250x soil scr
15 Sample	14	S0711302	VSOIL1	0807113-02;;5.00;;; 250x soil scr
16 Sample	15	S0711303	VSOIL1	0807113-03;;5.00;;; 250x soil scr
17 Sample	16	S0711304	VSOIL1	0807113-04;;5.00;;; 250x soil scr
18 Sample	17	S0711305	VSOIL1	0807113-05;;5.00;;; 250x soil scr
19 Sample	18	S0711306	VSOIL1	0807113-06;;5.00;;; 250x soil scr
20 QC	100	V1BFB	V1BFB	V1BFB 50ng;;;;;

Sequence Name: C:\HPCHEM\1\SEQUENCE\071508V1.S
 Comment: EPA 8260B
 Operator: JH
 Data Path: C:\HPCHEM\1\DATA\071508V1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

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Method Sections To Run On A Barcode Mismatch
 Full Method Inject Anyway
 Reprocessing Only Don't Inject

Line	Sample Name/Misc Info
1	Type: QC V1BFB 25ng;;;;; Vial: 50 ;3;BFB;;;all.sub;#5473 Meth: V1BFB.M Barcode: Data: V1BFB01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: ICAl V1STD200ppb;;;;; Vial: 1 ;1;;;7;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode: Data: V1STD07A.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: ICAl V1STD200ppb;;;;; Vial: 2 ;1;;;7;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode: Data: V1STD07.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: ICAl V1STD100ppb;;;;; Vial: 3 ;1;;;6;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode: Data: V1STD06.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: ICAl V1STD50ppb;;;;; Vial: 4 ;1;;;5;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode: Data: V1STD05.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: Sample V1BLK0715LCS;;;;; 50ppb Vial: 5 ;3;LCS;;;gm-all.sub;#5494,5514 Meth: VSOIL1.M Barcode: Data: V1ICV01.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: ICAl V1STD20ppb;;;;; Vial: 6 ;1;;;4;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode: Data: V1STD04.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: ICAl V1STD10ppb;;;;; Vial: 7 ;1;;;3;gm-all.sub;#5494,5513 Meth: VSOIL1.M Barcode:

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Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

9 Type: ICal V1STD5ppb;;;;;
Vial: 8 ;1;;;2;gm-all.sub;#5494,5513
Meth: VSOIL1.M Barcode:
Data: V1STD02.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

10 Type: ICal V1STD2ppb;;;;;
Vial: 9 ;1;;;1;gm-all.sub;#5494,5513
Meth: VSOIL1.M Barcode:
Data: V1STD01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

11 Type: Sample V1BLK0715LCS;;;;; 50ppb
Vial: 10 ;3;LCS;;;gm-all.sub;#5494,5514
Meth: VSOIL1.M Barcode:
Data: V1LCS01.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

12 Type: Sample V1BLK;;;;;
Vial: 11 ;3;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: BLANK01.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

13 Type: Sample V1BLK0715;;;;;
Vial: 12 ;3;BLANK;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: V1BLK01.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

14 Type: Sample 0807113-01;;5.00;;; 250x soil scr
Vial: 13 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711301.D Samp Amt: 0 Multiplr: 5
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

15 Type: Sample 0807113-02;;5.00;;; 250x soil scr
Vial: 14 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711302.D Samp Amt: 0 Multiplr: 5
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

16 Type: Sample 0807113-03;;5.00;;; 250x soil scr
Vial: 15 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711303.D Samp Amt: 0 Multiplr: 5
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

17 Type: Sample 0807113-04;;5.00;;; 250x soil scr
Vial: 16 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711304.D Samp Amt: 0 Multiplr: 5

Area Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

18 Type: Sample 0807113-05;;5.00;;; 250x soil scr
Vial: 17 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711305.D Samp Amt: 0 Multiplr: 5
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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19 Type: Sample 0807113-06;;5.00;;; 250x soil scr
Vial: 18 ch2.v07113;0;;;gm-all.sub;#5494
Meth: VSOIL1.M Barcode:
Data: S0711306.D Samp Amt: 0 Multiplr: 5
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

20 Type: QC V1BFB 50ng;;;;
Vial: 100 ;3;BFB;;;all.sub;#5473
Meth: V1BFB.M Barcode:
Data: V1BFB.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

Sequence Name: C:\HPCHEM\1\SEQUENCE\071508V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\071408V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8393
 M711078

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 BFB	50	V4BFB01	V4BFB	V4BFB25NG; ; ; ; ; 21:23, 7/15
2 Calibration	1	V4STD09A	VWATER4	V4STD200ppb; ; ; ; ;
3 Calibration	2	V4STD09	VWATER4	V4STD200ppb; ; ; ; ;
4 Calibration	3	V4STD08	VWATER4	V4STD100ppb; ; ; ; ;
5 Calibration	4	V4STD07	VWATER4	V4STD50ppb; ; ; ; ;
6 Spike	5	V4ICV01	VWATER4	V4BLK0715LCS; ; ; ; ;
7 Calibration	6	V4STD06	VWATER4	V4STD20ppb; ; ; ; ;
8 Calibration	7	V4STD05	VWATER4	V4STD10ppb; ; ; ; ;
9 Calibration	8	V4STD04	VWATER4	V4STD2ppb; ; ; ; ;
10 Calibration	9	V4STD03	VWATER4	V4STD1ppb; ; ; ; ;
11 Calibration	10	V4STD02	VWATER4	V4STD0.5ppb; ; ; ; ;
12 Calibration	11	V4STD01	VWATER4	V4STD0.25ppb; ; ; ; ;
13 Spike	12	V4LCS01	VWATER4	V4BLK0715LCS; ; ; ; ;
14 Blank	100	BLANK01	VWATER4	V4BLK; ; ; ; ;
15 Blank	100	V4BLK01	VWATER4	V4BLK0715; ; ; ; ;
16 Sample	13	0704326	VWATER4	0807043-26; ; ; ; ; vial 14:42, 7/16
17 BFB	100	V4BFB	V4BFB	V4BFB50NG; ; ; ; ;

KALH20

Sequence Name: C:\HPCHEM\1\SEQUENCE\071508V4.S
Comment: 8260b
Operator: ADM
Data Path: C:\HPCHEM\1\DATA\071408V4\
Pre-Seq Cmd:
Post-Seq Cmd:

8394

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: BFB V4BFB25NG;;;;; Vial: 50 ;3;;;;all.sub;#5473 Meth: V4BFB.M Barcode: Data: V4BFB01.D Samp Amt: 0 Multiplr: 1 Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
2	Type: Calibration V4STD200ppb;;;;; Vial: 1 ;1;;;9;gm-all.sub;#5494,5513 Meth: VWATER4.M Barcode: Data: V4STD09A.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
3	Type: Calibration V4STD200ppb;;;;; Vial: 2 ;1;;;9;gm-all.sub;#5494,5513 Meth: VWATER4.M Barcode: Data: V4STD09.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
4	Type: Calibration V4STD100ppb;;;;; Vial: 3 ;1;;;8;gm-all.sub;#5494,5513 Meth: VWATER4.M Barcode: Data: V4STD08.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
5	Type: Calibration V4STD50ppb;;;;; Vial: 4 ;1;;;7;gm-all.sub;#5494,5513 Meth: VWATER4.M Barcode: Data: V4STD07.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
6	Type: Spike V4BLK0715LCS;;;;; Vial: 5 ;3;LCS;;;gm-all.sub;#5494,5514 Meth: VWATER4.M Barcode: Data: V4ICV01.D Samp Amt: 0 Multiplr: 1 Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method
7	Type: Calibration V4STD20ppb;;;;; Vial: 6 ;1;;;6;gm-all.sub;#5494,5513 Meth: VWATER4.M Barcode: Data: V4STD06.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :per Method Lib. Search Rep :per Method Quant Report :per Method Post-Quant Macro:per Method CR Database :per Method CR Spreadsheet :per Method

8395

8 Type: Calibration V4STD10ppb;;;;;
 Vial: 7 ;1;;;5;gm-all.sub;#5494,5513
 Meth: VWATER4.M Barcode:
 Data: V4STD05.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

9 Type: Calibration V4STD2ppb;;;;;
 Vial: 8 ;1;;;4;gm-all.sub;#5494,5513
 Meth: VWATER4.M Barcode:
 Data: V4STD04.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

10 Type: Calibration V4STD1ppb;;;;;
 Vial: 9 ;1;;;3;gm-all.sub;#5494,5513
 Meth: VWATER4.M Barcode:
 Data: V4STD03.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

11 Type: Calibration V4STD0.5ppb;;;;;
 Vial: 10 ;1;;;2;gm-all.sub;#5494,5513
 Meth: VWATER4.M Barcode:
 Data: V4STD02.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

12 Type: Calibration V4STD0.25ppb;;;;;
 Vial: 11 ;1;;;1;gm-all.sub;#5494,5513
 Meth: VWATER4.M Barcode:
 Data: V4STD01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

13 Type: Spike V4BLK0715LCS;;;;;
 Vial: 12 ;3;LCS;;;gm-all.sub;#5494,5514
 Meth: VWATER4.M Barcode:
 Data: V4LCS01.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

14 Type: Blank V4BLK;;;;;
 Vial: 100 ;3;BLANK;;;gm-all.sub;#5494
 Meth: VWATER4.M Barcode:
 Data: BLANK01.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

15 Type: Blank V4BLK0715;;;;;
 Vial: 100 ;3;BLANK;;;gm-all.sub;#5494
 Meth: VWATER4.M Barcode:
 Data: V4BLK01.D Samp Amt: 0 Multiplr: 1
 Area% Report :per Method Lib. Search Rep :per Method
 Quant Report :per Method Post-Quant Macro:per Method
 CR Database :per Method CR Spreadsheet :per Method

16 Type: Sample 0807043-26;;;;; vial 1
 Vial: 13 sha.v07043;0;;;;;gm-all.sub;#5494
 Meth: VWATER4.M Barcode:
 Data: 0704326.D Samp Amt: 0 Multiplr: 1

PHC2.0

Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

17 Type: BFB V4BFB50NG;;;;;
Vial: 100 ;3;;;;all.sub;#5473
Meth: V4BFB.M Barcode:
Data: V4BFB.D Samp Amt: 0 Multiplr: 1
Area% Report :per Method Lib. Search Rep :per Method
Quant Report :per Method Post-Quant Macro:per Method
CR Database :per Method CR Spreadsheet :per Method

8396

Sequence Name: C:\HPCHEM\1\SEQUENCE\081508V1.S
 Comment: EPA 8260B
 Operator: JH
 Data Path: C:\HPCHEM\1\DATA\081508V1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8026
 8-15-08
 (S)

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	1	PRIMER01	VSOIL1	V1BLK;;;;;
2 Sample	2	PRIMER02	VSOIL1	V1BLK;;;;;
3 QC	50	V1BFB01	V1BFB	V1BFB 50ng;;;;; 8:52 AM 8-15-08 (S)
4 CCal	1	V1CCV01	VSOIL1	V1STD50ppb;;;;;
5 QC	2	V1LCS01	VSOIL1	V1BLK0815LCS;;;;; 50ppb
6 Sample	3	BLANK01	VSOIL1	V1BLK;;;;;
7 QC	4	V1MBLK01	VSOIL1	V1MBLK0815;;;;;
8 QC	5	V1BLK01	VSOIL1	V1BLK0815;;;;;
9 QC	6	V1PRPBLK	VSOIL1	V1PREPBLK0815;;;;;
10 Sample	7	0814201A	VSOIL1	0808142-01;;5.40;;; a-vial
11 Sample	8	0814202A	VSOIL1	0808142-02;;5.40;;; a-vial
12 Sample	9	0814203A	VSOIL1	0808142-03;;5.40;;; a-vial
13 Sample	10	0814204A	VSOIL1	0808142-04;;6.20;;; a-vial
14 Sample	11	0814205A	VSOIL1	0808142-05;;5.50;;; a-vial
15 Sample	12	0814206A	VSOIL1	0808142-06;;5.80;;; a-vial
16 Sample	13	0814207A	VSOIL1	0808142-07;;6.10;;; a-vial
17 QC	14	V1LCS01	VSOIL1	V1BLK0815LCS;;;;; 50ppb 6:12 PM 8-15-08 (S)
18 QC	100	V1BFB	V1BFB	V1BFB 50ng;;;;;

Sequence Name: C:\HPCHEM\1\SEQUENCE\081508V1.S
 Comment: EPA 8260B
 Operator: JH
 Data Path: C:\HPCHEM\1\DATA\081508V1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

8027

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info	
1	Type: Sample Vial: 1 Meth: VSOIL1.M Data: PRIMER01.D Area% Report Quant Report CR Database	V1BLK;;;;; ;3;;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
2	Type: Sample Vial: 2 Meth: VSOIL1.M Data: PRIMER02.D Area% Report Quant Report CR Database	V1BLK;;;;; ;3;;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
3	Type: QC Vial: 50 Meth: V1BFB.M Data: V1BFB01.D Area% Report Quant Report CR Database	V1BFB 50ng;;;;; ;3;BFB;;;;all.sub;#5473 Barcode: LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
4	Type: CCal Vial: 1 Meth: VSOIL1.M Data: V1CCV01.D Area% Report Quant Report CR Database	V1STD50ppb;;;;; ;2;;;;;gm-all.sub;#5517,5538 Barcode: LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
5	Type: QC Vial: 2 Meth: VSOIL1.M Data: V1LCS01.D Area% Report Quant Report CR Database	V1BLK0815LCS;;;;; 50ppb ;3;LCS;;;;gm-all.sub;#5517,5539 Barcode: LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
6	Type: Sample Vial: 3 Meth: VSOIL1.M Data: BLANK01.D Area% Report Quant Report CR Database	V1BLK;;;;; ;3;;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
7	Type: QC Vial: 4 Meth: VSOIL1.M Data: V1MBLK01.D Area% Report Quant Report CR Database	V1MBLK0815;;;;; ;3;BLANK;;;;gm-all.sub;#5517 Barcode: LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd :Default Lib. Search Rep.:Default :Default Post-Quant Macro:Default :Default CR Spreadsheet :Default
8	Type: QC Vial: 5 Meth: VSOIL1.M	V1BLK0815;;;;; ;3;BLANK;;;;gm-all.sub;#5517 Barcode:

Data: V1BLK01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

8028

9 Type: QC V1PREPBLK0815;;;;;
Vial: 6 ;3;BLANK;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: V1PRPBLK.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

10 Type: Sample 0808142-01;;5.40;;; a-vial
Vial: 7 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814201A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

11 Type: Sample 0808142-02;;5.40;;; a-vial
Vial: 8 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814202A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

12 Type: Sample 0808142-03;;5.40;;; a-vial
Vial: 9 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814203A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

13 Type: Sample 0808142-04;;6.20;;; a-vial
Vial: 10 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814204A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

14 Type: Sample 0808142-05;;5.50;;; a-vial
Vial: 11 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814205A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

15 Type: Sample 0808142-06;;5.80;;; a-vial
Vial: 12 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814206A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

16 Type: Sample 0808142-07;;6.10;;; a-vial
Vial: 13 tet.v08142;0;;;gm-all.sub;#5517
Meth: VSOIL1.M Barcode:
Data: 0814207A.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

17 Type: QC V1BLK0815LCSD;;;;; 50ppb
Vial: 14 ;3;LCSD;;;gm-all.sub;#5517,5539
Meth: VSOIL1.M Barcode:
Data: V1LCSD01.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd

Area% Report :Default LIB. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

8029

18 Type: QC V1BFB 50ng;;;;
Vial: 100 ;3;BFB;;;all.sub;#5473
Meth: V1BFB.M Barcode:
Data: V1BFB.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

Sequence Name: C:\HPCHEM\1\SEQUENCE\081508V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\081508V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7728

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Blank	100	BLANK01	VWATER4	V4BLK;;;;;
2 BFB	50	V4BFB01	V4BFB	V4BFB50NG;;;;;
3 DailyCal	1	V4CCV01	VWATER4	V4STD50ppb;;;;;
4 DailyCal	2	V4A9CCV	VWATER4	V4ap9ccv;;;;;
5 Spike	3	V4LCS01	VWATER4	V4BLK0815LCS;;;;; w/ap9
6 Spike	4	V4RL01	VWATER4	V4rllppb;;;;;
7 Blank	100	BLANK	VWATER4	V4BLK;;;;;
8 Blank	100	V4BLK01	VWATER4	V4BLK0815;;;;;
9 Sample	5	0814208	VWATER4	0808142-08;;;;; tb/vial 1
10 Sample	6	0802202	VWATER4	0808022-02;;;;; vial 1
11 Sample	7	0802203	VWATER4	0808022-03;;;;; vial 1
12 Spike	8	V4LCSD01	VWATER4	V4BLK0815LCSD;;;;; w/ap9
13 BFB	100	V4BFB	V4BFB	V4BFB50NG;;;;;

Sequence Name: C:\HPCHEM\1\SEQUENCE\081508V4.S
 Comment: 8260b
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\081508V4\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7729

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info	
1	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK01.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
2	Type: BFB Vial: 50 Meth: V4BFB.M Data: V4BFB01.D Area% Report Quant Report CR Database	V4BFB50NG;;;;; ;3;;;;;all.sub;#5473 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
3	Type: DailyCal Vial: 1 Meth: VWATER4.M Data: V4CCV01.D Area% Report Quant Report CR Database	V4STD50ppb;;;;; ;2;;;;;gm-all.sub;#5517,5538 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
4	Type: DailyCal Vial: 2 Meth: VWATER4.M Data: V4A9CCV.D Area% Report Quant Report CR Database	V4ap9ccv;;;;; ;2;;;;;ap9hex.sub;#5517,5522 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
5	Type: Spike Vial: 3 Meth: VWATER4.M Data: V4LCS01.D Area% Report Quant Report CR Database	V4BLK0815LCS;;;;; w/ap9 ;3;LCS;;;;;gm-allap9.sub;#5517,5539,5523 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
6	Type: Spike Vial: 4 Meth: VWATER4.M Data: V4RL01.D Area% Report Quant Report CR Database	V4rl1ppb;;;;; ;3;;;;;gm-all.sub;#5517,5538 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method
7	Type: Blank Vial: 100 Meth: VWATER4.M Data: BLANK.D Area% Report Quant Report CR Database	V4BLK;;;;; ;3;BLANK;;;;;gm-all.sub;#5517 Barcode: Samp Amt: 0 Multiplr: 1 :per Method Lib. Search Rep :per Method :per Method Post-Quant Macro:per Method :per Method CR Spreadsheet :per Method

730

PHC 2



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8  Type: Blank          V4BLK0815;;;;;
   Vial: 100           ;3;BLANK;;;gm-allap9.sub;#5517
   Meth: VWATER4.M     Barcode:
   Data: V4BLK01.D     Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
-----
9  Type: Sample        0808142-08;;;;; tb/vial 1
   Vial: 5             tet.v08142;0;;;;;gm-all.sub;#5517
   Meth: VWATER4.M     Barcode:
   Data: 0814208.D     Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
-----
10 Type: Sample        0808022-02;;;;; vial 1
   Vial: 6             arc.v08022;0;;;;;gm-allap9.sub;#5517
   Meth: VWATER4.M     Barcode:
   Data: 0802202.D     Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
-----
11 Type: Sample        0808022-03;;;;; vial 1
   Vial: 7             arc.v08022;0;;;;;gm-allap9.sub;#5517
   Meth: VWATER4.M     Barcode:
   Data: 0802203.D     Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
-----
12 Type: Spike         V4BLK0815LCSD;;;;; w/ap9
   Vial: 8             ;3;LCSD;;;gm-allap9.sub;#5517,5539,5523
   Meth: VWATER4.M     Barcode:
   Data: V4LCSD01.D   Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
-----
13 Type: BFB           V4BFB50NG;;;;;
   Vial: 100           ;3;;;;;all.sub;#5473
   Meth: V4BFB.M       Barcode:
   Data: V4BFB.D       Samp Amt: 0           Multiplr: 1
   Area% Report        :per Method          Lib. Search Rep :per Method
   Quant Report        :per Method          Post-Quant Macro:per Method
   CR Database         :per Method          CR Spreadsheet  :per Method
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Empirical Laboratories

Logbook#: MS047

270

Fraction: Volatiles Matrix: Soil Level: Low/Medium (circle one)

Supervisor

#	Client	Lab No.	Date Prepared	Time Prepared	Analyst Initials	Sample Weight (g)	MeOH Volume (mL)	Solvent-Reagent Lot/Vendor			Notes/Comments
								Vial	NaHSO4	Methanol	
1	Tetra Tech	0808147-01 A	8-15-06	10:09 am	DL	5.4	/	QEC Lot II		Fisher Lot #	Eneore Freeze
2	Gulfport	B				5.3	/	B-B-187-014B		081922	
3		M				5.4	S				
4		-02 A				5.4	/				
5		B				5.2	/				
6		m				5.6	S				
7		-03 A				5.4	/				
8		B				5.3	/				
9		m				5.6	S				
10		-04 A				6.2	/				
11		B				6.0	/				
12		m				6.2	S				
13		-05 A				5.5	/				
14		B				5.7	/				
15		m				5.8	S				
16		-06 A				5.8	/				
17		B				6.0	/				
18		m				5.4	S				
19		-07 A				6.1	/				
20		B				5.8	/				
21		M				6.0	S				
22											
23		prepbk A				/	/				
24		B				/	/				
25		m				/	S				
26											
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39											
40											

%SOLIDS

Client(s):

SHAW
TTNUS

Date on: 8/15/2008
Time on: 11:30

Date off: 8/18/2008
Time off: 8:30

Empirical Laboratories

Analyst: GM/CAT
Method #: 2540
Method Type: Gravimetric

Analyst Authorization: _____
Balance: Wet Chem #2

Cruc. ID.	Sample Type	Sample Number	Field ID.	Client	Boat Mass (gm)	Sample Mass, Wet (gm)	Sample Mass, Dry + Boat Mass (gm)	% Solids DL = 1.0%	RPD %	Control Limit %	Comments
1	Sample	0808141-01			1.0101	5.1377	5.3906	85.3			
2	Sample	0808141-02			1.0138	5.0805	5.3765	85.9			
3	Sample	0808141-03			1.0004	5.1487	5.0577	78.8			DAMP
4	Sample	0808141-04			0.9921	5.2072	5.3754	84.2			DAMP
5	Sample	0808141-05			0.9887	8.2995	7.8730	82.9			DAMP
6	Sample	0808141-06			0.9962	7.3798	6.9993	81.3			DAMP
7	Sample	0808142-01		TTNUS	0.9963	8.4867	8.4083	87.3			DAMP
8	Sample	0808142-02		TTNUS	0.9991	5.2806	5.6262	87.6			DAMP
9	Sample	0808142-03		TTNUS	0.9905	8.3349	7.7287	80.8			WET SAMPLE
10	Sample	0808142-04		TTNUS	1.0091	5.4906	5.5857	83.4			WET SAMPLE
11	Sample	0808142-05		TTNUS	0.9666	6.5000	6.5444	85.8			DAMP
12	Sample	0808142-06		TTNUS	1.0003	7.1005	6.6170	79.1			WET SAMPLE
13	Sample	0808142-07		TTNUS	1.0063	7.1879	7.4336	89.4			MOIST
14	Sample										
15	Sample										
16	Sample										
17	Sample										
18	Sample										
19	Sample										
20	Sample										
21	Duplicate										

FORM 2
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Level: (low/med) LOW

	CLIENT SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	S7 #	S8 #	TOT OUT
01	SBLK0815BS1	60	72	57	62	76	84			0
02	SBLK0815BS1L	52	59	51	53	65	67			0
03	SBLK0815BS1L	56	67	57	63	79	84			0
04	01SS01QT	46	57	51	54	70	74			0
05	01SS01QTDUP	50	59	56	59	72	85			0
06	01SS02QT	55	67	55	61	78	85			0
07	01SS03QT	42	53	44	50	62	65			0
08	01SS04QT	49	55	51	50	70	82			0
09	01SS05QT	52	63	53	57	78	81			0
10	01SS06QT	47	60	47	63	77	69			0
11										
12										
13										
14										
15										
16										
17										
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19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	EL QC LIMITS	SPIKE CONC (UG/KG)
S1 (2FP) = 2-Fluorophenol	(25-110)	6700
S2 (PHL) = Phenol-d6	(30-110)	6700
S3 (NBZ) = Nitrobenzene-d5	(30-110)	3300
S4 (FBP) = 2-Fluorobiphenyl	(35-110)	3300
S5 (TBP) = 2,4,6-Tribromophenol	(30-115)	6700
S6 (TPH) = Terphenyl-d14	(40-120)	3300

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
Acenaphthene	3333	0.0000	2286	68	45-110
Acenaphthylene	3333	0.0000	2657	80	45-105
Acetophenone	3333	0.0000	1604	48	35-110
Anthracene	3333	0.0000	2351	70	55-105
Atrazine	3333	0.0000	2268	68	55-105
Benzaldehyde	3333	0.0000	1519	46	10-160
Benzo (a) anthracene	3333	0.0000	2569	77	50-110
Benzo (b) fluoranthene	3333	0.0000	2488	75	45-115
Benzo (k) fluoranthene	3333	0.0000	2572	77	45-125
Benzo (g, h, i) perylene	3333	0.0000	2524	76	40-125
Benzo (a) pyrene	3333	0.0000	2615	78	50-110
1, 1'-Biphenyl	3333	0.0000	1898	57	45-110
bis (2-Chloroethoxy) meth	3333	0.0000	2056	62	45-110
bis (2-Chloroethyl) ether	3333	0.0000	2125	64	40-105
bis (2-Chloroisopropyl) e	3333	0.0000	1953	58	20-115
Bis (2-ethylhexyl) phthal	3333	120.1	2614	75	45-125
4-Bromophenyl-phenyleth	3333	0.0000	1755	53	45-115
Butylbenzylphthalate	3333	0.0000	2796	84	50-125
Caprolactam	3333	0.0000	2369	71	50-110
Carbazole	3333	0.0000	2107	63	45-115
4-Chloroaniline	3333	0.0000	2105	63	10- 95
4-Chloro-3-methylphenol	3333	0.0000	2258	68	45-115
2-Chloronaphthalene	3333	0.0000	2060	62	45-105
2-Chlorophenol	3333	0.0000	2451	74	45-105
4-Chlorophenyl-phenylet	3333	0.0000	2223	67	45-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
Chrysene	3333	0.0000	2601	78	55-110
Dibenz (a, h) anthracene	3333	0.0000	2659	80	40-125
Dibenzofuran	3333	0.0000	2202	66	50-105
3,3'-Dichlorobenzidine	3333	0.0000	2049	61	19-130
2,4-Dichlorophenol	3333	0.0000	2017	60	45-110
Diethylphthalate	3333	0.0000	2220	67	50-115
2,4-Dimethylphenol	3333	0.0000	2170	65	30-105
Dimethylphthalate	3333	0.0000	2059	62	50-110
Di-n-butylphthalate	3333	0.0000	2153	64	55-110
4,6-Dinitro-2-methylphe	3333	0.0000	2427	73	30-135
2,4-Dinitrophenol	3333	0.0000	2518	76	15-130
2,4-Dinitrotoluene	3333	0.0000	2369	71	50-115
2,6-Dinitrotoluene	3333	0.0000	2354	71	50-110
Di-n-octylphthalate	3333	0.0000	2251	68	40-130
Fluoranthene	3333	0.0000	2219	66	55-115
Fluorene	3333	0.0000	2347	70	50-110
Hexachlorobenzene	3333	0.0000	2225	67	45-120
Hexachlorobutadiene	3333	0.0000	1885	56	30-110
Hexachlorocyclopentadie	3333	0.0000	1911	57	10-110
Hexachloroethane	3333	0.0000	1851	56	35-110
Indeno (1,2,3-cd) pyrene	3333	0.0000	2619	78	40-120
Isophorone	3333	0.0000	1881	56	45-110
2-Methylnaphthalene	3333	0.0000	2232	67	40-110

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	LCS CONCENTRATION (UG/KG)	LCS % REC #	QC. LIMITS REC.
4-Methylphenol	3333	0.0000	2410	72	40-105
2-Methylphenol	3333	0.0000	2119	64	40-105
Naphthalene	3333	0.0000	2227	67	40-105
2-Nitroaniline	3333	0.0000	2100	63	45-120
3-Nitroaniline	3333	0.0000	2263	68	25-110
4-Nitroaniline	3333	0.0000	2232	67	35-115
Nitrobenzene	3333	0.0000	1828	55	40-115
2-Nitrophenol	3333	0.0000	1930	58	40-110
4-Nitrophenol	3333	0.0000	2065	62	15-140
N-Nitrosodiphenylamine	3333	0.0000	1988	60	50-115
N-Nitroso-di-n-prop. (1)	3333	0.0000	2044	61	40-115
Pentachlorophenol	3333	0.0000	2191	66	25-120
Phenanthrene	3333	0.0000	2236	67	50-110
Phenol	3333	0.0000	1963	59	40-100
Pyrene	3333	0.0000	2841	85	45-125
1,2,4,5-Tetrachlorobenz	3333	0.0000	1904	57	50-150
2,4,5-Trichlorophenol	3333	0.0000	2187	66	50-110
2,4,6-Trichlorophenol	3333	0.0000	2125	64	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	LCSD CONCENTRATION (UG/KG)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Acenaphthene	3333	2570	77	12	30	45-110
Acenaphthylene	3333	3000	90	12	30	45-105
Acetophenone	3333	1841	55	14	30	35-110
Anthracene	3333	2703	81	14	30	55-105
Atrazine	3333	2678	80	16	30	55-105
Benzaldehyde	3333	1678	50	10	30	10-160
Benzo (a) anthracene	3333	2961	89	14	30	50-110
Benzo (b) fluoranthene	3333	2850	86	14	30	45-115
Benzo (k) fluoranthene	3333	2711	81	5	30	45-125
Benzo (g,h,i) perylene	3333	2726	82	8	30	40-125
Benzo (a) pyrene	3333	2914	87	11	30	50-110
1,1'-Biphenyl	3333	2176	65	14	30	45-110
bis (2-Chloroethoxy) meth	3333	2185	66	6	30	45-110
bis (2-Chloroethyl) ether	3333	2269	68	6	30	40-105
bis (2-Chloroisopropyl) e	3333	2228	67	13	30	20-115
Bis (2-ethylhexyl) phthal	3333	3083	89	16	30	45-125
4-Bromophenyl-phenyleth	3333	2074	62	17	30	45-115
Butylbenzylphthalate	3333	3088	93	10	30	50-125
Caprolactam	3333	2788	84	16	30	50-110
Carbazole	3333	2628	79	22	30	45-115
4-Chloroaniline	3333	2542	76	19	30	10- 95
4-Chloro-3-methylphenol	3333	2611	78	14	30	45-115
2-Chloronaphthalene	3333	2358	71	13	30	45-105
2-Chlorophenol	3333	2738	82	11	30	45-105
4-Chlorophenyl-phenylet	3333	2480	74	11	30	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	LCSD CONCENTRATION (UG/KG)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Chrysene	3333	3009	90	14	30	55-110
Dibenz (a, h) anthracene	3333	2797	84	5	30	40-125
Dibenzofuran	3333	2642	79	18	30	50-105
3,3'-Dichlorobenzidine	3333	2717	82	28	30	19-130
2,4-Dichlorophenol	3333	2357	71	16	30	45-110
Diethylphthalate	3333	2663	80	18	30	50-115
2,4-Dimethylphenol	3333	2816	84	26	30	30-105
Dimethylphthalate	3333	2423	73	16	30	50-110
Di-n-butylphthalate	3333	2685	80	22	30	55-110
4,6-Dinitro-2-methylphe	3333	2965	89	20	30	30-135
2,4-Dinitrophenol	3333	2978	89	17	30	15-130
2,4-Dinitrotoluene	3333	2860	86	19	30	50-115
2,6-Dinitrotoluene	3333	2670	80	12	30	50-110
Di-n-octylphthalate	3333	2667	80	17	30	40-130
Fluoranthene	3333	2714	81	20	30	55-115
Fluorene	3333	2527	76	7	30	50-110
Hexachlorobenzene	3333	2636	79	17	30	45-120
Hexachlorobutadiene	3333	2059	62	9	30	30-110
Hexachlorocyclopentadie	3333	2101	63	9	30	10-110
Hexachloroethane	3333	2095	63	12	30	35-110
Indeno (1,2,3-cd) pyrene	3333	2614	78	0	30	40-120
Isophorone	3333	2090	63	10	30	45-110
2-Methylnaphthalene	3333	2549	76	13	30	40-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL SEMIVOLATILE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: SBLK0815BS1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	LCSD CONCENTRATION (UG/KG)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
4-Methylphenol	3333	2761	83	14	30	40-105
2-Methylphenol	3333	2476	74	16	30	40-105
Naphthalene	3333	2400	72	7	30	40-105
2-Nitroaniline	3333	2400	72	13	30	45-120
3-Nitroaniline	3333	2622	79	15	30	25-110
4-Nitroaniline	3333	2757	83	21	30	35-115
Nitrobenzene	3333	1868	56	2	30	40-115
2-Nitrophenol	3333	2184	66	12	30	40-110
4-Nitrophenol	3333	2472	74	18	30	15-140
N-Nitrosodiphenylamine	3333	2507	75	23	30	50-115
N-Nitroso-di-n-prop. (1)	3333	2412	72	16	30	40-115
Pentachlorophenol	3333	2651	80	19	30	25-120
Phenanthrene	3333	2627	79	16	30	50-110
Phenol	3333	2236	67	13	30	40-100
Pyrene	3333	3305	99	15	30	45-125
1,2,4,5-Tetrachlorobenz	3333	2177	65	13	30	50-150
2,4,5-Trichlorophenol	3333	2570	77	16	30	50-110
2,4,6-Trichlorophenol	3333	2444	73	14	30	45-110

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 66 outside limits
Spike Recovery: 0 out of 132 outside limits

COMMENTS: _____

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0815BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: SBLK0815BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS0815

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 10:34

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

83-32-9-----	Acenaphthene	26	330		U
208-96-8-----	Acenaphthylene	20	330		U
98-86-2-----	Acetophenone	41	330		U
120-12-7-----	Anthracene	27	330		U
1912-24-9-----	Atrazine	28	330		U
100-52-7-----	Benzaldehyde	55	330		U
56-55-3-----	Benzo (a) anthracene	36	330		U
205-99-2-----	Benzo (b) fluoranthene	32	330		U
207-08-9-----	Benzo (k) fluoranthene	39	330		U
191-24-2-----	Benzo (g, h, i) perylene	70	330		U
50-32-8-----	Benzo (a) pyrene	23	330		U
111-91-1-----	bis (2-Chloroethoxy) methane	31	330		U
92-52-4-----	1,1'-Biphenyl	29	330		U
111-44-4-----	bis (2-Chloroethyl) ether	41	330		U
108-60-1-----	bis (2-Chloroisopropyl) ether	51	330		U
117-81-7-----	Bis (2-ethylhexyl) phthalate	36	330		U
101-55-3-----	4-Bromophenyl-phenylether	26	330		U
85-68-7-----	Butylbenzylphthalate	30	330		U
86-74-8-----	Carbazole	36	330		U
106-47-8-----	4-Chloroaniline	48	330		U
105-60-2-----	Caprolactam	67	330		U
59-50-7-----	4-Chloro-3-methylphenol	28	330		U
91-58-7-----	2-Chloronaphthalene	32	330		U
95-57-8-----	2-Chlorophenol	41	330		U
7005-72-3-----	4-Chlorophenyl-phenylether	31	330		U
218-01-9-----	Chrysene	31	330		U
53-70-3-----	Dibenz (a, h) anthracene	60	330		U
132-64-9-----	Dibenzofuran	24	330		U
91-94-1-----	3,3'-Dichlorobenzidine	31	330		U
120-83-2-----	2,4-Dichlorophenol	19	330		U
84-66-2-----	Diethylphthalate	34	330		U
105-67-9-----	2,4-Dimethylphenol	21	330		U
131-11-3-----	Dimethylphthalate	30	330		U

120 J

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLK0815BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: SBLK0815BS1

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S1BS0815

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 08/15/08

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 08/19/08 10:34

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
84-74-2	Di-n-butylphthalate	30	330	U
534-52-1	4,6-Dinitro-2-methylphenol	22	830	U
51-28-5	2,4-Dinitrophenol	130	830	U
121-14-2	2,4-Dinitrotoluene	24	330	U
606-20-2	2,6-Dinitrotoluene	38	330	U
117-84-0	Di-n-octylphthalate	27	330	U
206-44-0	Fluoranthene	54	330	U
86-73-7	Fluorene	26	330	U
118-74-1	Hexachlorobenzene	35	330	U
87-68-3	Hexachlorobutadiene	33	330	U
77-47-4	Hexachlorocyclopentadiene	61	330	U
67-72-1	Hexachloroethane	39	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	46	330	U
78-59-1	Isophorone	28	330	U
91-57-6	2-Methylnaphthalene	35	330	U
95-48-7	2-Methylphenol	39	330	U
106-44-5	4-Methylphenol	26	330	U
91-20-3	Naphthalene	32	330	U
88-74-4	2-Nitroaniline	32	330	U
99-09-2	3-Nitroaniline	47	830	U
100-01-6	4-Nitroaniline	100	830	U
98-95-3	Nitrobenzene	34	330	U
88-75-5	2-Nitrophenol	22	330	U
100-02-7	4-Nitrophenol	81	830	U
86-30-6	N-Nitrosodiphenylamine (1)	32	330	U
621-64-7	N-Nitroso-di-n-propylamine	55	330	U
87-86-5	Pentachlorophenol	34	830	U
85-01-8	Phenanthrene	23	330	U
108-95-2	Phenol	36	330	U
129-00-0	Pyrene	40	330	U
95-94-3	1,2,4,5-Tetrachlorobenzene	100	330	U
95-95-4	2,4,5-Trichlorophenol	27	830	U
88-06-2	2,4,6-Trichlorophenol	35	330	U

(1) - Cannot be separated from Diphenylamine

FORM I SV

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

SBLK0815BS1

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab File ID: S1BS0815 Lab Sample ID: SBLK0815BS1

Instrument ID: BNA1 Date Extracted: 08/15/08

Matrix: (soil/water) SOIL Date Analyzed: 08/19/08

Level: (low/med) LOW GPC Cleanup: (Y/N) N Time Analyzed: 1034

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLK0815BS1L	SBLK0815BS1LCS	S1LS0815	08/19/08
02	SBLK0815BS1L	SBLK0815BS1LCS	S1DS0815	08/19/08
03	01SS01QT	0808142-01	0814201	08/19/08
04	01SS01QTDUP	0808142-02	0814202	08/19/08
05	01SS02QT	0808142-03	0814203	08/19/08
06	01SS03QT	0808142-04	0814204	08/19/08
07	01SS04QT	0808142-05	0814205	08/19/08
08	01SS05QT	0808142-06	0814206	08/19/08
09	01SS06QT	0808142-07	0814207	08/19/08
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12				
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COMMENTS:

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B1 DFTPP Injection Date: 07/24/08

Instrument ID: BNA1 DFTPP Injection Time: 1025

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.2 (0.3)1
127	40.0 - 60.0% of mass 198	40.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.7
275	10.0 - 30.0% of mass 198	19.9
365	Greater than 1.0% of mass 198	1.88
441	Present, but less than mass 443	9.4
442	Greater than 40.0% of mass 198	66.4
443	17.0 - 23.0% of mass 442	12.7 (19.1)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL001PPM	BNACAL001PPM	CAL001	07/24/08	1046
02	BNACAL005PPM	BNACAL005PPM	CAL005	07/24/08	1158
03	BNACAL010PPM	BNACAL010PPM	CAL010	07/24/08	1234
04	BNACAL020PPM	BNACAL020PPM	CAL020	07/24/08	1310
05	BNACAL040PPM	BNACAL040PPM	CAL040	07/24/08	1422
06	BNACAL050PPM	BNACAL050PPM	CAL050	07/24/08	1458
07	BNACAL060PPM	BNACAL060PPM	CAL060	07/24/08	1534
08	BNACAL070PPM	BNACAL070PPM	CAL070	07/24/08	1610
09	BNACAL080PPM	BNACAL080PPM	CAL080	07/24/08	1646
10	BNACAL090PPM	BNACAL090PPM	CAL090	07/24/08	1721
11	BNACAL100PPM	BNACAL100PPM	CAL100	07/24/08	1757
12	BNACAL001PPM	BNACAL001PPM	CALB001	07/24/08	1833
13	BNACAL002PPM	BNACAL002PPM	CALB002	07/24/08	1909
14	BNACAL005PPM	BNACAL005PPM	CALB005	07/24/08	1945
15	BNACAL010PPM	BNACAL010PPM	CALB010	07/24/08	2021
16	BNACAL020PPM	BNACAL020PPM	CALB020	07/24/08	2057
17	BNACAL050PPM	BNACAL050PPM	CALB050	07/24/08	2133
18	BNACAL070PPM	BNACAL070PPM	CALB070	07/24/08	2209
19					
20					
21					
22					

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
Acenaphthene	AVRG		1.09139170		9.0
Acenaphthylene	AVRG		1.53182455		10.6
Acetophenone	2ORDR	0.00000000	0.64936256	0.10790983	0.995
Aniline	AVRG		1.65682728		12.6
Anthracene	AVRG		1.06648172		7.2
Benzoic acid	2ORDR	0.00000000	3.98005908	-1.0444470	0.995
Benzo (a) anthracene	AVRG		1.03077121		2.8
Benzo (b) fluoranthene	AVRG		1.05722188		6.6
Benzo (k) fluoranthene	AVRG		1.10885119		5.7
Benzo (g,h,i) perylene	AVRG		0.78210443		10.5
Benzo (a) pyrene	AVRG		0.93455939		9.1
Benzyl alcohol	AVRG		0.83895015		4.4
bis (2-Chloroethoxy) methane	AVRG		0.49345373		14.5
1,1'-Biphenyl	AVRG		1.47806094		14.3
bis (2-Chloroethyl) ether	LINR	0.00000000	1.45848833		0.996
bis (2-Chloroisopropyl) ether	AVRG		2.25983627		14.3
Bis (2-ethylhexyl) phthalate	AVRG		1.04861488		10.8
4-Bromophenyl-phenylether	AVRG		0.27331114		10.9
Butylbenzylphthalate	AVRG		0.81176373		9.4
Carbazole	AVRG		1.08597457		9.1
4-Chloroaniline	AVRG		0.42040722		6.8
Caprolactam	2ORDR	0.00000000	9.51295377	-1.7864253	0.990
4-Chloro-3-methylphenol	AVRG		0.27799591		5.0
2-Chloronaphthalene	AVRG		1.14444890		12.7
2-Chlorophenol	2ORDR	0.00000000	0.81163348	6.617e-002	0.995
4-Chlorophenyl-phenylether	AVRG		0.56066559		9.4
Chrysene	AVRG		0.97560077		5.1
Dibenz (a,h) anthracene	AVRG		0.73731945		10.8
Dibenzofuran	AVRG		1.49129502		13.8
1,4-Dichlorobenzene	AVRG		1.38341996		14.6
1,2-Dichlorobenzene	2ORDR	0.00000000	0.61311311	0.12904362	0.998
1,3-Dichlorobenzene	2ORDR	0.00000000	0.56974861	7.529e-002	0.999
2,4-Dichlorophenol	AVRG		0.31114275		7.7
Diethylphthalate	AVRG		1.39912579		8.8
2,4-Dimethylphenol	AVRG		0.27674878		10.6
Dimethylphthalate	AVRG		1.48965062		7.7
Di-n-butylphthalate	AVRG		1.67222367		8.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4,6-Trichlorophenol	AVRG		0.38204520		5.5
2-Fluorophenol	2ORDR	0.00000000	0.56691538	7.38e-002	0.996
Phenol-d6	2ORDR	0.00000000	0.52282494	4.688e-002	0.997
Nitrobenzene-d5	AVRG		0.43773029		9.9
2-Fluorobiphenyl	AVRG		1.37616048		14.6
2,4,6-Tribromophenol	AVRG		0.13495814		6.3
Terphenyl-d14	AVRG		0.86401658		5.6

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract: *1XBN.m*

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Acenaphthene	1.194		1.269	1.212	1.148
Acenaphthylene	1.751		1.783	1.767	1.526
Acetophenone	1.655		1.564	1.476	1.337
Aniline	1.837		2.013	1.932	1.830
Anthracene	1.188		1.167	1.161	1.038
Benzoic acid	0.081		0.179	0.173	0.231
Benzo (a) anthracene	1.023		1.048	1.056	1.052
Benzo (b) fluoranthene	0.869		1.001	1.115	1.093
Benzo (k) fluoranthene	0.974		1.052	1.201	1.102
Benzo (g, h, i) perylene	0.580		0.807	0.857	0.842
Benzo (a) pyrene	0.696		0.898	1.008	0.968
Benzyl alcohol	0.768		0.844	0.858	0.896
bis (2-Chloroethoxy) methane	0.593		0.572	0.570	0.570
1,1'-Biphenyl	1.794		1.776	1.680	1.556
bis (2-Chloroethyl) ether	2.009		1.984	1.905	1.731
bis (2-Chloroisopropyl) ether	2.598		2.615	2.528	2.473
Bis (2-ethylhexyl) phthalate	0.734		1.012	1.063	1.116
4-Bromophenyl-phenylether	0.349		0.250	0.294	0.279
Butylbenzylphthalate	0.597		0.826	0.836	0.824
Carbazole	1.316		1.212	1.122	1.047
4-Chloroaniline	0.424		0.452	0.443	0.459
Caprolactam	0.095		0.074	0.094	0.109
4-Chloro-3-methylphenol	0.284		0.298	0.281	0.288
2-Chloronaphthalene	1.370		1.397	1.240	1.221
2-Chlorophenol	1.501		1.480	1.375	1.384
4-Chlorophenyl-phenylether	0.668		0.639	0.601	0.559
Chrysene	1.015		1.063	1.022	0.976
Dibenz (a, h) anthracene	0.524		0.784	0.758	0.729
Dibenzofuran	1.872		1.776	1.689	1.540
1,4-Dichlorobenzene	1.659		1.626	1.641	1.554
1,2-Dichlorobenzene	1.607		1.655	1.586	1.520
1,3-Dichlorobenzene	1.888		1.812	1.870	1.689
2,4-Dichlorophenol	0.296		0.350	0.340	0.335
Diethylphthalate	1.474		1.592	1.609	1.467
2,4-Dimethylphenol	0.317		0.331	0.290	0.281
Dimethylphthalate	1.581		1.678	1.649	1.555
Di-n-butylphthalate	1.716		1.889	1.846	1.742

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
4,6-Dinitro-2-methylphenol	0.034		0.095	0.110	0.135
2,4-Dinitrophenol	0.045		0.085	0.088	0.125
2,4-Dinitrotoluene	0.257		0.418	0.419	0.444
2,6-Dinitrotoluene	0.244		0.359	0.352	0.373
Di-n-octylphthalate	0.846		1.553	1.722	1.939
1,2-Diphenylhydrazine	1.358		1.212	1.223	1.135
Fluoranthene	1.192		1.154	1.159	1.133
Fluorene	1.238		1.433	1.268	1.196
Hexachlorobenzene	0.344		0.262	0.279	0.262
Hexachlorobutadiene	0.201		0.214	0.221	0.212
Hexachlorocyclopentadiene	0.257		0.296	0.285	0.286
Hexachloroethane	0.685		0.701	0.717	0.722
Indeno(1,2,3-cd)pyrene	0.468		0.693	0.758	0.782
Isophorone	0.876		0.905	0.892	0.940
2-Methylnaphthalene	0.542		0.672	0.574	0.538
1-Methylnaphthalene	0.553		0.590	0.538	0.505
4-Methylphenol	1.161		1.236	1.161	1.151
2-Methylphenol	1.174		1.199	1.141	1.187
Naphthalene	1.077		1.093	1.009	1.034
3-Methylphenol	1.168		1.236	1.161	1.151
2-Nitroaniline	0.349		0.360	0.388	0.418
3-Nitroaniline	0.238		0.361	0.388	0.412
4-Nitroaniline	0.241		0.240	0.225	0.272
Nitrobenzene	0.524		0.473	0.494	0.488
2-Nitrophenol	0.243		0.279	0.257	0.279
4-Nitrophenol	0.143		0.200	0.204	0.228
N-Nitroso-di-methylamine	0.568		0.647	0.727	0.772
N-Nitrosodiphenylamine	0.780		0.718	0.724	0.680
N-Nitroso-di-n-propylamine	1.005		1.050	1.027	0.937
Pentachlorophenol	0.110		0.135	0.159	0.169
Phenanthrene	1.436		1.169	1.177	1.056
Phenol	1.991		1.855	1.861	1.825
Pyrene	1.297		1.295	1.228	1.215
Pyridine	1.715		1.839	1.955	1.984
1,2,4,5-Tetrachlorobenzene	0.299		0.315	0.263	0.263
1,2,4-Trichlorobenzene	0.414		0.409	0.396	0.390
2,4,5-Trichlorophenol	0.338		0.416	0.428	0.416

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: ENA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF1: CAL001 RF2: RF5: CAL005
RF10: CAL010 RF20: CAL020

COMPOUND	RF1	RF2	RF5	RF10	RF20
2,4,6-Trichlorophenol	0.389		0.409	0.408	0.406
2-Fluorophenol	1.592		1.686	1.679	1.617
Phenol-d6	1.880		1.948	1.949	1.842
Nitrobenzene-d5	0.490		0.468	0.497	0.484
2-Fluorobiphenyl	1.706		1.583	1.686	1.467
2,4,6-Tribromophenol	0.114		0.127	0.135	0.136
Terphenyl-d14	0.924		0.921	0.833	0.868

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
Acenaphthene		1.048	1.090	1.030	1.008
Acenaphthylene		1.482	1.488	1.476	1.477
Acetophenone		1.215	1.254	1.163	1.240
Aniline		1.659	1.534	1.516	1.519
Anthracene		1.105	1.056	0.979	1.020
Benzoic acid		0.262	0.266	0.308	0.305
Benzo(a)anthracene		1.021	1.033	1.037	1.077
Benzo(b)fluoranthene		1.062	1.074	1.043	1.085
Benzo(k)fluoranthene		1.130	1.152	1.045	1.122
Benzo(g,h,i)perylene		0.784	0.781	0.756	0.872
Benzo(a)pyrene		0.931	0.931	0.950	0.996
Benzyl alcohol		0.810	0.858	0.825	0.880
bis(2-Chloroethoxy)methane		0.498	0.457	0.476	0.447
1,1'-Biphenyl		1.403	1.402	1.338	1.376
bis(2-Chloroethyl) ether		1.463	1.427	1.437	1.466
bis(2-Chloroisopropyl) ether		2.027	2.064	1.840	1.932
Bis(2-ethylhexyl)phthalate		1.099	1.174	1.100	1.101
4-Bromophenyl-phenylether		0.283	0.264	0.237	0.258
Butylbenzylphthalate		0.793	0.856	0.888	0.863
Carbazole		1.053	1.108	1.022	1.023
4-Chloroaniline		0.431	0.397	0.430	0.433
Caprolactam		0.109	0.096	0.116	0.116
4-Chloro-3-methylphenol		0.291	0.262	0.287	0.280
2-Chloronaphthalene		1.067	1.133	1.081	1.104
2-Chlorophenol		1.091	1.130	1.011	1.110
4-Chlorophenyl-phenylether		0.518	0.557	0.524	0.533
Chrysene		0.948	1.004	0.933	0.997
Dibenz(a,h)anthracene		0.715	0.737	0.773	0.839
Dibenzofuran		1.352	1.494	1.371	1.406
1,4-Dichlorobenzene		1.382	1.334	1.250	1.266
1,2-Dichlorobenzene		1.292	1.248	1.120	1.174
1,3-Dichlorobenzene		1.436	1.409	1.364	1.367
2,4-Dichlorophenol		0.321	0.294	0.311	0.309
Diethylphthalate		1.297	1.385	1.402	1.319
2,4-Dimethylphenol		0.281	0.236	0.285	0.264
Dimethylphthalate		1.478	1.488	1.402	1.438
Di-n-butylphthalate		1.802	1.706	1.528	1.549

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
4,6-Dinitro-2-methylphenol		0.181	0.174	0.191	0.196
2,4-Dinitrophenol		0.171	0.212	0.214	0.212
2,4-Dinitrotoluene		0.402	0.460	0.421	0.456
2,6-Dinitrotoluene		0.370	0.389	0.393	0.393
Di-n-octylphthalate		2.166	2.117	2.197	2.059
1,2-Diphenylhydrazine		1.206	1.043	0.997	1.026
Fluoranthene		1.151	1.052	0.990	0.998
Fluorene		1.105	1.238	1.134	1.146
Hexachlorobenzene		0.267	0.242	0.242	0.258
Hexachlorobutadiene		0.196	0.174	0.187	0.180
Hexachlorocyclopentadiene		0.281	0.296	0.281	0.297
Hexachloroethane		0.607	0.626	0.575	0.601
Indeno(1,2,3-cd)pyrene		0.688	0.753	0.757	0.836
Isophorone		0.861	0.749	0.811	0.816
2-Methylnaphthalene		0.513	0.472	0.520	0.513
1-Methylnaphthalene		0.512	0.444	0.495	0.490
4-Methylphenol		1.108	1.082	1.036	1.096
2-Methylphenol		1.087	1.092	1.056	1.168
Naphthalene		0.910	0.812	0.852	0.785
3-Methylphenol		1.108	1.082	1.036	1.096
2-Nitroaniline		0.360	0.395	0.384	0.406
3-Nitroaniline		0.431	0.443	0.416	0.444
4-Nitroaniline		0.321	0.394	0.364	0.395
Nitrobenzene		0.450	0.401	0.399	0.398
2-Nitrophenol		0.272	0.234	0.272	0.269
4-Nitrophenol		0.228	0.236	0.249	0.256
N-Nitroso-di-methylamine		0.674	0.671	0.675	0.647
N-Nitrosodiphenylamine		0.766	0.656	0.654	0.634
N-Nitroso-di-n-propylamine		0.870	0.874	0.810	0.860
Pentachlorophenol		0.194	0.185	0.196	0.205
Phenanthrene		1.151	1.034	1.015	1.040
Phenol		1.524	1.463	1.428	1.439
Pyrene		1.216	1.250	1.240	1.184
Pyridine		1.759	1.786	1.764	1.769
1,2,4,5-Tetrachlorobenzene		0.278	0.243	0.262	0.252
1,2,4-Trichlorobenzene		0.354	0.328	0.343	0.324
2,4,5-Trichlorophenol		0.369	0.411	0.416	0.419

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF30: RF40: CAL040 RF50: CAL050
RF60: CAL060 RF70: CAL070

COMPOUND	RF30	RF40	RF50	RF60	RF70
=====	=====	=====	=====	=====	=====
2,4,6-Trichlorophenol		0.370	0.395	0.369	0.384
=====	=====	=====	=====	=====	=====
2-Fluorophenol		1.275	1.290	1.134	1.190
Phenol-d6		1.483	1.427	1.370	1.376
Nitrobenzene-d5		0.432	0.365	0.446	0.414
2-Fluorobiphenyl		1.277	1.288	1.279	1.278
2,4,6-Tribromophenol		0.146	0.138	0.134	0.137
Terphenyl-d14		0.793	0.924	0.913	0.849

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
Acenaphthene	1.017	1.002	0.987
Acenaphthylene	1.426	1.322	1.353
Acetophenone	1.097	1.090	1.050
Aniline	1.472	1.413	1.498
Anthracene	1.038	0.994	0.985
Benzoic acid	0.289	0.298	
Benzo(a)anthracene	1.028	0.978	0.985
Benzo(b)fluoranthene	1.110	1.092	1.086
Benzo(k)fluoranthene	1.114	1.156	1.150
Benzo(g,h,i)perylene	0.810	0.702	0.812
Benzo(a)pyrene	0.977	0.968	0.958
Benzyl alcohol	0.798	0.857	0.834
bis(2-Chloroethoxy)methane	0.440	0.406	0.398
1,1'-Biphenyl	1.253	1.202	
bis(2-Chloroethyl)ether	1.443		
bis(2-Chloroisopropyl)ether			
Bis(2-ethylhexyl)phthalate	1.054	1.028	1.053
4-Bromophenyl-phenylether	0.269	0.269	0.254
Butylbenzylphthalate	0.807	0.820	0.818
Carbazole	1.036	0.998	1.009
4-Chloroaniline	0.402	0.367	0.386
Caprolactam	0.114	0.102	0.110
4-Chloro-3-methylphenol	0.267	0.251	0.270
2-Chloronaphthalene	0.996	0.982	0.998
2-Chlorophenol	1.022	1.044	1.024
4-Chlorophenyl-phenylether	0.529	0.520	0.519
Chrysene	0.911	0.959	0.904
Dibenz(a,h)anthracene	0.780	0.705	0.768
Dibenzofuran	1.369	1.241	1.292
1,4-Dichlorobenzene	1.217	1.146	1.139
1,2-Dichlorobenzene	1.114	1.066	1.058
1,3-Dichlorobenzene	1.284	1.276	1.248
2,4-Dichlorophenol	0.310	0.282	0.274
Diethylphthalate	1.296	1.256	1.294
2,4-Dimethylphenol	0.260	0.255	0.243
Dimethylphthalate	1.427	1.310	1.380
Di-n-butylphthalate	1.640	1.483	1.492

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
4,6-Dinitro-2-methylphenol	0.186	0.210	0.202
2,4-Dinitrophenol	0.213	0.233	0.243
2,4-Dinitrotoluene	0.440	0.408	0.446
2,6-Dinitrotoluene	0.365	0.386	0.402
Di-n-octylphthalate	2.232		
1,2-Diphenylhydrazine	1.061	0.912	0.990
Fluoranthene	1.085	1.014	1.016
Fluorene	1.159	1.114	1.122
Hexachlorobenzene	0.252	0.247	0.244
Hexachlorobutadiene	0.179	0.154	0.161
Hexachlorocyclopentadiene	0.286	0.273	0.292
Hexachloroethane	0.564	0.587	0.564
Indeno(1,2,3-cd)pyrene	0.782	0.705	0.754
Isophorone	0.787	0.767	0.778
2-Methylnaphthalene	0.467	0.423	0.422
1-Methylnaphthalene	0.409	0.388	0.414
4-Methylphenol	1.003	0.989	0.988
2-Methylphenol	1.075	1.078	1.115
Naphthalene	0.780		
3-Methylphenol	1.003	0.989	0.991
2-Nitroaniline	0.381	0.374	0.381
3-Nitroaniline	0.406	0.400	0.438
4-Nitroaniline	0.375	0.378	0.390
Nitrobenzene	0.398	0.360	0.356
2-Nitrophenol	0.267	0.245	0.246
4-Nitrophenol	0.235	0.232	0.256
N-Nitroso-di-methylamine	0.653	0.646	0.639
N-Nitrosodiphenylamine	0.678	0.646	0.642
N-Nitroso-di-n-propylamine	0.775	0.836	0.805
Pentachlorophenol	0.204	0.196	0.202
Phenanthrene	1.012	0.982	0.982
Phenol	1.368		
Pyrene	1.109	1.141	1.104
Pyridine	1.682	1.759	1.755
1,2,4,5-Tetrachlorobenzene	0.235	0.209	0.232
1,2,4-Trichlorobenzene	0.312	0.295	0.288
2,4,5-Trichlorophenol	0.377	0.390	0.386

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1046 1757

LAB FILE ID: RF80: CAL080 RF90: CAL090 RF100: CAL100

COMPOUND	RF80	RF90	RF100
2,4,6-Trichlorophenol	0.361	0.361	0.349
2-Fluorophenol	1.128	1.056	1.055
Phenol-d6	1.311	1.217	1.254
Nitrobenzene-d5	0.416	0.389	0.415
2-Fluorobiphenyl	1.277	1.144	1.153
2,4,6-Tribromophenol	0.145	0.136	0.136
Terphenyl-d14	0.826	0.833	0.821

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA21205

Lab File ID: DF0724B2 DFTPP Injection Date: 07/24/08

Instrument ID: BNA1 DFTPP Injection Time: 2241

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.8
70	Less than 2.0% of mass 69	0.1 (0.2)1
127	40.0 - 60.0% of mass 198	42.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	18.7
365	Greater than 1.0% of mass 198	1.59
441	Present, but less than mass 443	9.1
442	Greater than 40.0% of mass 198	55.6
443	17.0 - 23.0% of mass 442	11.5 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	BNACAL080PPM	BNACAL080PPM	CALB080	07/24/08	2302
02	BNACAL100PPM	BNACAL100PPM	CALB100	07/24/08	2338
03	BNAICV050PPM	BNAICV050PPM	ICVEX	07/25/08	0014
04	BNAICV050PPM	BNAICV050PPM	ICVMAIN	07/25/08	0050
05	BNAICV050PPM	BNAICV050PPM	ICV02	07/25/08	0126
06	BNAICV050PPM	BNAICV050PPM	ICV03	07/25/08	0202
07	CALAP9C001PP	CALAP9C001PPM	CAP9C001	07/25/08	0238
08	CALAP9C002PP	CALAP9C002PPM	CAP9C002	07/25/08	0314
09	CALAP9C005PP	CALAP9C005PPM	CAP9C005	07/25/08	0349
10	CALAP9C010PP	CALAP9C010PPM	CAP9C010	07/25/08	0425
11	CALAP9C020PP	CALAP9C020PPM	CAP9C020	07/25/08	0501
12	CALAP9C030PP	CALAP9C030PPM	CAP9C030	07/25/08	0537
13	CALAP9C050PP	CALAP9C050PPM	CAP9C050	07/25/08	0612
14	CALAP9C070PP	CALAP9C070PPM	CAP9C070	07/25/08	0648
15	CALAP9C100PP	CALAP9C100PPM	CAP9C100	07/25/08	0724
16	CALAP9A001PP	CALAP9A001PPM	CAP9A001	07/25/08	0800
17	CALAP9A002PP	CALAP9A002PPM	CAP9A002	07/25/08	0836
18	CALAP9A005PP	CALAP9A005PPM	CAP9A005	07/25/08	0912
19	CALAP9A010PP	CALAP9A010PPM	CAP9A010	07/25/08	0948
20	BNAICV050PPM	BNAICV050PPM	ICVEX1	07/25/08	1024
21					
22					

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
Atrazine	AVRG		0.19998352	8.0
Benzaldehyde	AVRG		1.13441801	14.1
Benzidine	LINR	0.00000000	0.68404336	0.999
3,3'-Dichlorobenzidine	AVRG		0.34213412	14.7
2,3,4,6-Tetrachlorophenol	LINR	0.00000000	0.24497359	0.997

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF1: CALB001 RF2: CALB002 RF5: CALB005
RF10: CALB010 RF20: CALB020

COMPOUND	RF1	RF2	RF5	RF10	RF20
Atrazine	0.184	0.191	0.200	0.236	0.214
Benzaldehyde	1.154	1.185	1.280	1.324	1.156
Benzidine	0.359	0.481	0.590	0.761	0.705
3,3'-Dichlorobenzidine	0.247	0.299	0.343	0.373	0.357
2,3,4,6-Tetrachlorophenol	0.150	0.186	0.186	0.233	0.232

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF30: RF40: RF50: CALB050
RF60: RF70: CALB070

COMPOUND	RF30	RF40	RF50	RF60	RF70
Atrazine			0.191		0.190
Benzaldehyde			0.946		0.895
Benzidine			0.679		0.684
3,3'-Dichlorobenzidine			0.344		0.358
2,3,4,6-Tetrachlorophenol			0.232		0.238

FORM 6
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date(s): 07/24/08 07/24/08

Column: FUSED SILICA ID: 0.25 (mm) Calibration Time(s): 1833 2338

LAB FILE ID: RF80: CALB080 RF90: RF100: CALB100

COMPOUND	RF80	RF90	RF100
Atrazine	0.199		0.194
Benzaldehyde			
Benzidine			
3,3'-Dichlorobenzidine	0.415		
2,3,4,6-Tetrachlorophenol	0.258		0.243

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969
 Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050
 Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08
 Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acenaphthene	1.091	1.121	50.00	51.34		AVRG	2.7	25.0
Acenaphthylene	1.532	1.727	50.00	56.37		AVRG	12.7	25.0
Aniline	1.657	1.765	50.00	53.28		AVRG	6.6	25.0
Anthracene	1.066	1.183	50.00	55.46		AVRG	10.9	25.0
Atrazine	0.200	0.191	50.00	0.0000		AVRG	-4.5	25.0
Benzaldehyde	1.134	0.946	50.00	0.0000		AVRG	-16.6	25.0
Benzoic acid	0.239	0.252	50.00	45.95		2ORDR	-8.1	25.0
Benzo (a) anthracene	1.031	1.150	50.00	55.78		AVRG	11.6	25.0
Benzo (b) fluoranthene	1.057	1.102	50.00	52.09		AVRG	4.2	25.0
Benzo (k) fluoranthene	1.109	1.163	50.00	52.43		AVRG	4.9	25.0
Benzo (g, h, i) perylene	0.782	0.829	50.00	52.98		AVRG	6.0	25.0
Benzo (a) pyrene	0.935	1.038	50.00	55.52		AVRG	11.0	25.0
Benzyl alcohol	0.839	0.810	50.00	48.26		AVRG	-3.5	25.0
1, 1'-Biphenyl	1.478	1.402	50.00	0.0000		AVRG	-5.1	25.0
bis (2-Chloroethoxy) methane	0.493	0.481	50.00	48.78		AVRG	-2.4	25.0
bis (2-Chloroethyl) ether	1.652	1.326	50.00	45.46		LINR	-9.1	25.0
bis (2-Chloroisopropyl) ether	2.260	2.091	50.00	46.27		AVRG	-7.5	25.0
Bis (2-ethylhexyl) phthalate	1.048	1.134	50.00	54.05		AVRG	8.1	25.0
4-Bromophenyl-phenylether	0.273	0.243	50.00	44.49		AVRG	-11.0	25.0
Butylbenzylphthalate	0.812	0.912	50.00	56.20		AVRG	12.4	25.0
4-Chloroaniline	0.420	0.447	50.00	53.18		AVRG	6.4	25.0
4-Chloro-3-methylphenol	0.278	0.292	50.00	52.45		AVRG	4.9	25.0
2-Chloronaphthalene	1.144	1.234	50.00	53.94		AVRG	7.9	25.0
2-Chlorophenol	1.197	1.251	50.00	57.25		2ORDR	14.5	25.0
4-Chlorophenyl-phenylether	0.561	0.561	50.00	50.04		AVRG	0.1	25.0
Chrysene	0.976	1.112	50.00	57.00		AVRG	14.0	25.0
Dibenz (a, h) anthracene	0.737	0.775	50.00	52.58		AVRG	5.2	25.0
Dibenzofuran	1.491	1.439	50.00	48.25		AVRG	-3.5	25.0
1,2-Dichlorobenzene	1.313	1.313	50.00	54.16		2ORDR	8.3	25.0
1,4-Dichlorobenzene	1.383	1.274	50.00	46.06		AVRG	-7.9	25.0
1,3-Dichlorobenzene	1.513	1.396	50.00	48.94		2ORDR	-2.1	25.0
2,4-Dichlorophenol	0.311	0.304	50.00	48.78		AVRG	-2.4	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969
 Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050
 Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08
 Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Diethylphthalate	1.399	1.247	50.00	44.55		AVRG	-10.9	25.0
2,4-Dimethylphenol	0.277	0.331	50.00	59.78		AVRG	19.6	25.0
Dimethylphthalate	1.490	1.386	50.00	46.54		AVRG	-6.9	25.0
Di-n-butylphthalate	1.672	1.620	50.00	48.44		AVRG	-3.1	25.0
4,6-Dinitro-2-methylphenol	0.156	0.200	50.00	55.35		2ORDR	10.7	25.0
2,4-Dinitrophenol	0.167	0.200	50.00	51.09	0.050	2ORDR	2.2	25.0
2,4-Dinitrotoluene	0.416	0.387	50.00	46.57		AVRG	-6.8	25.0
2,6-Dinitrotoluene	0.366	0.372	50.00	50.76		AVRG	1.5	25.0
Di-n-octylphthalate	1.870	2.025	50.00	46.98		LINR	-6.0	25.0
1,2-Diphenylhydrazine	1.106	1.109	50.00	50.13		AVRG	0.3	25.0
Fluoranthene	1.086	1.166	50.00	53.69		AVRG	7.4	25.0
Fluorene	1.196	1.174	50.00	49.08		AVRG	-1.8	25.0
Hexachlorobenzene	0.264	0.271	50.00	51.38		AVRG	2.8	25.0
Hexachlorobutadiene	0.189	0.185	50.00	48.92		AVRG	-2.2	25.0
Hexachlorocyclopentadiene	0.284	0.298	50.00	52.34	0.050	AVRG	4.7	25.0
Hexachloroethane	0.632	0.578	50.00	45.72		AVRG	-8.6	25.0
Indeno(1,2,3-cd)pyrene	0.725	0.760	50.00	52.43		AVRG	4.9	25.0
Isophorone	0.835	0.779	50.00	46.69		AVRG	-6.6	25.0
1-Methylnaphthalene	0.485	0.478	50.00	49.29		AVRG	-1.4	25.0
2-Methylnaphthalene	0.514	0.512	50.00	49.76		AVRG	-0.5	25.0
Naphthalene	0.928	0.939	50.00	50.61		AVRG	1.2	25.0
4-Methylphenol	1.092	1.161	50.00	53.17		AVRG	6.3	25.0
3-Methylphenol	1.093	1.161	50.00	53.13		AVRG	6.2	25.0
2-Methylphenol	1.125	1.075	50.00	47.79		AVRG	-4.4	25.0
2-Nitroaniline	0.381	0.394	50.00	51.59		AVRG	3.2	25.0
3-Nitroaniline	0.398	0.368	50.00	46.28		AVRG	-7.4	25.0
4-Nitroaniline	0.327	0.314	50.00	44.05		2ORDR	-11.9	25.0
Nitrobenzene	0.431	0.441	50.00	51.21		AVRG	2.4	25.0
2-Nitrophenol	0.260	0.262	50.00	50.29		AVRG	0.6	25.0
4-Nitrophenol	0.224	0.232	50.00	51.60	0.050	AVRG	3.2	25.0
N-Nitroso-di-methylamine	0.665	0.562	50.00	42.23		AVRG	-15.5	25.0
N-Nitrosodiphenylamine (1)	0.689	0.636	50.00	46.12		AVRG	-7.8	25.0
N-Nitroso-di-n-propylamine	0.895	0.841	50.00	46.95	0.050	AVRG	-6.1	25.0
Pentachlorophenol	0.178	0.211	50.00	52.84		LINR	5.7	25.0
Phenanthrene	1.096	1.143	50.00	52.15		AVRG	4.3	25.0
Phenol	1.639	1.684	50.00	51.35		AVRG	2.7	25.0

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0050

Lab File ID: ICVMAIN Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Pyrene	1.207	1.342	50.00	55.57		AVRG	11.1	25.0
Pyridine	1.797	1.712	50.00	47.63		AVRG	-4.7	25.0
1,2,4-Trichlorobenzene	0.350	0.300	50.00	42.76		AVRG	-14.5	25.0
2,4,5-Trichlorophenol	0.397	0.419	50.00	52.74		AVRG	5.5	25.0
2,4,6-Trichlorophenol	0.382	0.390	50.00	51.00		AVRG	2.0	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0014

Lab File ID: ICVEX Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benidine	0.608	0.902	50.00	65.92		LINR	31.8	25.0 <
3,3'-Dichlorobenzidine	0.342	0.458	50.00	66.98		AVRG	34.0	25.0 <

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0202

Lab File ID: ICV03 Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Benzaldehyde	1.134	0.944	50.00	41.60		AVRG	-16.8	25.0

SEMIVOLATILE INITIAL CALIBRATION VERIFICATION

Lab Name: EMPIRICAL LABS Contract:

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: SDGA81969

Instrument ID: BNA1 Calibration Date: 07/25/08 Time: 0126

Lab File ID: ICV02 Init. Calib. Date(s): 07/24/08 07/28/08

Init. Calib. Times: 1046 1122

COMPOUND	RRF	RRF50	CURVE AMOUNT	CCAL AMOUNT	MIN RRF	CURVE	%D	MAX %D
Acetophenone	1.286	1.030	50.00	40.60		2ORDR	-18.8	25.0
Atrazine	0.200	0.217	50.00	54.28		AVRG	8.6	25.0
1,1'-Biphenyl	1.478	1.424	50.00	48.19		AVRG	-3.6	25.0
Caprolactam	0.103	0.128	50.00	59.13		2ORDR	18.2	25.0
1,2,4,5-Tetrachlorobenzene	0.259	0.265	50.00	51.14		AVRG	2.3	25.0
2,3,4,6-Tetrachlorophenol	0.218	0.259	50.00	52.88		LINR	5.8	25.0

*P
JW
8-5-08*

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab File ID: DF0819B1 DFTPP Injection Date: 08/19/08

Instrument ID: BNA1 DFTPP Injection Time: 0937

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	58.6
70	Less than 2.0% of mass 69	0.3 (0.5)1
127	40.0 - 60.0% of mass 198	45.0
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.6
275	10.0 - 30.0% of mass 198	18.1
365	Greater than 1.0% of mass 198	2.00
441	Present, but less than mass 443	8.9
442	Greater than 40.0% of mass 198	57.1
443	17.0 - 23.0% of mass 442	11.8 (20.7)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCV050PPM	CCV050PPM	CCV050S	08/19/08	0958
02	SBLK0815BS1	SBLK0815BS1	S1BS0815	08/19/08	1034
03	SBLK0815BS1L	SBLK0815BS1LCS	S1LS0815	08/19/08	1110
04	SBLK0815BS1L	SBLK0815BS1LCS	S1DS0815	08/19/08	1147
05	01SS01QT	0808142-01	0814201	08/19/08	1337
06	01SS01QTDUP	0808142-02	0814202	08/19/08	1414
07	01SS02QT	0808142-03	0814203	08/19/08	1451
08	01SS03QT	0808142-04	0814204	08/19/08	1528
09	01SS04QT	0808142-05	0814205	08/19/08	1605
10	01SS05QT	0808142-06	0814206	08/19/08	1642
11	01SS06QT	0808142-07	0814207	08/19/08	1719
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab File ID (Standard): CCV050S Date Analyzed: 08/19/08

Instrument ID: BNA1 Time Analyzed: 0958

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	962903	5.51	3185936	6.85	1756020	9.97
UPPER LIMIT	1925806	6.01	6371872	7.35	3512040	10.47
LOWER LIMIT	481452	5.01	1592968	6.35	878010	9.47
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0815BS1	956986	5.51	3375734	6.85	1799455	9.97
02 SBLK0815BS1L	1017120	5.51	3462045	6.85	1810296	9.98
03 SBLK0815BS1L	957151	5.51	3329098	6.85	1766302	9.98
04 01SS01QT	1119866	5.51	3482206	6.85	1934446	9.97
05 01SS01QTDUP	1044839	5.51	3248898	6.85	1711303	9.97
06 01SS02QT	1088424	5.51	3624879	6.85	1994669	9.97
07 01SS03QT	1079791	5.51	3505263	6.86	1906254	9.98
08 01SS04QT	1141435	5.51	3592177	6.86	2110165	9.98
09 01SS05QT	1138928	5.51	3707364	6.85	2041816	9.98
10 01SS06QT	1160849	5.51	3799698	6.85	1845044	9.98
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4
 IS2 (NPT) = Naphthalene-d8
 IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMPIRICAL LABS Contract: TETRATECH-GULFPORT

Lab Code: Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab File ID (Standard): CCV050S Date Analyzed: 08/19/08

Instrument ID: BNA1 Time Analyzed: 0958

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2378552	13.73	1872138	21.34	1398246	25.35
UPPER LIMIT	4757104	14.23	3744276	21.84	2796492	25.85
LOWER LIMIT	1189276	13.23	936069	20.84	699123	24.85
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SBLK0815BS1	2275372	13.72	1822095	21.32	1549077	25.35
02 SBLK0815BS1L	2648630	13.73	1931789	21.34	1664595	25.36
03 SBLK0815BS1L	2515891	13.73	1969066	21.34	1669726	25.35
04 01SS01QT	2602121	13.72	2140373	21.33	1999001	25.36
05 01SS01QTDUP	2441415	13.72	1736716	21.34	1267047	25.35
06 01SS02QT	2620311	13.72	1965878	21.33	1409705	25.35
07 01SS03QT	2683502	13.72	2098098	21.34	1661347	25.35
08 01SS04QT	2645942	13.73	1647962	21.34	974218	25.35
09 01SS05QT	2781054	13.73	2176553	21.34	1580517	25.35
10 01SS06QT	2557271	13.73	2179350	21.34	1645455	25.35
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10
 IS5 (CRY) = Chrysene-d12
 IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
 * Values outside of QC limits.

Data File: \\ELABNSH05\TARGET\chem\bna1.i\081908B1.b\0814203.D
 Report Date: 19-Aug-2008 19:01

Empirical Laboratories, LLC

Data file : \\ELABNSH05\TARGET\chem\bna1.i\081908B1.b\0814203.D
 Lab Smp Id: 0808142-03 Client Smp ID: 01SS02QT
 Inj Date : 19-AUG-2008 14:51 MS Autotune Date: 24-JUL-2008 08:11
 Operator : ADM Inst ID: bna1.i
 Smp Info : 0808142-03;1;15;1000;1;UG/KG;15-AUG-2008
 Misc Info : tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Comment :
 Method : \\ELABNSH05\TARGET\chem\bna1.i\081908B1.b\IXSOX1.m
 Meth Date : 19-Aug-2008 19:00 tmonteiro Quant Type: ISTD
 Cal Date : 28-JUL-2008 11:22 Cal File: CAP9C080.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: ppbna.sub
 Target Version: 4.04
 Processing Host: TARGET02_VM

Concentration Formula: Amt * DF * Uf * Vt*Vi/(Amt * Vi * (Solids/100))

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL) (1000 low, 2
Amt	15.000	Mass of initial extraction
Vi	0.500	Volume injected (uL)
Solids	80.800	Percent Solids

8/19/08

Compounds	QUANT	SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN (ng/ul)	FINAL (UG/KG)
* 1 1,4-Dichlorobenzene-d4	152			5.510	5.510	(1.000)	1088424	40.0000	
\$ 2 2-Fluorophenol	112			4.497	4.502	(0.816)	2109521	55.0393	4541
\$ 3 Phenol-d6	99			5.192	5.204	(0.942)	2822391	66.8396	5515
* 31 Naphthalene-d8	136			6.854	6.851	(1.000)	3624879	40.0000	
\$ 32 Nitrobenzene-d5	82			6.015	6.021	(0.878)	1085097	27.3545	2257
* 65 Acenaphthene-d10	164			9.972	9.973	(1.000)	1994669	40.0000	
\$ 70 2-Fluorobiphenyl	172			8.577	8.576	(0.860)	2093256	30.5030	2517
* 97 Phenanthrene-d10	188			13.723	13.732	(1.000)	2620311	40.0000	
\$ 102 2,4,6-Tribromophenol	330			11.893	11.898	(0.867)	685563	77.5453	6398
* 124 Chrysene-d12	240			21.332	21.339	(1.000)	1965878	40.0000	
\$ 127 Terphenyl-d14	244			18.407	18.409	(0.863)	1802430	42.4463	3502
132 Bis(2-ethylhexyl)phthalate	149			21.812	21.816	(1.022)	29378	0.57005	47.03 (a)
* 145 Perylene-d12	264			25.352	25.350	(1.000)	1409705	40.0000	

Low
8-21-08

$$\text{Conc} = \frac{A_x}{A_i} \times \frac{I_s}{RRF}$$

$$\frac{29378}{1965878} \times \frac{40}{1.048} = 0.57038$$

Ax = Area of analyte
 Ai = Area of internal standard
 Is = Conc. of internal standard
 RRF = Initial calibration relative response factor

Sequence Name: C:\HPCHEM\1\SEQUENCE\072408B1.b
 Comment: clp/8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\072408B1.b
 Pre-Seq Cmd:
 Post-Seq Cmd:

6979

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

M 7/24/08
 L 7/28/08

BNA/PP9 calibs.

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	BLANK	DFTPPBN1	
2	CCal	99	CCV050	IXBN1	BNACAL050PPM;;;;;SV4451
3	ICal	14	CHK100	IXBN1	BNACAL100PPM;;;;;SV4413-13
4	ICal	4	CHK005	IXBN1	BNACAL005PPM;;;;;SV4413-3
5	QC	1	DF0724B1	DFTPPBN1	DF0724B1;;;;;SV4405 10:25, 7/24
6	ICal	2	CAL001	IXBN1	BNACAL001PPM;;;;;SV4413-1
7	ICal	3	CAL002	IXBN1	BNACAL002PPM;;;;;SV4413-2
8	ICal	4	CAL005	IXBN1	BNACAL005PPM;;;;;SV4413-3
9	ICal	5	CAL010	IXBN1	BNACAL010PPM;;;;;SV4413-4
10	ICal	6	CAL020	IXBN1	BNACAL020PPM;;;;;SV4413-5
11	ICal	7	CAL030	IXBN1	BNACAL030PPM;;;;;SV4413-6
12	ICal	8	CAL040	IXBN1	BNACAL040PPM;;;;;SV4413-7
13	ICal	9	CAL050	IXBN1	BNACAL050PPM;;;;;SV4413-8
14	ICal	10	CAL060	IXBN1	BNACAL060PPM;;;;;SV4413-9
15	ICal	11	CAL070	IXBN1	BNACAL070PPM;;;;;SV4413-10
16	ICal	12	CAL080	IXBN1	BNACAL080PPM;;;;;SV4413-11
17	ICal	13	CAL090	IXBN1	BNACAL090PPM;;;;;SV4413-12
18	ICal	14	CAL100	IXBN1	BNACAL100PPM;;;;;SV4413-13
19	ICal	15	CALB001	IXBN1	BNACAL001PPM;;;;;SV4415-1
20	ICal	16	CALB002	IXBN1	BNACAL002PPM;;;;;SV4415-2
21	ICal	17	CALB005	IXBN1	BNACAL005PPM;;;;;SV4415-3
22	ICal	18	CALB010	IXBN1	BNACAL010PPM;;;;;SV4415-4
23	ICal	19	CALB020	IXBN1	BNACAL020PPM;;;;;SV4415-5
24	ICal	20	CALB050	IXBN1	BNACAL050PPM;;;;;SV4415-8
25	ICal	21	CALB070	IXBN1	BNACAL070PPM;;;;;SV4415-10
26	Sample	1	DF0724B2	DFTPPBN1	DF0724B2;;;;;SV4405 22:41, 7/24
27	ICal	22	CALB080	IXBN1	BNACAL080PPM;;;;;SV4415-11
28	ICal	23	CALB100	IXBN1	BNACAL100PPM;;;;;SV4415-13
29	QC	24	ICVEX	IXBN1	BNAICV050PPM;;;;;SV4304
30	QC	25	ICVMAIN	IXBN1	BNAICV050PPM;;;;;SV4444-A(main)
31	QC	26	ICV02	IXBN1	BNAICV050PPM;;;;;SV4444-B
32	QC	27	ICV03	IXBN1	BNAICV050PPM;;;;;SV4445
33	Sample	28	CAP9C001	IXBN1	CALAP9C001PPM;;;;;SV4457-1
34	Sample	29	CAP9C002	IXBN1	CALAP9C002PPM;;;;;SV4457-2
35	Sample	30	CAP9C005	IXBN1	CALAP9C005PPM;;;;;SV4457-3
36	Sample	31	CAP9C010	IXBN1	CALAP9C010PPM;;;;;SV4457-4
37	Sample	32	CAP9C020	IXBN1	CALAP9C020PPM;;;;;SV4457-5
38	Sample	33	CAP9C030	IXBN1	CALAP9C030PPM;;;;;SV4457-6
39	Sample	34	CAP9C050	IXBN1	CALAP9C050PPM;;;;;SV4457-8
40	Sample	35	CAP9C070	IXBN1	CALAP9C070PPM;;;;;SV4457-10
41	Sample	36	CAP9C100	IXBN1	CALAP9C100PPM;;;;;SV4457-13
42	Sample	37	CAP9A001	IXBN1	CALAP9A001PPM;;;;;SV4455-1
43	Sample	38	CAP9A002	IXBN1	CALAP9A002PPM;;;;;SV4455-2

ppbna3
 Scomp
 ppbna
 pp9a

ppbna3, Scomp, pp9c,
 pp9a, pp9b. subs used
 1XBN1.m (H2O)
 1XSOX1.m (Soil)

Line Type	Vial	DataFile	Method	Sample Name
44 Sample	39	CAP9A005	IXBN1	CALAP9A005PPM;;;;;SV4455-3
45 Sample	40	CAP9A010	IXBN1	CALAP9A010PPM;;;;;SV4455-4
46 QC	98	ICVEX1	IXBN1	BNAICV050PPM;;;;;SV4459
47 Sample	1	DF0724B3	DFTPPBN1	DF0724B3;;;;;SV4405 10:56, 7/25
48 Sample	41	CAP9A020	IXBN1	CALAP9A020PPM;;;;;SV4455-5
49 Sample	42	CAP9A030	IXBN1	CALAP9A030PPM;;;;;SV4455-6
50 Sample	43	CAP9A050	IXBN1	CALAP9A050PPM;;;;;SV4455-8
51 Sample	44	CAP9A070	IXBN1	CALAP9A070PPM;;;;;SV4455-10
52 Sample	45	CAP9A100	IXBN1	CALAP9A100PPM;;;;;SV4455-13
53 Sample	46	CAP9B001	IXBN1	CALAP9B001PPM;;;;;SV4456-1
54 Sample	47	CAP9B002	IXBN1	CALAP9B002PPM;;;;;SV4456-2
55 Sample	48	CAP9B005	IXBN1	CALAP9B005PPM;;;;;SV4456-3
56 Sample	49	CAP9B010	IXBN1	CALAP9B010PPM;;;;;SV4456-4
57 Sample	50	CAP9B020	IXBN1	CALAP9B020PPM;;;;;SV4456-5
58 Sample	51	CAP9B030	IXBN1	CALAP9B030PPM;;;;;SV4456-6
59 Sample	52	CAP9B050	IXBN1	CALAP9B050PPM;;;;;SV4456-8
60 Sample	53	CAP9B070	IXBN1	CALAP9B070PPM;;;;;SV4456-10
61 Sample	54	CAP9B100	IXBN1	CALAP9B100PPM;;;;;SV4456-13
62 Sample	100	BLANK	DFTPPBN1	
63 Sample	1	DF0728B1	DFTPPBN1	DF0728B1;;;;;SV4405 7/26, 9:48
64 Sample	55	CAP9C060	IXBN1	CALAP9C060PPM;;;;;SV4457-9 x
65 Sample	56	CAP9C070	IXBN1	CALAP9C070PPM;;;;;SV4457-10 x
66 Sample	57	CAP9C080	IXBN1	CALAP9C080PPM;;;;;SV4457-11 -ok
67 Sample	58	CAP9C090	IXBN1	CALAP9C090PPM;;;;;SV4457-12 x
68 Sample	59	CA9C100	IXBN1	CALAP9C100PPM;;;;;SV4457-13 x

6980

Sequence Name: C:\HPCHEM\1\SEQUENCE\072408B1.S
 Comment: clp/8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\072408B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

6981

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: CCal BNACAL050PPM;;;;;SV4451 Vial: 99 ;2;;;;;ppbna.sub;4449 Meth: IXBN1.M Barcode: Data: CCV050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: ICal BNACAL100PPM;;;;;SV4413-13 Vial: 14 ;1;;;13;;ppbna1.sub;4392 Meth: IXBN1.M Barcode: Data: CHK100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: ICal BNACAL005PPM;;;;;SV4413-3 Vial: 4 ;1;;;3;;ppbna1.sub;4392 Meth: IXBN1.M Barcode: Data: CHK005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: QC DF0724B1;;;;;SV4405 Vial: 1 ;;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0724B1.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: ICal BNACAL001PPM;;;;;SV4413-1 Vial: 2 ;1;;;1;;ppbna3.sub;4392 Meth: IXBN1.M Barcode: Data: CAL001.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: ICal BNACAL002PPM;;;;;SV4413-2 Vial: 3 ;1;;;2;;ppbna3.sub;4392 Meth: IXBN1.M Barcode: Data: CAL002.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: ICal BNACAL005PPM;;;;;SV4413-3 Vial: 4 ;1;;;3;;ppbna3.sub;4392 Meth: IXBN1.M Barcode:

Data: CAL005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

6982

9 Type: ICal BNACAL010PPM;;;;;SV4413-4
 Vial: 5 ;1;;;4;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL010.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

10 Type: ICal BNACAL020PPM;;;;;SV4413-5
 Vial: 6 ;1;;;5;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL020.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

11 Type: ICal BNACAL030PPM;;;;;SV4413-6
 Vial: 7 ;1;;;6;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL030.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

12 Type: ICal BNACAL040PPM;;;;;SV4413-7
 Vial: 8 ;1;;;7;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL040.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

13 Type: ICal BNACAL050PPM;;;;;SV4413-8
 Vial: 9 ;1;;;8;;ppbna3.sub;4352
 Meth: IXBN1.M Barcode:
 Data: CAL050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

14 Type: ICal BNACAL060PPM;;;;;SV4413-9
 Vial: 10 ;1;;;9;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL060.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

15 Type: ICal BNACAL070PPM;;;;;SV4413-10
 Vial: 11 ;1;;;10;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL070.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

16 Type: ICal BNACAL080PPM;;;;;SV4413-11
 Vial: 12 ;1;;;11;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL080.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

17 Type: ICal BNACAL090PPM;;;;;SV4413-12
 Vial: 13 ;1;;;12;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL090.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd

Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

6983

18 Type: ICAL BNACAL100PPM;;;;;SV4413-13
 Vial: 14 ;1;;;13;;ppbna3.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CAL100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

19 Type: ICAL BNACAL001PPM;;;;;SV4415-1
 Vial: 15 ;1;;;1;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB001.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

20 Type: ICAL BNACAL002PPM;;;;;SV4415-2
 Vial: 16 ;1;;;2;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB002.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

21 Type: ICAL BNACAL005PPM;;;;;SV4415-3
 Vial: 17 ;1;;;3;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB005.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

22 Type: ICAL BNACAL010PPM;;;;;SV4415-4
 Vial: 18 ;1;;;4;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB010.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

23 Type: ICAL BNACAL020PPM;;;;;SV4415-5
 Vial: 19 ;1;;;5;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB020.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

24 Type: ICAL BNACAL050PPM;;;;;SV4415-8
 Vial: 20 ;1;;;8;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

25 Type: ICAL BNACAL070PPM;;;;;SV4415-10
 Vial: 21 ;1;;;10;;5comp.sub;4392
 Meth: IXBN1.M Barcode:
 Data: CALB070.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

26 Type: Sample DF0724B2;;;;;SV4405
 Vial: 1 ;;;;;;all.sub;
 Meth: DFTPPBN1.M Barcode:
 Data: DF0724B2.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default

Quant Report	:Default	Post-Quant Macro:Default
CR Database	:Default	CR Spreadsheet :Default

27 Type: ICal BNACAL080PPM;;;;;SV4415-11
Vial: 22 ;1;;;11;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB080.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

28 Type: ICal BNACAL100PPM;;;;;SV4415-13
Vial: 23 ;1;;;13;;5comp.sub;4392
Meth: IXBN1.M Barcode:
Data: CALB100.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

29 Type: QC BNAICV050PPM;;;;;SV4304
Vial: 24 ;3;;;;;ppbna.sub;4292
Meth: IXBN1.M Barcode:
Data: ICVEX.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

30 Type: QC BNAICV050PPM;;;;;SV4444-A(main)
Vial: 25 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICVMAIN.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

31 Type: QC BNAICV050PPM;;;;;SV4444-B
Vial: 26 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICV02.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

32 Type: QC BNAICV050PPM;;;;;SV4445
Vial: 27 ;3;;;;;ppbna.sub;4441
Meth: IXBN1.M Barcode:
Data: ICV03.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

33 Type: Sample CALAP9C001PPM;;;;;SV4457-1
Vial: 28 ; ; ; ; ; app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C001.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

34 Type: Sample CALAP9C002PPM;;;;;SV4457-2
Vial: 29 ; ; ; ; ; app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C002.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

35 Type: Sample CALAP9C005PPM;;;;;SV4457-3
Vial: 30 ; ; ; ; ; app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C005.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default

6984

36 Type: Sample CALAP9C010PPM;;;;;SV4457-4
 Vial: 31 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C010.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

6985

37 Type: Sample CALAP9C020PPM;;;;;SV4457-5
 Vial: 32 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C020.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

38 Type: Sample CALAP9C030PPM;;;;;SV4457-6
 Vial: 33 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C030.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

39 Type: Sample CALAP9C050PPM;;;;;SV4457-8
 Vial: 34 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C050.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

40 Type: Sample CALAP9C070PPM;;;;;SV4457-10
 Vial: 35 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C070.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

41 Type: Sample CALAP9C100PPM;;;;;SV4457-13
 Vial: 36 ;;;;;;app9c.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9C100.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

42 Type: Sample CALAP9A001PPM;;;;;SV4455-1
 Vial: 37 ;;;;;;app9a.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9A001.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

43 Type: Sample CALAP9A002PPM;;;;;SV4455-2
 Vial: 38 ;;;;;;app9a.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9A002.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

44 Type: Sample CALAP9A005PPM;;;;;SV4455-3
 Vial: 39 ;;;;;;app9a.sub;4449
 Meth: IXBN1.M Barcode:
 Data: CAP9A005.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

6986

45 Type: Sample CALAP9A010PPM;;;;;SV4455-4
Vial: 40 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A010.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

46 Type: QC BNAICV050PPM;;;;;SV4459
Vial: 98 ;3;;;;;ppbna.sub;4454A
Meth: IXBN1.M Barcode:
Data: ICVEX1.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

47 Type: Sample DF0724B3;;;;;SV4405
Vial: 1 ;;;;;;all.sub;
Meth: DFTPPBN1.M Barcode:
Data: DF0724B3.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

48 Type: Sample CALAP9A020PPM;;;;;SV4455-5
Vial: 41 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A020.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

49 Type: Sample CALAP9A030PPM;;;;;SV4455-6
Vial: 42 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A030.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

50 Type: Sample CALAP9A050PPM;;;;;SV4455-8
Vial: 43 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A050.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

51 Type: Sample CALAP9A070PPM;;;;;SV4455-10
Vial: 44 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A070.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

52 Type: Sample CALAP9A100PPM;;;;;SV4455-13
Vial: 45 ;;;;;;app9a.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9A100.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

53 Type: Sample CALAP9B001PPM;;;;;SV4456-1
Vial: 46 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B001.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

6987

54 Type: Sample CALAP9B002PPM;;;;;SV4456-2
Vial: 47 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B002.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

55 Type: Sample CALAP9B005PPM;;;;;SV4456-3
Vial: 48 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B005.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

56 Type: Sample CALAP9B010PPM;;;;;SV4456-4
Vial: 49 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B010.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

57 Type: Sample CALAP9B020PPM;;;;;SV4456-5
Vial: 50 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B020.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

58 Type: Sample CALAP9B030PPM;;;;;SV4456-6
Vial: 51 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B030.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

59 Type: Sample CALAP9B050PPM;;;;;SV4456-8
Vial: 52 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B050.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

60 Type: Sample CALAP9B070PPM;;;;;SV4456-10
Vial: 53 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B070.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

61 Type: Sample CALAP9B100PPM;;;;;SV4456-13
Vial: 54 ;;;;;;app9b.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9B100.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

62 Type: Sample
Vial: 100
Meth: DFTPPBN1.M Barcode:
Data: BLANK.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

63 Type: Sample DF0728B1;;;;;SV4405

Vial: 1
Meth: DFTPPBN1.M Barcode:
Data: DF0728B1.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

6988

64 Type: Sample CALAP9C060PPM;;;;;SV4457-9
Vial: 55 ;;;;;;app9c.sub;4454A
Meth: IXBN1.M Barcode:
Data: CAP9C060.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

65 Type: Sample CALAP9C070PPM;;;;;SV4457-10
Vial: 56 ;;;;;;app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CAP9C070R.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

66 Type: Sample CALAP9C080PPM;;;;;SV4457-11
Vial: 57 ;;;;;;app9c.sub;4454A
Meth: IXBN1.M Barcode:
Data: CAP9C080.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

67 Type: Sample CALAP9C090PPM;;;;;SV4457-12
Vial: 58 ;;;;;;app9c.sub;4454A
Meth: IXBN1.M Barcode:
Data: CAP9C090.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

68 Type: Sample CALAP9C100PPM;;;;;SV4457-13
Vial: 59 ;;;;;;app9c.sub;4449
Meth: IXBN1.M Barcode:
Data: CA9C100R.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

Sequence Name: C:\HPCHEM\1\SEQUENCE\081908B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\081908B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7016 M8/19/8

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	BLANK	DFTPPBN1	
2 CCal	2	PRIMER	IXSOX1	CCV050PPM;;;;;SV4491
3 Tune	1	DF0819B1	DFTPPBN1	DF0819B1;;;;;SV4405 9:37, 8/19
4 CCal	2	CCV050	IXSOX1	CCV050PPM;;;;;SV4492
5 QC	3	S1BS0815	IXSOX1	SBLK0815BS1;1;15;1000;1;UG/KG;15-AUG-
6 QC	4	S1LS0815	IXSOX1	SBLK0815BS1LCS;1;15;1000;1;UG/KG;15-A
7 QC	5	S1DS0815	IXSOX1	SBLK0815BS1LCS;1;15;1000;1;UG/KG;15-
8 QC	6	S1BS0813	IXSOX1	SBLK0813BS1;1;15;1000;1;UG/KG;13-AUG-
9 QC	7	S1LS0813	IXSOX1	SBLK0813BS1LCS;1;15;1000;1;UG/KG;13-A
10 Sample	8	0814201	IXSOX1	0808142-01;1;15;1000;1;UG/KG;15-AUG-2
11 Sample	9	0814202	IXSOX1	0808142-02;1;15;1000;1;UG/KG;15-AUG-2
12 Sample	10	0814203	IXSOX1	0808142-03;1;15;1000;1;UG/KG;15-AUG-2
13 Sample	11	0814204	IXSOX1	0808142-04;1;15;1000;1;UG/KG;15-AUG-2
14 Sample	12	0814205	IXSOX1	0808142-05;1;15;1000;1;UG/KG;15-AUG-2
15 Sample	13	0814206	IXSOX1	0808142-06;1;15;1000;1;UG/KG;15-AUG-2
16 Sample	14	0814207	IXSOX1	0808142-07;1;15;1000;1;UG/KG;15-AUG-2
17 Sample	15	0807413	IXSOX1	0808074-13;1;15;1000;1;UG/KG;13-AUG-2
18 Sample	16	0807414	IXSOX1	0808074-14;1;15;1000;1;UG/KG;13-AUG-2
19 Sample	17	0807415	IXSOX1	0808074-15;1;15;1000;1;UG/KG;13-AUG-2
20 Sample	18	0807416	IXSOX1	0808074-16;1;15;1000;1;UG/KG;13-AUG-2
21 Sample	19	0807417	IXSOX1	0808074-17;1;15;1000;1;UG/KG;13-AUG-2
22 Sample	20	0807418	IXSOX1	0808074-18;1;15;1000;1;UG/KG;13-AUG-2
23 Sample	21	0807419	IXSOX1	0808074-19;1;15;1000;1;UG/KG;13-AUG-2 21:36, 8/19
24 QC	22	0807404M	IXSOX1	0808074-04;1;15;1000;1;UG/KG;11-AUG-2
25 QC	23	0807404S	IXSOX1	0808074-04;1;15;1000;1;UG/KG;11-AUG-2 22:49, 8/19 } out of tune
26 Sample	1	DF0819B2	DFTPPBN1	DF0819B2;;;;;SV4405 23:22, 8/19
27 Sample	2	CCV050E	IXSOX1	CCV050PPM;;;;;SV4491
28 QC	24	S1BW0818	IXBN1	SBLK0818BW1;1;1000;1000;1;UG/L;18-AUG
29 QC	25	S1LW0818	IXBN1	SBLK0818BW1LCS;1;1000;1000;1;UG/L;18-
30 QC	26	S1DW0818	IXBN1	SBLK0818BW1LCD;1;1000;1000;1;UG/L;18-
31 Sample	27	0807420	IXSOX1	0808074-20;1;15;1000;1;UG/KG;13-AUG-2
32 Sample	28	0813502	IXBN1	0808135-02;1;1000;1000;1;UG/L;18-AUG-
33 Sample	29	0813601	IXBN1	0808136-01;1;1080;1000;1;UG/L;18-AUG-
34 Sample	30	0813602	IXBN1	0808136-02;1;1080;1000;1;UG/L;18-AUG-
35 Sample	31	0813603	IXBN1	0808136-03;1;1080;1000;1;UG/L;18-AUG-
36 Sample	32	0813604	IXBN1	0808136-04;1;1080;1000;1;UG/L;18-AUG-
37 Sample	33	0813605	IXBN1	0808136-05;1;1080;1000;1;UG/L;18-AUG-
38 Sample	34	0813606	IXBN1	0808136-06;1;1080;1000;1;UG/L;18-AUG-
39 Sample	35	0814801	IXBN1	0808148-01;1;1080;1000;1;UG/L;18-AUG-
40 Sample	36	0814802	IXBN1	0808148-02;1;1080;1000;1;UG/L;18-AUG-
41 Sample	37	0814803	IXBN1	0808148-03;1;1080;1000;1;UG/L;18-AUG-
42 Sample	38	0814804	IXBN1	0808148-04;1;1080;1000;1;UG/L;18-AUG-
43 Sample	39	0807411	IXSOX1	0808074-11;1;15;1000;1;UG/KG;13-AUG-2

Line Type	Vial	DataFile	Method	Sample Name
44 Sample	40	0807412	IXSOX1	0808074-12;1;15;1000;1;UG/KG;13-AUG-2
45 Sample	41	0814301	IXBN1	0808143-01;1;1080;1000;1;UG/L;18-AUG-
46 Sample	42	0812804	IXBN1	0808128-04;1;1080;1000;1;UG/L;18-AUG-
47 QC	43	0807411M	IXSOX1	0808074-11;1;15;1000;1;UG/KG;13-AUG-2
48 QC	44	0807411S	IXSOX1	0808074-11;1;15;1000;1;UG/KG;13-AUG-2

7017

Sequence Name: C:\HPCHEM\1\SEQUENCE\081908B1.S
 Comment: 8270/625
 Operator: ADM
 Data Path: C:\HPCHEM\1\DATA\081908B1.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

7018

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

Line	Sample Name/Misc Info
1	Type: Sample Vial: 100 Meth: DFTPPBN1.M Barcode: Data: BLANK.D Samp Amt: 0 Multiplr: 1 Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
2	Type: CCal CCV050PPM;;;;;SV4491 Vial: 2 ;;;;;;ppbna.sub;4490 Meth: IXSOX1.M Barcode: Data: PRIMER.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
3	Type: Tune DF0819B1;;;;;SV4405 Vial: 1 ;;;;;;all.sub; Meth: DFTPPBN1.M Barcode: Data: DF0819B1.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
4	Type: CCal CCV050PPM;;;;;SV4492 Vial: 2 ;2;;;;;ppbna.sub;4490 Meth: IXSOX1.M Barcode: Data: CCV050.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
5	Type: QC SBLK0815BS1;1;15;1000;1;UG/KG;15-AUG-2008 Vial: 3 ;3;BLANK;;;081508BS1;ppbna.sub;4490 Meth: IXSOX1.M Barcode: Data: S1BS0815.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
6	Type: QC SBLK0815BS1LCS;1;15;1000;1;UG/KG;15-AUG-2008 Vial: 4 ;3;LCS;;;081508BS1;ppbna.sub;4490 Meth: IXSOX1.M Barcode: Data: S1LS0815.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
7	Type: QC SBLK0815BS1LCS;1;15;1000;1;UG/KG;15-AUG-2008 Vial: 5 ;3;LCSD;;;081508BS1;ppbna.sub;4490 Meth: IXSOX1.M Barcode: Data: S1DS0815.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd Area% Report :Default Lib. Search Rep.:Default Quant Report :Default Post-Quant Macro:Default CR Database :Default CR Spreadsheet :Default
8	Type: QC SBLK0813BS1;1;15;1000;1;UG/KG;13-AUG-2008 Vial: 6 ;3;BLANK;;;081308BS1;ppbna.sub;4490 Meth: IXSOX1.M Barcode:

Data: S1BS0813.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

7019

- 9 Type: QC SBLK0813BS1LCS;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 7 ;3:LCS;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: S1LS0813.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 10 Type: Sample 0808142-01;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 8 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814201.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 11 Type: Sample 0808142-02;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 9 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814202.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 12 Type: Sample 0808142-03;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 10 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814203.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 13 Type: Sample 0808142-04;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 11 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814204.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 14 Type: Sample 0808142-05;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 12 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814205.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 15 Type: Sample 0808142-06;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 13 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814206.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 16 Type: Sample 0808142-07;1;15;1000;1;UG/KG;15-AUG-2008
 Vial: 14 tet.b08142;0;;;081508BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0814207.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
- 17 Type: Sample 0808074-13;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 15 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807413.D Samp Amt: 0 Multiplr: 1

Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default

7020

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- 18 Type: Sample 0808074-14;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 16 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807414.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 19 Type: Sample 0808074-15;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 17 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807415.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 20 Type: Sample 0808074-16;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 18 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807416.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 21 Type: Sample 0808074-17;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 19 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807417.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 22 Type: Sample 0808074-18;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 20 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807418.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 23 Type: Sample 0808074-19;1;15;1000;1;UG/KG;13-AUG-2008
 Vial: 21 RSA284S003;0;;;081308BS1;ppbna.sub;4490
 Meth: IXSOX1.M Barcode:
 Data: 0807419.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 24 Type: QC 0808074-04;1;15;1000;1;UG/KG;11-AUG-2008
 Vial: 22 RSA284S003;3;MS;;;081108BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0807404M.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 25 Type: QC 0808074-04;1;15;1000;1;UG/KG;11-AUG-2008
 Vial: 23 RSA284S003;3;MSD;;;081108BS1;ppbna.sub;4467
 Meth: IXSOX1.M Barcode:
 Data: 0807404S.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
 Area% Report :Default Lib. Search Rep.:Default
 Quant Report :Default Post-Quant Macro:Default
 CR Database :Default CR Spreadsheet :Default
-
- 26 Type: Sample DF0819B2;;;;;SV4405
 Vial: 1 ;;;;;all.sub;
 Meth: DFTPPBN1.M Barcode:
 Data: DF0819B2.D Samp Amt: 0 Multiplr: 1
 Area% Report :Default Lib. Search Rep.:Default

Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

27 Type: Sample CCV050PPM;;;;;SV4491
Vial: 2 ;;;;;;ppbna.sub;4490
Meth: IXSOX1.M Barcode:
Data: CCV050E.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

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28 Type: QC SBLK0818BW1;1;1000;1000;1;UG/L;18-AUG-2008
Vial: 24 ;3;BLANK;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: S1BW0818.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

29 Type: QC SBLK0818BW1LCS;1;1000;1000;1;UG/L;18-AUG-2008
Vial: 25 ;3;LCS;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: S1LW0818.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

30 Type: QC SBLK0818BW1LCD;1;1000;1000;1;UG/L;18-AUG-2008
Vial: 26 ;3;LCS;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: S1DW0818.D LvlId: UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

31 Type: Sample 0808074-20;1;15;1000;1;UG/KG;13-AUG-2008
Vial: 27 RSA284S003;0;;;081308BS1;ppbna.sub;4490
Meth: IXSOX1.M Barcode:
Data: 0807420.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

32 Type: Sample 0808135-02;1;1000;1000;1;UG/L;18-AUG-2008
Vial: 28 sha.b08135;0;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: 0813502.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

33 Type: Sample 0808136-01;1;1080;1000;1;UG/L;18-AUG-2008
Vial: 29 nas.b08136;0;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: 0813601.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

34 Type: Sample 0808136-02;1;1080;1000;1;UG/L;18-AUG-2008
Vial: 30 nas.b08136;0;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: 0813602.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default
CR Database :Default CR Spreadsheet :Default

35 Type: Sample 0808136-03;1;1080;1000;1;UG/L;18-AUG-2008
Vial: 31 nas.b08136;0;;;081808BW1;ppbna.sub;4490
Meth: IXBN1.M Barcode:
Data: 0813603.D Samp Amt: 0 Multiplr: 1
Area% Report :Default Lib. Search Rep.:Default
Quant Report :Default Post-Quant Macro:Default

	CR Database	:Default	CR Spreadsheet	:Default
36	Type: Sample	0808136-04;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 32	nas.b08136;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0813604.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
37	Type: Sample	0808136-05;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 33	nas.b08136;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0813605.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
38	Type: Sample	0808136-06;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 34	nas.b08136;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0813606.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
39	Type: Sample	0808148-01;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 35	nas.b08148;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0814801.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
40	Type: Sample	0808148-02;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 36	nas.b08148;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0814802.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
41	Type: Sample	0808148-03;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 37	nas.b08148;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0814803.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
42	Type: Sample	0808148-04;1;1080;1000;1;UG/L;18-AUG-2008		
	Vial: 38	nas.b08148;0;;;081808BW1;ppbna.sub;4490		
	Meth: IXBN1.M	Barcode:		
	Data: 0814804.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
43	Type: Sample	0808074-11;1;15;1000;1;UG/KG;13-AUG-2008		
	Vial: 39	RSA284S003;0;;;081308BS1;ppbna.sub;4490		
	Meth: IXSOX1.M	Barcode:		
	Data: 0807411.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	
44	Type: Sample	0808074-12;1;15;1000;1;UG/KG;13-AUG-2008		
	Vial: 40	RSA284S003;0;;;081308BS1;ppbna.sub;4490		
	Meth: IXSOX1.M	Barcode:		
	Data: 0807412.D	Samp Amt: 0	Multiplr: 1	
	Area% Report	:Default	Lib. Search Rep.:Default	
	Quant Report	:Default	Post-Quant Macro:Default	
	CR Database	:Default	CR Spreadsheet :Default	

7022

7023

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45  Type: Sample      0808143-01;1;1080;1000;1;UG/L;18-AUG-2008
    Vial: 41         isp.b08143;0;;;081808BW1;ppbna.sub;4490
    Meth: IXBN1.M    Barcode:
    Data: 0814301.D  Samp Amt: 0          Multiplr: 1
    Area% Report    :Default          Lib. Search Rep.:Default
    Quant Report    :Default          Post-Quant Macro:Default
    CR Database     :Default          CR Spreadsheet  :Default
-----
46  Type: Sample      0808128-04;1;1080;1000;1;UG/L;18-AUG-2008
    Vial: 42         emc.b08128;0;;;081808BW1;ppbna.sub;4490
    Meth: IXBN1.M    Barcode:
    Data: 0812804.D  Samp Amt: 0          Multiplr: 1
    Area% Report    :Default          Lib. Search Rep.:Default
    Quant Report    :Default          Post-Quant Macro:Default
    CR Database     :Default          CR Spreadsheet  :Default
-----
47  Type: QC          0808074-11;1;15;1000;1;UG/KG;13-AUG-2008
    Vial: 43         RSA284S003;3;MS;;;081308BS1;ppbna.sub;4490
    Meth: IXSOX1.M   Barcode:
    Data: 0807411M.D LvlId:          UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
    Area% Report    :Default          Lib. Search Rep.:Default
    Quant Report    :Default          Post-Quant Macro:Default
    CR Database     :Default          CR Spreadsheet  :Default
-----
48  Type: QC          0808074-11;1;15;1000;1;UG/KG;13-AUG-2008
    Vial: 44         RSA284S003;3;MSD;;;081308BS1;ppbna.sub;4490
    Meth: IXSOX1.M   Barcode:
    Data: 0807411S.D LvlId:          UpdRF:No Upd UpdRT:No Upd UpdQI:No Upd
    Area% Report    :Default          Lib. Search Rep.:Default
    Quant Report    :Default          Post-Quant Macro:Default
    CR Database     :Default          CR Spreadsheet  :Default
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Empirical Laboratories
 Empirical Laboratories, LLC
 LABORATORY SAMPLE CUSTODY FORM
 SOIL REFRIGERATOR
 (all soils are assumed to be USDA regulated)

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/Comments	Task Performed
8101 (1-2)	8-14-08 2:00 pm	8-14-08 2:55 pm		VOA
7196-07				
8134-01-02	From log in 8/14/08 KH	8/14/08 2:30 KH		TCLP
8136-01-15	From log in 8/14/08 KH	8/14/08 4:13 KH		metals/Hg
826-33-38	8/15/08 09:05	8/15/08		metals/Hg
8042-01-16		12:16		
8044-01-10				
8045-01-21				
8130-01-15	8/15/08 9:11 AM	8/15/08 10:20 AM		% moist
8127-01				
808141-01-06	8/15/08 11:00 AM	8/15/08 11:30 AM		% moist
8142-01-07	8/15/08 12:20	14:23 8/15/08		Metals/Hg
8074-01-20				
8127-01	12:55 8/15/08 KAG	12:58 8/15/08 LOG		Hg
8142-1-7	taken from log in	2:41 AF 8/15/08		BNA P/PES
8145-12				Exp
8142-01-707	AM 8:30 8/18/08	AM 12:00 8/18/08		HEBP
7192-01	8/18/08 09:38	8/18/08 11:45		D:G
8145-02 A	8/18/08 12:00 JG	8/18/08 1:45 JG		TCLP
815-1-6 J9	8/18/08 1:26 AF	8/18/08 1:50 AF		TTHENS
8115-01-03	8/19/08 7:00	8-11 8/19/08 CA		ALK
8147-01				
8015-01-03	KH 8/19/08	KH 8/19/08 11:13		metals
8147-01				
8159-01	From log in			
8160-01-04A	8/19/08 1:32	8/19/08		TCLP
8157-01A		JG 5:00		
8157-02A				

HOBART SAMPLE EXTRACT CUSTODY FORM

Sample ID	Extraction	Time/Date/Initials		Received	Analysis	Balance	Volume	Comments
		Inserted	Removed					
8054-02	LCB	10/11/08 13:40	15/8/14/08 10:10					X
8021-1-2 8008-01	PCB ECP	① 4:44 8/14/08						
B 660-11,12,15 8053-1,2,8064-1	BNA	14:15 8/18/08 BTD	06:45 8/19/08 BTD					X
8068-01 8060-15-21 8074-1-16	↓	↓	↓					X
8120-1-3	ECP	11/8/15/08 14:00	11/8/15/08 9:30 TAKEN TO ANALYST					X
8121-01-02	↓	↓	15/8/15/08 9:30					X
8122-1-6	PCB	15:00 AF 8/15/08						X
8142-01-07 8142-01-07	PCB BNA	① 8/15/08 3:50						
8142-01-07 8074-11-20	BNA	15:20 BTD 8/18/08	07:00 BTD 8/19/08					X
8074-04 MS/MSO	BNA	↓	14:15 8/18/08 BTD					X
8145-1-6 A	CWGA	19:00 AF 8/18/08						X
8142-01-07 13-2A	BNA	14:30 8/20/08 BTD	06:45 8/19/08 BTD					X
8128-04; 8128-04 8105-02; 8136-1L 8143-01; 8148-01-4	BNA	↓	↓					X
8145-01-02	EXD	14:00 8/19/08 BTD	① 9:05 8/19/08 Taken to analyst					

%SOLIDS

506

Client(s):


TTNUS

Date on: 8/15/2008

Time on: 11:30

Date off: 8/18/2008

Time off: 8:30

Empirical Laboratories

Analyst: GM/CAT

Method #: 2540

Method Type: Gravimetric

Analyst Authorization: _____

Balance: Wet Chem #2

Cruc. ID.	Sample Type	Sample Number	Field ID.	Client	Boat Mass (gm)	Sample Mass, Wet (gm)	Sample Mass, Dry + Boat Mass (gm)	% Solids DL = 1.0%	RPD %	Control Limit %	Comments
1	Sample	0808141-01			1.0101	5.1377	5.3906	85.3			
2	Sample	0808141-02			1.0138	5.0805	5.3765	85.9			
3	Sample	0808141-03			1.0004	5.1487	5.0577	78.8			DAMP
4	Sample	0808141-04			0.9921	5.2072	5.3754	84.2			DAMP
5	Sample	0808141-05			0.9887	8.2995	7.8730	82.9			DAMP
6	Sample	0808141-06			0.9962	7.3798	6.9993	81.3			DAMP
7	Sample	0808142-01		TTNUS	0.9963	8.4867	8.4083	87.3			DAMP
8	Sample	0808142-02		TTNUS	0.9991	5.2806	5.6262	87.6			DAMP
9	Sample	0808142-03		TTNUS	0.9905	8.3349	7.7287	80.8			WET SAMPLE
10	Sample	0808142-04		TTNUS	1.0091	5.4906	5.5857	83.4			WET SAMPLE
11	Sample	0808142-05		TTNUS	0.9666	6.5000	6.5444	85.8			DAMP
12	Sample	0808142-06		TTNUS	1.0003	7.1005	6.6170	79.1			WET SAMPLE
13	Sample	0808142-07		TTNUS	1.0063	7.1879	7.4336	89.4			MOIST
14	Sample										
15	Sample										
16	Sample										
17	Sample										
18	Sample										
19	Sample										
20	Sample										
21	Duplicate										

FORM 2
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PS1BLK0820	87	75	111	112			0
02	PS1BLK0820LC	80	67	98	95			0
03	PS1BLK0820LC	72	59	97	94			0
04	PS1BLK0820LC	87	73	103	103			0
05	PS1BLK0820LC	85	70	110	110			0
06	01SS01QT	79	67	105	103			0
07	01SS01QTDUP	85	72	108	109			0
08	01SS02QT	92	79	121	116			0
09	01SS03QT	84	73	103	104			0
10	01SS04QT	90	79	110	107			0
11	01SS05QT	90	78	115	113			0
12	01SS06QT	89	77	112	109			0
13								
14								
15								
16								
17								
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20								
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22								
23								
24								
25								
26								
27								
28								
29								
30								

		EL	SPIKE
		QC LIMITS	CONC (ug/Kg)
S1	= TCMX	(30-120)	17
S2	= DCB	(35-140)	17

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: PS1BLK0820

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Aldrin	33.33	0.0000	29.35	88	45-140
Alpha-BHC	33.33	0.0000	28.56	86	60-125
Alpha-Chlordane	33.33	0.0000	29.65	89	65-120
Beta-BHC	33.33	0.0000	27.10	81	60-125
4,4'-DDD	33.33	0.0000	32.13	96	30-135
4,4'-DDE	33.33	0.0000	30.76	92	70-125
4,4'-DDT	33.33	0.0000	31.90	96	45-140
Delta-BHC	33.33	0.0000	29.71	89	55-130
Dieldrin	33.33	0.0000	31.29	94	65-125
Endosulfan I	33.33	0.0000	30.18	90	15-135
Endosulfan II	33.33	0.0000	30.45	91	35-140
Endosulfan Sulfate	33.33	0.0000	32.40	97	60-135
Endrin	33.33	0.0000	32.95	99	60-135
Endrin Aldehyde	33.33	0.0000	27.81	83	35-145
Endrin Ketone	33.33	0.0000	32.70	98	65-135
Gamma-BHC	33.33	0.0000	28.20	85	60-125
Gamma-Chlordane	33.33	0.0000	31.23	94	65-125
Heptachlor	33.33	0.0000	27.27	82	50-140
Heptachlor Epoxide	33.33	0.0000	28.78	86	65-130
Methoxychlor	33.33	0.0000	30.71	92	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: PS1BLK0820

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Aldrin	33.33	31.14	93	6	30	45-140
Alpha-BHC	33.33	29.93	90	5	30	60-125
Alpha-Chlordane	33.33	32.16	96	8	30	65-120
Beta-BHC	33.33	29.22	88	8	30	60-125
4,4'-DDD	33.33	35.27	106	9	30	30-135
4,4'-DDE	33.33	33.42	100	8	30	70-125
4,4'-DDT	33.33	35.38	106	10	30	45-140
Delta-BHC	33.33	32.70	98	10	30	55-130
Dieldrin	33.33	34.00	102	8	30	65-125
Endosulfan I	33.33	32.65	98	8	30	15-135
Endosulfan II	33.33	33.20	100	9	30	35-140
Endosulfan Sulfate	33.33	34.78	104	7	30	60-135
Endrin	33.33	37.27	112	12	30	60-135
Endrin Aldehyde	33.33	30.42	91	9	30	35-145
Endrin Ketone	33.33	34.89	105	6	30	65-135
Gamma-BHC	33.33	30.05	90	6	30	60-125
Gamma-Chlordane	33.33	33.75	101	8	30	65-125
Heptachlor	33.33	29.07	87	6	30	50-140
Heptachlor Epoxide	33.33	30.90	93	7	30	65-130
Methoxychlor	33.33	33.41	100	8	30	55-145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 20 outside limits

Spike Recovery: 0 out of 40 outside limits

COMMENTS: _____

FORM 3
SOIL PESTICIDE LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: PS1BLK0820

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
PCB-1016	166.7	0.0000	131.7	79	40-140
PCB-1260	166.7	0.0000	126.2	76	60-130

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
PCB-1016	166.7	146.6	88	11	50	40-140
PCB-1260	166.7	147.9	89	16	50	60-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

FORM 1
PESTA ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PS1BLK0820

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: PS1BLK0820

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 031F3101

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/20/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/26/08 05:02

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
309-00-2-----	Aldrin	0.11	0.33	U
319-84-6-----	Alpha-BHC	0.11	0.33	U
5103-71-9-----	Alpha-Chlordane	0.11	0.33	U
319-85-7-----	Beta-BHC	0.11	0.33	U
72-54-8-----	4,4'-DDD	0.17	0.67	U
72-55-9-----	4,4'-DDE	0.17	0.67	U
50-29-3-----	4,4'-DDT	0.17	0.67	U
319-86-8-----	Delta-BHC	0.11	0.33	U
60-57-1-----	Dieldrin	0.17	0.67	U
959-98-8-----	Endosulfan I	0.11	0.33	U
33213-65-9----	Endosulfan II	0.17	0.67	U
1031-07-8-----	Endosulfan Sulfate	0.17	0.67	U
72-20-8-----	Endrin	0.17	0.67	U
7421-93-4-----	Endrin Aldehyde	0.17	0.67	U
53494-70-5----	Endrin Ketone	0.17	0.67	U
58-89-9-----	Gamma-BHC	0.11	0.33	U
5103-74-2-----	Gamma-Chlordane	0.11	0.33	U
76-44-8-----	Heptachlor	0.11	0.33	U
1024-57-3-----	Heptachlor Epoxide	0.11	0.33	U
72-43-5-----	Methoxychlor	0.11	0.33	U
8001-35-2-----	Toxaphene	11	33	U
12674-11-2----	PCB-1016	4.2	17	U
11104-28-2----	PCB-1221	4.2	17	U
11141-16-5----	PCB-1232	4.2	17	U
53469-21-9----	PCB-1242	4.2	17	U
12672-29-6----	PCB-1248	4.2	17	U
11097-69-1----	PCB-1254	4.2	17	U
11096-82-5----	PCB-1260	4.2	17	U

FORM 4
PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PS1BLK0820

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820 Lab File ID: 031F3101

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SONC

Sulfur Cleanup (Y/N) N Date Extracted: 08/20/08

Date Analyzed (1): 08/26/08 Date Analyzed (2): 08/26/08

Time Analyzed (1): 0502 Time Analyzed (2): 0502

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PS1BLK0820LC	PS1BLK0820LCS	08/26/08	08/26/08
02	PS1BLK0820LC	PS1BLK0820LCSD	08/26/08	08/26/08
03	PS1BLK0820LC	PS1BLK0820LCS	08/26/08	08/26/08
04	PS1BLK0820LC	PS1BLK0820LCSD	08/26/08	08/26/08
05	01SS01QT	0808142-01	08/26/08	08/26/08
06	01SS01QTDUP	0808142-02	08/26/08	08/26/08
07	01SS02QT	0808142-03	08/26/08	08/26/08
08	01SS03QT	0808142-04	08/26/08	08/26/08
09	01SS04QT	0808142-05	08/26/08	08/26/08
10	01SS05QT	0808142-06	08/26/08	08/26/08
11	01SS06QT	0808142-07	08/26/08	08/26/08
12				
13				
14				
15				
16				
17				
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21				
22				
23				
24				
25				
26				

COMMENTS:

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPORT-009
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 6-2-08

EPA Sample NO. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 6-2-08
 Lab Sample ID (PEM): _____ Time Analyzed: 13:42

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): 3.0 Endrin & breakdown (1): 13.3
 Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPORT-009
 GC Column: ZB-MR1 ID: 0.32 (mm) Init. Calib. Date(s): 6-2-08

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 8-20-08
 Lab Sample ID (PEM): _____ Time Analyzed : 03:29

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): ∅ Endrin & breakdown (1): 9.7
 Combined & breakdown (1): NA

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RF200: 011F1101 RF100: 012F1201 RF50: 013F1301
RF25: 014F1401 RF10: 015F1501

COMPOUND	RF200	RF100	RF50	RF25	RF10
Aldrin	7062.660	7177.150	7263.120	15459.600	7692.300
Alpha-BHC	x 8582.155	x 8813.390	x 8871.520	18476.680	x 9217.200
Alpha-Chlordane	6393.955	6471.550	6540.120	13964.760	7196.300
Beta-BHC	3402.300	3432.030	3484.180	7313.880	3905.000
4,4'-DDD	5110.650	5032.080	4955.820	10428.040	5426.600
4,4'-DDE	6271.755	6214.140	6234.700	13268.280	6734.000
4,4'-DDT	5420.290	5249.280	5138.020	10883.320	5508.800
Delta-BHC	7569.790	7644.080	7671.900	16253.200	8002.800
Dieldrin	6521.140	6557.170	6653.720	14107.680	7356.300
Endosulfan I	5949.625	6052.640	6183.980	13028.120	6870.400
Endosulfan II	5426.370	5449.060	5546.500	11595.040	6503.100
Endosulfan Sulfate	4910.175	4836.790	4819.500	10181.960	5537.100
Endrin	5095.270	4840.690	4922.800	10279.640	5420.800
Endrin Aldehyde	4282.765	4374.780	4373.360	9199.560	5124.500
Endrin Ketone	5882.680	5930.720	5979.680	12518.480	6949.200
Gamma-BHC	-7725.640	-7882.910	-7997.360	16849.600	-8562.000
Gamma-Chlordane	6407.695	6435.730	6431.920	14028.200	7119.800
Heptachlor	7316.220	7466.320	7610.940	16204.800	8447.300
Heptachlor Epoxide	6266.070	6411.670	6600.520	14129.200	7590.200
Methoxychlor	2601.795	2530.300	2531.780	5371.760	3045.800
TCMX	5747.445	5886.340	5978.820	12009.000	6599.800
DCB	4217.180	3984.770	4118.920	8614.160	5209.600

*J.H. 6-6-08
149 6/11/08*

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RF5: 016F1601 RF1: 017F1701

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Aldrin	7010.000	6805.000	AVRG	7168.37167	4.2
Alpha-BHC	>8699.400	X7949.000	AVRG	8688.77750	4.8
Alpha-Chlordane	6874.600	6991.000	AVRG	6744.58750	4.8
Beta-BHC	3808.400	3531.000	AVRG	3593.81833	5.8
4,4'-DDD	5001.000	4866.000	AVRG	5065.35833	3.8
4,4'-DDE	6216.400	5530.000	AVRG	6200.16583	6.2
4,4'-DDT	5088.200	5079.000	AVRG	5247.26500	3.4
Delta-BHC	7121.600	6525.000	AVRG	7422.52833	7.0
Dieldrin	6656.600	6837.000	AVRG	6763.65500	4.6
Endosulfan I	6523.200	6400.000	AVRG	6329.97417	5.4
Endosulfan II	6715.200	6702.000	AVRG	6057.03833	10.6
Endosulfan Sulfate	5324.800	5573.000	AVRG	5166.89417	6.8
Endrin	5097.400	4950.000	AVRG	5054.49333	4.1
Endrin Aldehyde	5021.600	4987.000	AVRG	4694.00083	8.3
Endrin Ketone	-6596.000	6967.000	AVRG	6384.21333	8.1
Gamma-BHC	-8103.200	*7672.000	AVRG	7990.51833	4.0
Gamma-Chlordane	6645.400	6554.000	AVRG	6599.09083	4.1
Heptachlor	8133.200	8177.000	AVRG	7858.49667	5.8
Heptachlor Epoxide	7207.600	7077.000	AVRG	6858.84333	7.5
Methoxychlor	3010.200	3268.000	AVRG	2831.31250	11.2
=====	=====	=====	=====	=====	=====
TCMX	6658.400	6727.000	AVRG	6266.30083	7.0
DCB	4769.600	5257.000	AVRG	4592.84500	12.3

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RT1: 011F1101 RT2: 012F1201 RT3: 013F1301
RT4: 014F1401 RT5: 015F1501

COMPOUND	RT1	RT2	RT3	RT4	RT5
Aldrin	6.900	6.894	6.890	6.890	6.890
Alpha-BHC	5.570	5.565	5.570	5.570	5.570
Alpha-Chlordane	7.790	7.792	7.790	7.790	7.790
Beta-BHC	6.170	6.172	6.170	6.170	6.170
4,4'-DDD	8.670	8.669	8.670	8.670	8.670
4,4'-DDE	8.000	7.999	8.000	8.000	8.000
4,4'-DDT	9.050	9.045	9.050	9.050	9.050
Delta-BHC	6.440	6.442	6.440	6.440	6.440
Dieldrin	8.210	8.212	8.210	8.210	8.210
Endosulfan I	7.870	7.872	7.870	7.870	7.870
Endosulfan II	8.810	8.810	8.810	8.810	8.810
Endosulfan Sulfate	9.270	9.272	9.270	9.270	9.270
Endrin	8.510	8.507	8.510	8.510	8.510
Endrin Aldehyde	8.980	8.979	8.980	8.980	8.980
Endrin Ketone	9.910	9.912	9.910	9.920	9.910
Gamma-BHC	5.920	5.922	5.920	5.920	5.920
Gamma-Chlordane	7.710	7.705	7.710	7.710	7.710
Heptachlor	6.510	6.510	6.510	6.510	6.510
Heptachlor Epoxide	7.410	7.407	7.410	7.410	7.410
Methoxychlor	9.670	9.665	9.670	9.670	9.670
TCMX	5.080	5.079	5.080	5.080	5.080
DCB	11.490	11.492	11.490	11.490	11.490

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RT6: 016F1601 RT7: 017F1701

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
Aldrin	6.900	6.890	6.893	6.864	6.924
Alpha-BHC	5.570	5.570	5.569	5.535	5.595
Alpha-Chlordane	7.790	7.800	7.792	7.762	7.822
Beta-BHC	6.170	6.170	6.170	6.142	6.202
4,4'-DDD	8.670	8.680	8.671	8.639	8.699
4,4'-DDE	8.000	8.010	8.001	7.969	8.029
4,4'-DDT	9.050	9.050	9.049	9.015	9.075
Delta-BHC	6.440	6.440	6.440	6.412	6.472
Dieldrin	8.210	8.210	8.210	8.182	8.242
Endosulfan I	7.870	7.870	7.870	7.842	7.902
Endosulfan II	8.810	8.810	8.810	8.780	8.840
Endosulfan Sulfate	9.270	9.280	9.272	9.242	9.302
Endrin	8.510	8.510	8.510	8.477	8.537
Endrin Aldehyde	8.980	8.980	8.980	8.949	9.009
Endrin Ketone	9.920	9.920	9.915	9.882	9.942
Gamma-BHC	5.920	5.920	5.920	5.892	5.952
Gamma-Chlordane	7.710	7.710	7.709	7.675	7.735
Heptachlor	6.510	6.510	6.510	6.480	6.540
Heptachlor Epoxide	7.410	7.410	7.410	7.377	7.437
Methoxychlor	9.670	9.680	9.671	9.635	9.695
TCMX	5.080	5.080	5.080	5.049	5.109
DCB	11.490	11.500	11.492	11.462	11.522

J.H. 6/6/08
14 6/10/08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd3.i Injection Date: 02-JUN-2008 18:42
 Lab File ID: 018F1801.D Init. Cal. Date(s): 22-SEP-2006 02-JUN-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 18:24
 Lab Sample ID: AB ICV #6982 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\060208.b\8081_82F.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
3 Alpha-BHC	8689	8806	0.010	1.4
23 Gamma-BHC	7991	8075	0.010	1.1
5 Beta-BHC	3594	3503	0.010	-2.5
15 Delta-BHC	7423	8233	0.010	10.9
25 Heptachlor	7858	7643	0.010	-2.7
2 Aldrin	7168	7390	0.010	3.1
26 Heptachlor Epoxide	6859	6543	0.010	-4.6
24 Gamma-Chlordane	6599	6871	0.010	4.1
4 Alpha-Chlordane	6745	6638	0.010	-1.6
17 Endosulfan I	6330	6284	0.010	-0.7
13 4,4'-DDE	6200	6438	0.010	3.8
16 Dieldrin	6764	6761	0.010	-0.0
20 Endrin	5054	4999	0.010	-1.1
12 4,4'-DDD	5065	5267	0.010	4.0
18 Endosulfan II	6057	5712	0.010	-5.7
21 Endrin Aldehyde	4694	4578	0.010	-2.5
14 4,4'-DDT	5247	5432	0.010	3.5
19 Endosulfan Sulfate	5167	5034	0.010	-2.6
27 Methoxychlor	2831	2705	0.010	-4.5
22 Endrin Ketone	6384	6310	0.010	-1.2

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 06/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 5.08 S2 : 11.49			
CLIENT	LAB	DATE	TIME	S1	S2
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT
				#	#
01	AB/SUR200 #6	06/02/08	1631	5.08	11.49
02	AB/SUR100 #6	06/02/08	1650	5.08	11.49
03	AB/SUR 50 #6	06/02/08	1708	5.08	11.49
04	AB/SUR 25 #6	06/02/08	1727	5.08	11.49
05	AB/SUR 10 #6	06/02/08	1746	5.08	11.49
06	AB/SUR 5 #68	06/02/08	1805	5.08	11.49
07	AB/SUR 1 #68	06/02/08	1824	5.08	11.50
08	AB ICV #6982	06/02/08	1842		
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RF200: 002F0201 RF100: 003F0301 RF50: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	274.265	278.853	276.897	274.620	260.280
(2)	96.836	-101.089	103.821	104.774	117.930
(3)	144.402	149.240	152.091	152.334	172.630
(4)	145.425	153.605	157.116	157.844	183.180
(5)	113.071	120.651	121.663	124.762	143.230
PCB-1260	625.750	612.573	614.107	607.802	649.490
(2)	316.791	313.293	312.007	303.306	309.750
(3)	385.492	378.091	378.508	367.576	375.010
(4)	270.370	279.283	291.511	296.614	334.700
(5)	146.278	146.641	145.464	145.932	152.060

J.H. 8.4.08
HP 8/16/08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
PCB-1016	223.380	X 205.280	AVRG	256.225076	11.6
(2)	. 119.180	- 123.120	AVRG	109.535762	9.4
(3)	181.640	183.480	AVRG	162.259467	10.1
(4)	158.080	153.720	AVRG	158.424257	7.4
(5)	148.940	144.160	AVRG	130.925210	10.8
PCB-1260	X 672.760	696.560	AVRG	639.863152	5.3
(2)	305.000	300.200	AVRG	308.620924	1.9
(3)	372.100	360.040	AVRG	373.831057	2.2
(4)	353.880	370.680	AVRG	313.862467	12.4
(5)	148.500	130.920	AVRG	145.113514	4.6

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RT1: 002F0201 RT2: 003F0301 RT3: 004F0401
 RT4: 005F0501 RT5: 006F0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	6.050	6.049	6.050	6.050	6.050
(2)	5.180	5.177	5.180	5.180	5.180
(3)	5.520	5.524	5.520	5.520	5.520
(4)	6.230	6.230	6.230	6.230	6.230
(5)	6.330	6.329	6.330	6.330	6.330
PCB-1260	9.340	9.344	9.350	9.350	9.350
(2)	8.220	8.219	8.220	8.220	8.220
(3)	8.570	8.575	8.580	8.580	8.580
(4)	8.660	8.657	8.660	8.660	8.660
(5)	10.450	10.449	10.450	10.450	10.450

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RT6: 007F0701 RT7: 008F0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	6.050	6.050	6.050	6.019	6.079
(2)	5.180	5.180	5.180	5.147	5.207
(3)	5.520	5.520	5.521	5.494	5.554
(4)	6.230	6.230	6.230	6.200	6.260
(5)	6.330	6.330	6.330	6.299	6.359
PCB-1260	9.350	9.350	9.348	9.314	9.374
(2)	8.230	8.230	8.223	8.189	8.249
(3)	8.580	8.590	8.579	8.545	8.605
(4)	8.660	8.670	8.661	8.627	8.687
(5)	10.460	10.460	10.453	10.419	10.479

J.H. 8.4.08
8/8/08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION~~ COMPOUNDS

Instrument ID: ecd3.i Injection Date: 01-AUG-2008 16:52
 Lab File ID: 009F0901.D Init. Cal. Date(s): 22-SEP-2006 01-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 16:34
 Lab Sample ID: 1660 ICV 6974 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\080108A.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	MAX RRF	MIN %D	MAX %D
29 PCB-1016(1)	256	289	0.010	12.9	15.0	
(2)	110	100	0.010	-8.8	15.0	
(3)	162	153	0.010	-5.9	15.0	
(4)	++++	++++	0.010	++++	15.0	<-
(5)	158	156	0.010	-1.7	15.0	
(6)	131	124	0.010	-5.0	15.0	
35 PCB-1260(1)	640	566	0.010	-11.6	15.0	
(2)	++++	++++	0.010	++++	15.0	<-
(3)	309	315	0.010	2.0	15.0	
(4)	374	339	0.010	-9.4	15.0	
(5)	314	253	0.010	-19.4	15.0	<-
(6)	++++	++++	0.010	++++	15.0	<-
(7)	++++	++++	0.010	++++	15.0	<-
(8)	145	121	0.010	-16.5	15.0	<-

-11.0% ▽

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 08/26/08
O.H. 8.29.08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 0443

LAB FILE ID: RF5: 030F3001 RF1: 012F1201

** SINGLE POINT **

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
=====	=====	=====	=====	=====	=====
Toxaphene	* 300.240		AVRG	300.240000	0.0
(2)	✓ 134.460		AVRG	134.460000	0.0
(3)	161.670		AVRG	161.670000	0.0
(4)	120.340		AVRG	120.340000	0.0
(5)	124.940		AVRG	124.940000	0.0
=====	=====	=====	=====	=====	=====

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 08/01/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT #	RT #
	=====	=====	=====	=====	=====	=====
01		1660 2500 71	08/01/08	1442		
02		1660 1000 71	08/01/08	1500		
03		1660 750 710	08/01/08	1519		
04		1660 500 710	08/01/08	1538		
05		1660 100 710	08/01/08	1556		
06		1660 50 7103	08/01/08	1615		
07		1660 25 7103	08/01/08	1634		
08		1660 ICV 697	08/01/08	1652		
09		1254 1000 #7	08/01/08	1730		
10		1248 1000 #6	08/01/08	1749		
11		1242 1000 #7	08/01/08	1807		
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
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24						
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29						
30						
31						
32						

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 8.29.08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Bm 8 Sep 08

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 03:47
 Lab File ID: 027F2701.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	6266	6641	0.010	6.0	15.0
3 Alpha-BHC	8689	x 10042	0.010	15.6	15.0
23 Gamma-BHC	7991	8969	0.010	12.2	15.0
5 Beta-BHC	3594	3902	0.010	8.6	15.0
15 Delta-BHC	7423	8895	0.010	19.8	15.0
25 Heptachlor	7858	8374	0.010	6.6	15.0
2 Aldrin	7168	8354	0.010	16.5	15.0
26 Heptachlor Epoxide	6859	7953	0.010	16.0	15.0
24 Gamma-Chlordane	6599	8151	0.010	23.5	15.0
4 Alpha-Chlordane	6745	8040	0.010	19.2	15.0
17 Endosulfan I	6330	7522	0.010	18.8	15.0
13 4,4'-DDE	6200	7898	0.010	27.4	15.0
16 Dieldrin	6764	8436	0.010	24.7	15.0
20 Endrin	5054	6840	0.010	35.3	15.0
12 4,4'-DDD	5065	6600	0.010	30.3	15.0
18 Endosulfan II	6057	7436	0.010	22.8	15.0
21 Endrin Aldehyde	4694	5680	0.010	21.0	15.0
14 4,4'-DDT	5247	6839	0.010	30.3	15.0
19 Endosulfan Sulfate	5167	6689	0.010	29.5	15.0
27 Methoxychlor	2831	3317	0.010	17.1	15.0
22 Endrin Ketone	6384	8139	0.010	27.5	15.0
\$ 37 DCB	4593	5968	0.010	29.9	15.0

HIGH

HIGH

HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 04:06
 Lab File ID: 028F2801.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: 1660 1000 #7302 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	256	X 356	0.010	39.1	15.0
(2)	110	120	0.010	9.7	15.0
(3)	162	179	0.010	10.5	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	158	187	0.010	18.1	15.0
(6)	131	147	0.010	12.2	15.0
35 PCB-1260(1)	640	827	0.010	29.3	15.0
(2)	++++	++++	0.010	++++	15.0
(3)	309	451	0.010	46.2	15.0
(4)	374	472	0.010	26.3	15.0
(5)	314	367	0.010	17.1	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	145	207	0.010	42.8	15.0

Handwritten notes on the right side of the table:
 A bracket groups rows 1-6 with the note "17.9% (HIGH)".
 A bracket groups rows 7-8 with the note "32.3% (HIGH)".

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

J.H. 8.29.08
BR 8 Sep 08

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 09:58
 Lab File ID: 047F4701.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	6266	6509	0.010	3.9	15.0
3 Alpha-BHC	8689	9864	0.010	13.5	15.0
23 Gamma-BHC	7991	8894	0.010	11.3	15.0
5 Beta-BHC	3594	3842	0.010	6.9	15.0
15 Delta-BHC	7423	8693	0.010	17.1	15.0
25 Heptachlor	7858	8192	0.010	4.2	15.0
2 Aldrin	7168	8190	0.010	14.2	15.0
26 Heptachlor Epoxide	6859	7714	0.010	12.5	15.0
24 Gamma-Chlordane	6599	7920	0.010	20.0	15.0
4 Alpha-Chlordane	6745	7803	0.010	15.7	15.0
17 Endosulfan I	6330	7290	0.010	15.2	15.0
13 4,4'-DDE	6200	7630	0.010	23.1	15.0
16 Dieldrin	6764	8176	0.010	20.9	15.0
20 Endrin	5054	6687	0.010	32.3	15.0
12 4,4'-DDD	5065	6457	0.010	27.5	15.0
18 Endosulfan II	6057	7191	0.010	18.7	15.0
21 Endrin Aldehyde	4694	5483	0.010	16.8	15.0
14 4,4'-DDT	5247	6547	0.010	24.8	15.0
19 Endosulfan Sulfate	5167	6472	0.010	25.3	15.0
27 Methoxychlor	2831	3214	0.010	13.5	15.0
22 Endrin Ketone	6384	7839	0.010	22.8	15.0
\$ 37 DCB	4593	5559	0.010	21.0	15.0

HIGH

HIGH

HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 10:17
 Lab File ID: 048F4801.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: 1660 1000 #7302 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82F.m

COMPOUND	RRF	RF100	MIN RRF	MAX %D
29 PCB-1016(1)	256	370	0.010	44.5
(2)	110	128	0.010	16.5
(3)	162	188	0.010	15.9
(4)	****	****	0.010	****
(5)	158	199	0.010	25.6
(6)	131	157	0.010	19.6
35 PCB-1260(1)	640	873	0.010	36.4
(2)	****	****	0.010	****
(3)	309	477	0.010	54.6
(4)	374	501	0.010	33.9
(5)	314	387	0.010	23.5
(6)	****	****	0.010	****
(7)	****	****	0.010	****
(8)	145	217	0.010	49.8

} 24.5% D
 (HIGH)
 } 39.6% D
 (HIGH)

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Column: ZB MR-1 ID: 0.32 (mm) Cont. Calib. Date(s): 08/26/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 4.65 S2 : 10.85			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01					
02	AB/SUR 100#7	08/26/08	0347	4.65	10.85
03	1660 1000 #7	08/26/08	0406		
04	PS1BLK0820	08/26/08	0502	4.65	10.85
05	PS1BLK0820LC	08/26/08	0520	4.65	10.84
06	PS1BLK0820LC	08/26/08	0539	4.65	10.85
07	PS1BLK0820LC	08/26/08	0557	4.65	10.85
08	PS1BLK0820LC	08/26/08	0616	4.65	10.84
09	01SS01QT	08/26/08	0634	4.65	10.84
10	01SS01QTDUP	08/26/08	0653	4.65	10.84
11	01SS02QT	08/26/08	0711	4.65	10.84
12	01SS03QT	08/26/08	0730	4.65	10.84
13	01SS04QT	08/26/08	0749	4.65	10.84
14	01SS05QT	08/26/08	0807	4.65	10.84
15	01SS06QT	08/26/08	0826	4.65	10.85
16	AB/SUR 100#7	08/26/08	0958	4.65	10.85
17	1660 1000 #7	08/26/08	1017		
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPORT-009

GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 6-2-08

EPA Sample No. (FIELK): _____

Date Analyzed: _____

Lab Sample ID (FIELK): _____

Time Analyzed: _____

EPA Sample No. (PEM): _____

Date Analyzed: 6-2-08

Lab Sample ID (PEM): _____

Time Analyzed: 13:42

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NON AMOUNT (ng)	ID
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): 0

Endrin & breakdown (1): 6.2

Combined & breakdown (1): NA

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: EMPIRICAL LABS, LLC Contract: TETRA TECH
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: GULFPORT-009
 GC Column: ZB-MR2 ID: 0.32 (mm) Init. Calib. Date(s): 6-2-08

EPA Sample No. (PIBLK): _____ Date Analyzed: _____
 Lab Sample ID (PIBLK): _____ Time Analyzed: _____
 EPA Sample No. (PEM): _____ Date Analyzed: 8-26-08
 Lab Sample ID (PEM): _____ Time Analyzed: 03:29

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NON AMOUNT (ng)	#D
		FROM	TO			
alpha-BHC						
beta-BHC						
gamma-BHC (Lindane)						
Endrin						
4,4'-DDT						
Methoxychlor						

4,4'-DDT & breakdown (1): 0 Endrin & breakdown (1): 8.0
 Combined & breakdown (1): NA

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RF200: 011R1101 RF100: 012R1201 RF50: 013R1301
RF25: 014R1401 RF10: 015R1501

NOT USED

COMPOUND	RF200	RF100	RF50	RF25	RF10
=====	=====	=====	=====	=====	=====
Aldrin	14287.935	14732.780	15087.360	31195.520	16959.600
Alpha-BHC	16895.400	17320.140	17727.720	36104.720	19401.000
Alpha-Chlordane	12720.410	13082.430	13516.500	27552.550	15626.700
Beta-BHC	6976.440	7109.940	7311.440	15038.200	8537.300
4,4'-DDD	10969.230	10775.690	10696.240	22022.160	11517.800
4,4'-DDE	12507.775	12610.900	12700.260	26136.560	14051.800
4,4'-DDT	11511.355	11290.950	11193.940	23197.040	12578.400
Delta-BHC	14735.930	14919.940	15080.860	31196.880	16574.000
Dieldrin	13723.380	14159.330	14512.820	29656.800	16362.400
Endosulfan I	12259.740	12747.280	13185.560	27092.080	15283.300
Endosulfan II	11504.120	11766.350	11923.320	24634.640	13831.800
Endosulfan Sulfate	10344.760	10380.400	10435.680	21746.480	12288.600
Endrin	11084.620	10818.100	11267.980	23095.720	12813.600
Endrin Aldehyde	9957.060	10230.840	10182.660	21100.400	11817.700
Endrin Ketone	12609.905	12954.280	13454.220	28015.160	16318.300
Gamma-BHC	15246.010	15635.250	16071.120	32842.520	18034.500
Gamma-Chlordane	12628.060	12920.730	13252.300	27256.920	15158.000
Heptachlor	14285.495	14892.660	15411.300	31724.480	17966.200
Heptachlor Epoxide	12353.855	12911.620	13500.900	27712.720	16189.600
Methoxychlor	5617.890	5405.350	5612.520	11558.320	6639.400
=====	=====	=====	=====	=====	=====
TCMX	12172.635	12538.640	12950.440	26368.560	14515.100
DCB	8485.680	8127.940	8456.260	17793.040	10838.300

*J.H. 6.6.08
149 6/10/08*

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RF5: 016R1601 RF1: 017R1701

COMPOUND	RF5	RF1
=====	=====	=====
Aldrin	16013.600	18810.000
Alpha-BHC	18160.600	19437.000
Alpha-Chlordane	14647.800	16279.000
Beta-BHC	8604.800	9393.000
4,4'-DDD	9728.800	10541.000
4,4'-DDE	11817.200	13213.000
4,4'-DDT	11467.000	11566.000
Delta-BHC	16013.400	16446.000
Dieldrin	14497.000	16909.000
Endosulfan I	13805.400	17171.000
Endosulfan II	12859.800	15737.000
Endosulfan Sulfate	11729.600	13249.000
Endrin	11933.800	13090.000
Endrin Aldehyde	11105.200	14053.000
Endrin Ketone	16069.200	21323.000
Gamma-BHC	17343.600	18900.000
Gamma-Chlordane	14318.400	14880.000
Heptachlor	17951.400	20151.000
Heptachlor Epoxide	15522.400	17074.000
Methoxychlor	6802.600	6565.000
=====	=====	=====
TCMX	14381.800	16750.000
DCB	9435.200	12482.000

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
=====	=====	=====	=====	=====
Aldrin	AVRG		15981.8792	10.5
Alpha-BHC	AVRG		18156.9767	5.9
Alpha-Chlordane	AVRG		14312.1400	10.1
Beta-BHC	AVRG		7988.82000	12.4
4,4'-DDD	AVRG		10704.7933	5.5
4,4'-DDE	AVRG		12816.8225	5.9
4,4'-DDT	AVRG		11601.2742	4.3
Delta-BHC	AVRG		15628.3550	5.2
Dieldrin	AVRG		15027.3217	8.6
Endosulfan I	AVRG		14075.3800	13.1
Endosulfan II	AVRG		12937.0650	12.5
Endosulfan Sulfate	AVRG		11404.6733	10.7
Endrin	AVRG		11834.6833	8.0
Endrin Aldehyde	AVRG		11224.4100	13.8
Endrin Ketone	LINR	0.00000000	12730.3257	0.999
Gamma-BHC	AVRG		16871.7467	8.6
Gamma-Chlordane	AVRG		13859.5817	7.7
Heptachlor	AVRG		16776.3425	13.5
Heptachlor Epoxide	AVRG		14592.0625	13.2
Methoxychlor	AVRG		6107.12667	10.2
=====	=====	=====	=====	=====
TCMX	AVRG		13884.7692	12.2
DCB	LINR	0.00000000	8425.03830	0.999

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RT1: 011R1101 RT2: 012R1201 RT3: 013R1301
RT4: 014R1401 RT5: 015R1501

COMPOUND	RT1	RT2	RT3	RT4	RT5
=====	=====	=====	=====	=====	=====
Aldrin	5.210	5.209	5.210	5.210	5.210
Alpha-BHC	4.370	4.366	4.360	4.370	4.360
Alpha-Chlordane	5.980	5.979	5.980	5.980	5.980
Beta-BHC	4.900	4.899	4.900	4.900	4.900
4,4'-DDD	6.750	6.746	6.750	6.750	6.750
4,4'-DDE	6.160	6.159	6.160	6.160	6.160
4,4'-DDT	7.020	7.026	7.030	7.030	7.030
Delta-BHC	5.100	5.101	5.100	5.100	5.100
Dieldrin	6.300	6.301	6.300	6.300	6.300
Endosulfan I	6.030	6.031	6.030	6.030	6.030
Endosulfan II	6.910	6.907	6.910	6.910	6.910
Endosulfan Sulfate	7.360	7.362	7.360	7.360	7.360
Endrin	6.590	6.587	6.590	6.590	6.590
Endrin Aldehyde	7.100	7.104	7.100	7.110	7.100
Endrin Ketone	7.950	7.946	7.950	7.950	7.950
Gamma-BHC	4.640	4.641	4.640	4.640	4.640
Gamma-Chlordane	5.920	5.917	5.920	5.920	5.920
Heptachlor	4.950	4.954	4.950	4.950	4.950
Heptachlor Epoxide	5.670	5.666	5.670	5.670	5.660
Methoxychlor	7.690	7.691	7.690	7.690	7.690
=====	=====	=====	=====	=====	=====
TCMX	3.950	3.954	3.950	3.950	3.950
DCB	9.290	9.292	9.290	9.290	9.290

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

LAB FILE ID: RT6: 016R1601 RT7: 017R1701

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
Aldrin	5.210	5.210	5.210	5.179	5.239
Alpha-BHC	4.360	4.360	4.364	4.336	4.396
Alpha-Chlordane	5.980	5.980	5.980	5.949	6.009
Beta-BHC	4.900	4.900	4.900	4.869	4.929
4,4'-DDD	6.750	6.760	6.751	6.716	6.776
4,4'-DDE	6.160	6.170	6.161	6.129	6.189
4,4'-DDT	7.030	7.040	7.029	6.996	7.056
Delta-BHC	5.100	5.100	5.100	5.071	5.131
Dieldrin	6.300	6.300	6.300	6.271	6.331
Endosulfan I	6.030	6.030	6.030	6.001	6.061
Endosulfan II	6.910	6.910	6.910	6.877	6.937
Endosulfan Sulfate	7.360	7.370	7.362	7.332	7.392
Endrin	6.590	6.590	6.590	6.557	6.617
Endrin Aldehyde	7.110	7.110	7.105	7.074	7.134
Endrin Ketone	7.950	7.950	7.949	7.916	7.976
Gamma-BHC	4.640	4.640	4.640	4.611	4.671
Gamma-Chlordane	5.920	5.920	5.920	5.887	5.947
Heptachlor	4.950	4.950	4.951	4.924	4.984
Heptachlor Epoxide	5.660	5.670	5.667	5.636	5.696
Methoxychlor	7.690	7.710	7.693	7.661	7.721
=====	=====	=====	=====	=====	=====
TCMX	3.950	3.950	3.951	3.924	3.984
DCB	9.290	9.300	9.292	9.262	9.322

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

J.H. 6-6-08
14 6/12/08

Instrument ID: ecd3.i Injection Date: 02-JUN-2008 18:42
 Lab File ID: 018R1801.D Init. Cal. Date(s): 22-SEP-2006 02-JUN-2008
 Analysis Type: SOIL Init. Cal. Times: 14:42 18:24
 Lab Sample ID: AB ICV #6982 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\060208.b\8081_82R.m

COMPOUND	RRF	RF100	MIN	MAX
			RRF	%D
3 Alpha-BHC	18157	X 17229	0.010	-5.1 | 15.0
23 Gamma-BHC	16872	✓ 15887	0.010	-5.8 | 15.0
5 Beta-BHC	7989	7272	0.010	-9.0 | 15.0
25 Heptachlor	16776	15181	0.010	-9.5 | 15.0
15 Delta-BHC	15628	15978	0.010	2.2 | 15.0
2 Aldrin	15982	15068	0.010	-5.7 | 15.0
26 Heptachlor Epoxide	14592	13339	0.010	-8.6 | 15.0
24 Gamma-Chlordane	13860	13797	0.010	-0.5 | 15.0
4 Alpha-Chlordane	14312	13503	0.010	-5.7 | 15.0
17 Endosulfan I	14075	13220	0.010	-6.1 | 15.0
13 4,4'-DDE	12817	13081	0.010	2.1 | 15.0
16 Dieldrin	15027	14511	0.010	-3.4 | 15.0
20 Endrin	11835	11193	0.010	-5.4 | 15.0
12 4,4'-DDD	10705	11273	0.010	5.3 | 15.0
18 Endosulfan II	12937	12152	0.010	-6.1 | 15.0
14 4,4'-DDT	11601	11723	0.010	1.1 | 15.0
21 Endrin Aldehyde	11224	10343	0.010	-7.9 | 15.0
19 Endosulfan Sulfate	11405	10784	0.010	-5.4 | 15.0
27 Methoxychlor	6107	5964	0.010	-2.3 | 15.0
22 Endrin Ketone	100	110	0.010	-10.2 | 15.0

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 06/02/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 3.95 S2 : 9.29			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
=====					
01	AB/SUR200 #6	06/02/08	1631	3.95	9.29
02	AB/SUR100 #6	06/02/08	1650	3.95	9.29
03	AB/SUR 50 #6	06/02/08	1708	3.95	9.29
04	AB/SUR 25 #6	06/02/08	1727	3.95	9.29
05	AB/SUR 10 #6	06/02/08	1746	3.95	9.29
06	AB/SUR 5 #68	06/02/08	1805	3.95	9.29
07	AB/SUR 1 #68	06/02/08	1824	3.95	9.30
08	AB ICV #6982	06/02/08	1842		
09					
10					
11					
12					
13					
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25					
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28					
29					
30					
31					
32					

QC LIMITS
 S1 = TCMX (+/- 0.03 MINUTES)
 S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
 * Values outside of QC limits.

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RF200: 002R0201 RF100: 003R0301 RF50: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF100	RF50	RF25	RF10
PCB-1016	601.441	X 662.630	653.396	X 680.240	752.810
(2)	- 209.945	- 232.288	242.139	246.406	304.650
(3)	323.696	375.858	388.961	393.392	451.120
(4)	308.552	331.209	344.783	346.480	402.820
(5)	315.444	348.265	360.655	356.616	422.780
PCB-1260	X 1226.989	1310.478	X 1342.859	1342.390	X 1483.230
(2)	622.042	680.768	700.149	712.842	839.210
(3)	760.148	821.735	843.285	841.588	969.300
(4)	302.556	317.019	321.547	315.716	360.180
(5)	309.763	323.578	325.931	330.312	370.220

J.H. 8.4.08
148 8/16/08

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R^2
PCB-1016	X 789.880	817.200	AVRG	708.228114	11.2
(2)	- 330.080	- 313.800	AVRG	268.472552	17.4
(3)	472.440	511.600	AVRG	416.723962	15.5
(4)	431.960	449.920	AVRG	373.674867	14.5
(5)	455.420	490.520	AVRG	392.814238	16.3
PCB-1260	1591.040	X 1736.880	AVRG	1433.40941	12.5
(2)	884.220	969.880	AVRG	772.730248	16.3
(3)	1031.200	1067.760	AVRG	905.002276	12.9
(4)	368.640	396.560	AVRG	340.316810	10.2
(5)	380.320	410.800	AVRG	350.131981	10.6

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	4.730	4.734	4.730	4.730	4.730
(2)	4.090	4.096	4.100	4.100	4.100
(3)	4.510	4.516	4.510	4.520	4.520
(4)	4.880	4.887	4.890	4.890	4.890
(5)	4.970	4.972	4.970	4.970	4.970
PCB-1260	7.370	7.371	7.370	7.370	7.370
(2)	6.170	6.176	6.170	6.180	6.180
(3)	6.390	6.389	6.390	6.390	6.390
(4)	7.700	7.702	7.700	7.700	7.700
(5)	8.370	8.374	8.370	8.370	8.370

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Instrument ID: ECD3 Calibration Date(s): 08/01/08 08/01/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1442 1634

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	4.740	4.740	4.733	4.704	4.764
(2)	4.100	4.100	4.098	4.066	4.126
(3)	4.520	4.520	4.516	4.486	4.546
(4)	4.890	4.890	4.888	4.857	4.917
(5)	4.970	4.970	4.970	4.942	5.002
PCB-1260	7.370	7.380	7.372	7.341	7.401
(2)	6.180	6.180	6.176	6.146	6.206
(3)	6.390	6.400	6.391	6.359	6.419
(4)	7.700	7.700	7.700	7.672	7.732
(5)	8.380	8.380	8.373	8.344	8.404

J.H. 8.4.08
10/8/6/08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd3.i Injection Date: 01-AUG-2008 16:52
 Lab File ID: 009R0901.D Init. Cal. Date(s): 22-SEP-2006 01-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 16:34
 Lab Sample ID: 1660 ICV 6974 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\080108A.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	708	671	0.010	-5.3	15.0
(2)	268	232	0.010	-13.7	15.0
(3)	417	385	0.010	-7.5	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	374	342	0.010	-8.6	15.0
(6)	393	364	0.010	-7.3	15.0
35 PCB-1260(1)	1433	1235	0.010	-13.9	15.0
(2)	773	689	0.010	-10.9	15.0
(3)	905	834	0.010	-7.9	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	++++	++++	0.010	++++	15.0 <-
(6)	++++	++++	0.010	++++	15.0 <-
(7)	340	260	0.010	-23.5	15.0 <-
(8)	350	✓ 269	0.010	-23.1	15.0 <-

-15.8% Δ
(Low)

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA22807

Instrument ID: ECD3 Calibration Date(s): ~~12/02/06~~ 08/26/08
OR 8.29.08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1932~~ 0443

LAB FILE ID: RF5: 030R3001 RF1: 012R1201

~~—~~ *SINGLE POINT* ~~—~~ *

COMPOUND	RF5	RF1	CURVE	COEFFICIENT A1	%RSD OR R ²
----- Toxaphene	765.300	-----	AVRG	765.300000	0.0
(2) -----	371.590	-----	AVRG	371.590000	0.0
(3) -----	589.130	-----	AVRG	589.130000	0.0
(4) -----	481.260	-----	AVRG	481.260000	0.0
(5) -----	* 257.960	-----	AVRG	257.960000	0.0

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA17545

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 08/01/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION							
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	RT	#	RT	#
01	1660 2500 71	08/01/08	1442				
02	1660 1000 71	08/01/08	1500				
03	1660 750 710	08/01/08	1519				
04	1660 500 710	08/01/08	1538				
05	1660 100 710	08/01/08	1556				
06	1660 50 7103	08/01/08	1615				
07	1660 25 7103	08/01/08	1634				
08	1660 ICV 697	08/01/08	1652				
09	1254 1000 #7	08/01/08	1730				
10	1248 1000 #6	08/01/08	1749				
11	1242 1000 #7	08/01/08	1807				
12							
13							
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32							

QC LIMITS

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

J.H. 8.29.08
BM 8 Sep 08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 03:47
 Lab File ID: 027R2701.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	13885	12111	0.010	-12.8	15.0
3 Alpha-BHC	18157	X 16565	0.010	-8.8	15.0
23 Gamma-BHC	16872	15240	0.010	-9.7	15.0
5 Beta-BHC	7989	7042	0.010	-11.9	15.0
25 Heptachlor	16776	15059	0.010	-10.2	15.0
15 Delta-BHC	15628	15025	0.010	-3.9	15.0
2 Aldrin	15982	14416	0.010	-9.8	15.0
26 Heptachlor Epoxide	14592	13411	0.010	-8.1	15.0
24 Gamma-Chlordane	13860	13657	0.010	-1.5	15.0
4 Alpha-Chlordane	14312	13431	0.010	-6.2	15.0
17 Endosulfan I	14075	12594	0.010	-10.5	15.0
13 4,4'-DDE	12817	13191	0.010	2.9	15.0
16 Dieldrin	15027	14049	0.010	-6.5	15.0
20 Endrin	11835	12028	0.010	1.6	15.0
12 4,4'-DDD	10705	11904	0.010	11.2	15.0
18 Endosulfan II	12937	12258	0.010	-5.2	15.0
14 4,4'-DDT	11601	12651	0.010	9.0	15.0
21 Endrin Aldehyde	11224	10362	0.010	-7.7	15.0
19 Endosulfan Sulfate	11405	11643	0.010	2.1	15.0
27 Methoxychlor	6107	6692	0.010	9.6	15.0
22 Endrin Ketone	100	116	0.010	-16.0	15.0
\$ 37 DCB	100	125	0.010	-24.7	15.0

> HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 04:06
 Lab File ID: 028R2801.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: 1660 1000 #7302 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	708	676	0.010	-4.5	15.0
(2)	268	239	0.010	-10.8	15.0
(3)	417	371	0.010	-11.0	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	374	359	0.010	-3.8	15.0
(6)	393	358	0.010	-9.0	15.0
35 PCB-1260(1)	1433	1596	0.010	11.4	15.0
(2)	773	745	0.010	-3.6	15.0
(3)	905	914	0.010	1.0	15.0
(4)	++++	++++	0.010	++++	15.0
(5)	++++	++++	0.010	++++	15.0
(6)	++++	++++	0.010	++++	15.0
(7)	340	358	0.010	5.2	15.0
(8)	350	392	0.010	12.1	15.0

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 09:58
 Lab File ID: 047R4701.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: AB/Sur 100#7180H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
\$ 36 TCMX	13885	11937	0.010	-14.0	15.0
3 Alpha-BHC	18157	X 16301	0.010	-10.2	15.0
23 Gamma-BHC	16872	15000	0.010	-11.1	15.0
5 Beta-BHC	7989	6986	0.010	-12.6	15.0
25 Heptachlor	16776	14940	0.010	-10.9	15.0
15 Delta-BHC	15628	14999	0.010	-4.0	15.0
2 Aldrin	15982	14224	0.010	-11.0	15.0
26 Heptachlor Epoxide	14592	13185	0.010	-9.6	15.0
24 Gamma-Chlordane	13860	13451	0.010	-2.9	15.0
4 Alpha-Chlordane	14312	13201	0.010	-7.8	15.0
17 Endosulfan I	14075	12432	0.010	-11.7	15.0
13 4,4'-DDE	12817	12973	0.010	1.2	15.0
16 Dieldrin	15027	13740	0.010	-8.6	15.0
20 Endrin	11835	11820	0.010	-0.1	15.0
12 4,4'-DDD	10705	11684	0.010	9.1	15.0
18 Endosulfan II	12937	12203	0.010	-5.7	15.0
14 4,4'-DDT	11601	12303	0.010	6.1	15.0
21 Endrin Aldehyde	11224	10191	0.010	-9.2	15.0
19 Endosulfan Sulfate	11405	11388	0.010	-0.1	15.0
27 Methoxychlor	6107	6545	0.010	7.2	15.0
22 Endrin Ketone	100	113	0.010	-12.7	15.0
\$ 37 DCB	100	117	0.010	-17.3	15.0

<- HIGH

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd3.i Injection Date: 26-AUG-2008 10:17
 Lab File ID: 048R4801.D Init. Cal. Date(s): 22-SEP-2006 26-AUG-2008
 Analysis Type: Init. Cal. Times: 14:42 04:43
 Lab Sample ID: 1660 1000 #7302 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
29 PCB-1016(1)	708	698	0.010	-1.4	15.0
(2)	268	253	0.010	-5.6	15.0
(3)	417	391	0.010	-6.2	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	374	380	0.010	1.8	15.0
(6)	393	390	0.010	-0.7	15.0
35 PCB-1260(1)	1433	1672	0.010	16.7	15.0 <-
(2)	773	787	0.010	1.8	15.0
(3)	905	962	0.010	6.4	15.0
(4)	++++	++++	0.010	++++	15.0 <-
(5)	++++	++++	0.010	++++	15.0 <-
(6)	++++	++++	0.010	++++	15.0 <-
(7)	340	372	0.010	9.4	15.0
(8)	350	X 406	0.010	15.9	15.0 <-

} 10.0% D

FORM 8
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 08/26/08

Instrument ID: ECD3

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION					
		S1 : 3.68 S2 : 8.82			
CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	S2 RT #
01					
02	AB/SUR 100#7	08/26/08	0347	3.68	8.82
03	1660 1000 #7	08/26/08	0406		
04	PS1BLK0820	08/26/08	0502	3.68	8.82
05	PS1BLK0820LC	08/26/08	0520	3.68	8.82
06	PS1BLK0820LC	08/26/08	0539	3.68	8.82
07	PS1BLK0820LC	08/26/08	0557	3.68	8.82
08	PS1BLK0820LC	08/26/08	0616	3.68	8.82
09	01SS01QT	08/26/08	0634	3.68	8.82
10	01SS01QTDUP	08/26/08	0653	3.68	8.82
11	01SS02QT	08/26/08	0711	3.68	8.82
12	01SS03QT	08/26/08	0730	3.68	8.82
13	01SS04QT	08/26/08	0749	3.68	8.82
14	01SS05QT	08/26/08	0807	3.68	8.82
15	01SS06QT	08/26/08	0826	3.68	8.82
16	AB/SUR 100#7	08/26/08	0958	3.68	8.82
17	1660 1000 #7	08/26/08	1017		
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-04 Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Beta-BHC	1	5.69	5.67	5.73	0.1564	
	2	4.56	4.55	4.61	0.1569	0.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-05 Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDE	1	7.42	7.40	7.46	0.5796	
	2	5.77	5.74	5.80	0.5842	0.8
4,4'-DDT	1	8.45	8.42	8.48	1.379	
	2	6.60	6.57	6.63	1.516	9.5
Dieldrin	1	7.62	7.59	7.65	0.2218	
	2	5.91	5.86	5.92	0.9456	124.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS05QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-06 Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Alpha-BHC	1	5.14	5.08	5.14	0.2565	
	2	4.05	4.04	4.10	0.2056	22.0
Beta-BHC	1	5.69	5.67	5.73	0.1751	
	2	4.56	4.55	4.61	0.2226	23.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS06QT

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-07 Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Endrin Aldehyde	1	8.41	8.35	8.41	0.2226	
	2	6.66	6.64	6.70	0.3139	34.0
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCS

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCS Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	6.35	6.32	6.38	29.35	
	2	4.86	4.83	4.89	23.94	20.3
Alpha-BHC	1	5.11	5.08	5.14	28.56	
	2	4.08	4.04	4.10	23.72	18.5
Alpha-Chlordane	1	7.22	7.18	7.24	29.65	
	2	5.59	5.56	5.62	23.73	22.2
Beta-BHC	1	5.70	5.67	5.73	27.10	
	2	4.59	4.55	4.61	22.43	18.8
4,4'-DDD	1	8.08	8.05	8.11	32.13	
	2	6.33	6.30	6.36	27.46	15.7
4,4'-DDE	1	7.43	7.40	7.46	30.76	
	2	5.77	5.74	5.80	26.14	16.2
4,4'-DDT	1	8.45	8.42	8.48	31.90	
	2	6.60	6.57	6.63	26.43	18.8
Delta-BHC	1	5.95	5.92	5.98	29.71	
	2	4.77	4.74	4.80	25.02	17.1

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCS

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCS Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	7.62	7.59	7.65	31.29	
	2	5.89	5.86	5.92	24.87	22.9
Endosulfan I	1	7.29	7.26	7.32	30.18	
	2	5.64	5.60	5.66	23.97	22.9
Endosulfan II	1	8.21	8.18	8.24	30.45	
	2	6.48	6.45	6.51	25.15	19.1
Endosulfan Sulfate	1	8.67	8.64	8.70	32.40	
	2	6.92	6.89	6.95	26.17	21.3
Endrin	1	7.91	7.87	7.93	32.95	
	2	6.17	6.14	6.20	25.18	26.7
Endrin Aldehyde	1	8.38	8.35	8.41	27.81	
	2	6.67	6.64	6.70	23.83	15.4
Endrin Ketone	1	9.29	9.26	9.32	32.70	
	2	7.48	7.45	7.51	30.62	6.6
Gamma-BHC	1	5.45	5.42	5.48	28.20	
	2	4.34	4.30	4.36	23.59	17.8

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCS

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCS Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Gamma-Chlordane	1	7.14	7.10	7.16	31.23	
	2	5.53	5.50	5.56	25.20	21.4
Heptachlor	1	5.99	5.96	6.02	27.27	
	2	4.62	4.59	4.65	23.52	14.8
Heptachlor Epoxide	1	6.85	6.81	6.87	28.78	
	2	5.29	5.26	5.32	23.45	20.4
Methoxychlor	1	9.07	9.04	9.10	30.71	
	2	7.25	7.22	7.28	28.32	8.1
TCMX	1	4.65	4.62	4.68	39.90	
	2	3.68	3.65	3.71	33.67	16.9
DCB	1	10.84	10.82	10.88	49.08	
	2	8.82	8.79	8.85	47.58	3.1
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCSD

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCSD Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aldrin	1	6.35	6.32	6.38	31.14	
	2	4.86	4.83	4.89	24.84	22.5
Alpha-BHC	1	5.11	5.08	5.14	29.93	
	2	4.08	4.04	4.10	24.19	21.2
Alpha-Chlordane	1	7.22	7.18	7.24	32.16	
	2	5.59	5.56	5.62	25.55	22.9
Beta-BHC	1	5.70	5.67	5.73	29.22	
	2	4.59	4.55	4.61	23.53	21.6
4,4'-DDD	1	8.08	8.05	8.11	35.27	
	2	6.33	6.30	6.36	30.10	15.8
4,4'-DDE	1	7.43	7.40	7.46	33.42	
	2	5.77	5.74	5.80	28.33	16.5
4,4'-DDT	1	8.45	8.42	8.48	35.38	
	2	6.60	6.57	6.63	29.50	18.1
Delta-BHC	1	5.95	5.92	5.98	32.70	
	2	4.77	4.74	4.80	26.64	20.4

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCSD

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCSD Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Dieldrin	1	7.62	7.59	7.65	34.00	
	2	5.89	5.86	5.92	26.74	23.9
Endosulfan I	1	7.29	7.26	7.32	32.65	
	2	5.64	5.60	5.66	25.69	23.9
Endosulfan II	1	8.21	8.18	8.24	33.20	
	2	6.48	6.45	6.51	27.19	19.9
Endosulfan Sulfate	1	8.67	8.64	8.70	34.78	
	2	6.92	6.89	6.95	28.30	20.5
Endrin	1	7.90	7.87	7.93	37.27	
	2	6.17	6.14	6.20	28.20	27.7
Endrin Aldehyde	1	8.38	8.35	8.41	30.42	
	2	6.67	6.64	6.70	25.46	17.8
Endrin Ketone	1	9.29	9.26	9.32	34.89	
	2	7.48	7.45	7.51	32.44	7.3
Gamma-BHC	1	5.45	5.42	5.48	30.05	
	2	4.34	4.30	4.36	24.37	20.9

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCSD

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCSD Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Gamma-Chlordane	1	7.14	7.10	7.16	33.75	
	2	5.53	5.50	5.56	27.16	21.6
Heptachlor	1	5.99	5.96	6.02	29.07	
	2	4.62	4.59	4.65	24.31	17.8
Heptachlor Epoxide	1	6.85	6.81	6.87	30.90	
	2	5.29	5.26	5.32	24.94	21.3
Methoxychlor	1	9.07	9.04	9.10	33.41	
	2	7.26	7.22	7.28	30.99	7.5
TCMX	1	4.65	4.62	4.68	35.95	
	2	3.68	3.65	3.71	29.59	19.4
DCB	1	10.85	10.82	10.88	48.38	
	2	8.82	8.79	8.85	46.95	3.0
	1					
	2					
	1					
	2					

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCS

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCS Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32(mm) Column(2): ZB MR-2 ID: 0.32(mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
PCB-1016	1	5.91	5.87	5.93	151.8	131.7	
	2	5.05	5.02	5.08	122.3		
	3	5.39	5.36	5.42	126.7		
	4	6.08	6.05	6.11	128.5		
	5	6.18	6.15	6.21	129.3		
COLUMN 1	1	4.63	4.60	4.66	108.8	106.9	20.8
	2	4.01	3.98	4.04	100.2		
	3	4.42	4.39	4.45	107.3		
	4	4.78	4.75	4.81	109.4		
	5	4.87	4.84	4.90	108.9		
PCB-1260	1	9.17	9.14	9.20	116.0	126.2	
	2	8.05	8.02	8.08	149.8		
	3	8.40	8.37	8.43	138.6		
	4	8.49	8.45	8.51	111.5		
	5	10.27	10.23	10.29	115.1		
COLUMN 1	1	7.23	7.20	7.26	107.4	100.5	22.7
	2	6.05	6.02	6.08	108.4		
	3	6.26	6.23	6.29	110.7		
	4	7.56	7.53	7.59	85.50		
	5	8.23	8.20	8.26	90.42		
COLUMN 2	1						
	2						
	3						
	4						
	5						
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM 10
 PESTICIDE IDENTIFICATION SUMMARY
 FOR MULTICOMPONENT ANALYTES

CLIENT SAMPLE NO.

PS1BLK0820LCSD

Lab Name: EMPIRICAL LABS Contract: GULFPORT-009

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: PS1BLK0820LCSD Date(s) Analyzed: 08/26/08 08/26/08

Instrument ID (1): ECD3 Instrument ID (2): ECD3

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW		CONCENTRATION	MEAN CONCENTRATION	%D
			FROM	TO			
PCB-1016	1	5.90	5.87	5.93	169.9	146.6	
	2	5.05	5.02	5.08	135.9		
	3	5.39	5.36	5.42	140.8		
	4	6.08	6.05	6.11	143.3		
	5	6.18	6.15	6.21	143.2		
COLUMN 1	1	4.63	4.60	4.66	119.2	116.3	23.0
	2	4.01	3.98	4.04	107.2		
	3	4.42	4.39	4.45	116.6		
	4	4.78	4.75	4.81	118.8		
	5	4.87	4.84	4.90	119.9		
COLUMN 2	1	9.17	9.14	9.20	136.2	147.9	
	2	8.05	8.02	8.08	173.9		
	3	8.40	8.37	8.43	163.0		
	4	8.48	8.45	8.51	128.2		
	5	10.27	10.23	10.29	138.4		
PCB-1260	1	7.23	7.20	7.26	125.6	117.4	23.0
	2	6.05	6.02	6.08	124.1		
	3	6.26	6.23	6.29	127.4		
	4	7.56	7.53	7.59	99.67		
	5	8.23	8.20	8.26	110.3		
COLUMN 1	1						
	2						
	3						
	4						
	5						
COLUMN 2	1						
	2						
	3						
	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

Sample 015504 QT

Data File: \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\040F4001.D
 Report Date: 03-Sep-2008 11:57

Page 1

J.H. 9.3.08
 BM 8 Sep 08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\040F4001.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\040R4001.D
 Inj Date : 26-AUG-2008 07:49
 Sample Info: 0808142-05
 Misc Info : Gulfport-009;15.0;5;082008PS1;ug/Kg;;tcl.sub;20-Aug-2008
 Cal Date : 02-SEP-2008 13:02
 Operator : JH
 Inst ID : ecd3.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd3.i\082508.b\8081_82R.m
 Sub List #1 : tcl.sub
 Sub List #2 : tcl.sub
 Col #1 Phase : ZB MR-1
 Col #2 Phase : ZB MR-2

Concentration Formula: $Amt * DF * Uf * Vt * 2 / (Amt * Vi * (Solids/100))$

Name	X Value	Description
DF	1.000	Dilution Factor
Uf	1.000	Unit Correction Factor
Vt	10.000	Final Volume
Amt	30.000	Sample Amount
Vi	2.000	Injection Volume
Solids	85.800	Percent Solids

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/Kg)	Conc#2 (ug/Kg)	Target Range	Ratio
Beta-BHC	5.691	0.000	1452	0	0.1570	0.0000	NC	100.00 (a)
4,4'-DDE	7.424	5.768	9250	19274	0.5796	0.5842		100.00 (a)
4,4'-DDT	8.446	6.599	18624	45261	1.379	1.516		100.00
Dieldrin	7.619	5.911	3861	36578	0.2218	0.9456	(MATRIX)	100.00 (a)
Endrin Ketone	0.000	7.488	0	8875	0.0000	0.2708		
Gamma-BHC	0.000	4.354	0	7854	0.0000	0.1808		
Gamma-Chlordane	0.000	5.559	0	9489	0.0000	0.2660		
TCMX	4.651	3.679	280509	548010	17.39	15.33		100.00
DCB	10.844	8.818	253486	450971	21.44	20.80		100.00

$$\text{Concentration (column 2)} = \frac{A_x \times DF \times Uf \times Vt \times 2}{Amt \times Vi \times \% \text{ Solids} \times RRF} = \frac{45261 \times 1 \times 1 \times 10 \times 2}{30 \times 2 \times 0.858 \times 11601.2742} = 1.515 \text{ ug/kg}$$

A_x = Area of Analyte
 RRF = Initial Calibration
 relative response factor

FORM 6
PESTA ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA89615

Instrument ID: ECD3 Calibration Date(s): 06/02/08 06/02/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): 1631 1824

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
=====	=====	=====	=====	=====
Aldrin	AVRG		15981.8792	10.5
Alpha-BHC	AVRG		18156.9767	5.9
Alpha-Chlordane	AVRG		14312.1400	10.1
Beta-BHC	AVRG		7988.82000	12.4
4,4'-DDD	AVRG		10704.7933	5.5
4,4'-DDE	AVRG		12816.8225	5.9
4,4'-DDT	AVRG		11601.2742	4.3
Delta-BHC	AVRG		15628.3550	5.2
Dieldrin	AVRG		15027.3217	8.6
Endosulfan I	AVRG		14075.3800	13.1
Endosulfan II	AVRG		12937.0650	12.5
Endosulfan Sulfate	AVRG		11404.6733	10.7
Endrin	AVRG		11834.6833	8.0
Endrin Aldehyde	AVRG		11224.4100	13.8
Endrin Ketone	LINR	0.00000000	12730.3257	0.999
Gamma-BHC	AVRG		16871.7467	8.6
Gamma-Chlordane	AVRG		13859.5817	7.7
Heptachlor	AVRG		16776.3425	13.5
Heptachlor Epoxide	AVRG		14592.0625	13.2
Methoxychlor	AVRG		6107.12667	10.2
=====	=====	=====	=====	=====
TCMX	AVRG		13884.7692	12.2
DCB	LINR	0.00000000	8425.03830	0.999



Empirical Laboratories

Empirical Laboratories, LLC

LABORATORY SAMPLE CUSTODY FORM

SOIL REFRIGERATOR

(all soils are assumed to be USDA regulated)

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/ Comments	Task Performed
8101 (1-2)	8-14-08 2:00 PM KH	8-14-08 2:30 PM KH		VOA
7196-07				
8134-01-02	From login 8/14/08 KH	8/14/08 2:30 KH		TCLP
8136-01-15	From login 8/14/08 KH	8/14/08 4:13 KH		Metals/Hg
8026-33-38	8/15/08 09:05	8/15/08 12:16		metals/Hg
8042-01-16				
8044-01-10				
8045-01-21				
8130-01-15	8/15/08 9:11 KH	8/15/08 10:20 KH		% moist
8127-01				
808141-01-06	8/15/08 11:00 KH	8/15/08 11:30 KH		% moist
8142-01-07	8/15/08 12:20	14:23 8/15/08		Metals/Hg
8074-01-20				
8127-01	12:55 8/15/08 KH	12:58 8/15/08 KH		Hg
8147-1-7	taken from login	2:41 AF 8/15/08		BNA PIPES
8145-1-2				Exp
8143-01-207	11 8:30 8/18/08	11 12:00 8/18/08		Exp
7192-01	8/19/08 09:38	8/19/08 11:45		D:G
8145-02 A	8/18/08 12:00 JG	8/18/08 1:45 JG		TCLP
8115-1-059	8/18/08 1:20 AF	8/19/08 1:50 AF		THICK
8115-01-03	8/19/08 7:00 CA	8-11 8/19/08 CA		Atk
8147-01				
8159-01	From login			
8160-01-04A	8/19/08 1:30 JG	8/19/08 5:00 JG		TCLP
8159-01A				
8157-02A				

HOBART SAMPLE EXTRACT CUSTODY FORM

Sample Log #'s	Fraction	Time/Date/Initials		Reasons for Inserting/Removal					
		Inserted	Removed	Screening/ Cleaning	Re-Analysis	Analysis	Dilution	Extract Inserted in Process	Extract Inserted Completed
8105-1-6, 9	TPH CWG	J.H. 3:00 PM / 8.19.08	J.H. 2:00 PM / 8.19.08		X				
8142-1-7, 2068-11 8134-1-6	P/P	J.H. 3:50 PM / 8.19.08	J.H. 3:05 PM / 8.19.08			X			
8104-01, 02 8142-1-7	HERB		STRAIGHT TO GC 4:00 PM / 8.19.08 J.H.			X			
8174-1-4	RB	4:24 J.H. 8/19/08							
8114-1-4 8145-2	EXP	4:35 AF 8/19/08							X
8144-1-4 8145-2 8145-2	EXP	8:00 8/20/08 BTA	6:45 8/20/08 BTD			X			
8124-01-04	DRB	3:00 J.H. 8/20/08	10:00 8/20/08 (out)	X		X			
8073-01-05	DRU	3:30 J.H. 8/21/08	10:00 8/21/08 (out)			X			
8142-1-7 (REDC)	P/P	4:20 J.H. 4 PM / 8.20.08	7:30 8/20/08 AF taken to analyst			X			
8073-1-5 Redc	DRH	17:20 AF 8/20/08							X
8073-1-5	PMH	1:10 8/21/08	5:15 8/21/08			✓			
8144-03	EXP	11:45 8/21/08 BTD	08:35 8/21/08 BTD			X			
8117-1-2	EXP	↓	9:50 8/21/08 AF taken to analyst			✓			
8145-11 8157-2, 3 8164-1 8120-1-8	BNA	14:30 AF 8/21/08							X
8105-1-6, 09	TPH CWG	J.H. 4:30 PM / 8.21.08	J.H. 3:00 PM / 8.21.08		X				

Sequence Table (Front/Injector):

70.263
[Signature]
 4.3.08

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDamt	Multiplier	Dilution
1	Vial 1	Pest. Primer				
2	Vial 2	P.E.M. #7027				
3	Vial 3	AB/Sur100 #6901				
4	Vial 4	1660 1000 #7164				
5	Vial 5	Chlor.5ppb #6821				
6	Vial 6	Chlor.50 #6813				
7	Vial 7	Chlor.200 #6813				
8	Vial 8	Tox.100ppb #6985				
9	Vial 9	Tox.1200 #7103				
10	Vial 10	Tox.2000 #7103				
11	Vial 11	AB/Sur200 #6839A				
12	Vial 12	AB/Sur100 #6839B				
13	Vial 13	AB/Sur 50 #6839C				
14	Vial 14	AB/Sur 25 #6839D				
15	Vial 15	AB/Sur 10 #6839E				
16	Vial 16	AB/Sur 5 #6839F				
17	Vial 17	AB/Sur 1 #6851				
18	Vial 18	AB ICV #6982				
19	Vial 19	AB/Sur100 #6901				
20	Vial 20	Chlor.50 #6813				
21	Vial 21	Tox.1200 #7103				
22	Vial 22	PS1BLK0516	5024.9, 14, 17 x 1			
23	Vial 23	PS1BLK0516LCS				
24	Vial 24	PS1BLK0516LCSD				
25	Vial 25	0805024-09 x 1				
26	Vial 26	0805024-09;10x				
27	Vial 27	0805024-09;100x				
28	Vial 28	0805024-16 x 1				
29	Vial 29	0805024-16;10x				
30	Vial 30	0805024-17 x 1				
31	Vial 31	0805024-17;10x				
32	Vial 32	AB/Sur100 #6901				
33	Vial 33	Chlor.50 #6813				
34	Vial 34	Tox.1200 #7103				
35	Vial 35	PW1BLK0516	5140.1-4; 5146.2, 3; 5147.1-4 x 1			
36	Vial 36	PW1BLK0516LCS				
37	Vial 37	PW1BLK0516LCSD				
38	Vial 38	0805147-01 x 1				
39	Vial 39	0805147-01;F				
40	Vial 40	0805147-02				
41	Vial 41	0805147-02;F				
42	Vial 42	0805147-03				
43	Vial 43	0805147-03;F				
44	Vial 44	0805147-04				
45	Vial 45	0805147-04;F				
46	Vial 46	AB/Sur100 #6901				
47	Vial 47	1660 1000 #7164				
48	Vial 48	PW1BLK0521	5024.13; 5142.02; 5154.01 x 1			
49	Vial 49	PW1BLK0521LCS				
50	Vial 50	PW1BLK0521LCSD				
51	Vial 51	PW1BLK0521LCSpcb				
52	Vial 52	PW1BLK0521LCSDpcb				
53	Vial 53	0805024-13 x 1				
54	Vial 54	0805024-13;10x				
55	Vial 55	0805142-02 x 1				
56	Vial 56	0805142-02;MS				
57	Vial 57	0805142-02;MStc				
58	Vial 58	0805156-01				
59	Vial 59	AB/Sur100 #6901				

NOT USED (J.A.) 4.6.08

Jack Hill
8.4.08

Sequence Table (Front/~~BACK~~ Injector):

Quantification Part:

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	Primer				
2	Vial 2	1660 2500 7103A				
3	Vial 3	1660 1000 7103B				
4	Vial 4	1660 750 7103C				
5	Vial 5	1660 500 7103D				
6	Vial 6	1660 100 7103E				
7	Vial 7	1660 50 7103F				
8	Vial 8	1660 25 7103G				
9	Vial 9	1660 ICV 6974				
10	Vial 10	1660 1000 #7221				
11	Vial 11	1254 1000 #7222				
12	Vial 12	1248 1000 #6953B				
13	Vial 13	1242 1000 #7227H				
14	Vial 14	0807252-01 x 1		ACID		
15	Vial 15	0807252-02		↓		
16	Vial 16	0807252-03		↓		
17	Vial 17	0807252-04		↓		
18	Vial 18	0807252-05		↓		
19	Vial 19	0807252-06		↓		
20	Vial 20	1660 1000 #7221				
21	Vial 21	1254 1000 #7222				
22	Vial 22	1248 1000 #6953B				
23	Vial 23	1242 1000 #7227H				
24	Vial 24	PW1BLK0731 7229.1-4; 7252.11 x 1		ACID/cu		
25	Vial 25	PW1BLK0731LCS		↓		
26	Vial 26	PW1BLK0731LCS		↓		
27	Vial 27	0807229-01 x 1		ACID/cu		
28	Vial 28	0807229-02		↓		
29	Vial 29	0807229-03		↓		
30	Vial 30	0807229-04		↓		
31	Vial 31	0807229-05		↓		
32	Vial 32	0807229-06		↓		
33	Vial 33	0807229-01 7252.11 x 1		↓		
34	Vial 34	1660 1000 #7221				
35	Vial 35	1254 1000 #7222				
36	Vial 36	1248 1000 #6953B				
37	Vial 37	1242 1000 #7227H				
38	Vial 38	PW2BLK0731 7249.1-4 x 1		ACID/cu		
39	Vial 39	PW2BLK0731LCS		↓		
40	Vial 40	0807249-01		↓		
41	Vial 41	0807249-02		↓		
42	Vial 42	0807249-03		↓		
43	Vial 43	0807249-04		↓		
44	Vial 44	1660 1000 #7221				
45	Vial 45	1254 1000 #7222				
46	Vial 46	1248 1000 #6953B				
47	Vial 47	1242 1000 #7227H				
48	Vial 48	PS1BLK0801 8001.1-3; 7236.03; 7252.2,6 x 1		ACID/cu		
49	Vial 49	PS1BLK0801LCS		(RESO) ↓		
50	Vial 50	0808001-01 x 1		ACID/cu		
51	Vial 51	0808001-02		↓		
52	Vial 52	0808001-03		↓		
53	Vial 53	0808001-03;MS		↓		
54	Vial 54	0808001-03;MSD		↓		
55	Vial 55	0807236-03		↓		
56	Vial 56	0807252-02		↓		
57	Vial 57	0807252-06		↓		
58	Vial 58	1660 1000 #7221				
59	Vial 59	1254 1000 #7222				

Sequence Table (Front/Injector):

Quantification Part:

7G.12
Paul Holl
 8.27.08

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
1	Vial 1	EDB PRIMER				
2	Vial 2	EDB CAL1 0.03	ID.# 7313			
3	Vial 3	EDB CAL2 0.05				
4	Vial 4	EDB CAL3 0.1	ID.# 7312			
5	Vial 5	EDB CAL4 0.15				
6	Vial 6	EDB CAL5 0.20				
7	Vial 7	EDB CCV 0.1				
8	Vial 8	EW1BLK0822	7195.09 x 1			
9	Vial 9	EW1BLK0822LCS				
10	Vial 10	EW1BLK0822LCS				
11	Vial 11	EW1BLK0822LCS				
12	Vial 12	EW1BLK0822LCS				
13	Vial 13	0807195-09	x 1			
14	Vial 14	0807195-09;DUP	x 1			
15	Vial 15	EDB CCV 0.1	ID.# 7312			
16	Vial 16	EDB MDL1 0.03	ID.# 7313			
17	Vial 17	EDB MDL2 0.03				
18	Vial 18	EDB MDL3 0.03				
19	Vial 19	EDB MDL4 0.03				
20	Vial 20	EDB MDL5 0.03				
21	Vial 21	EDB MDL6 0.03				
22	Vial 22	EDB MDL7 0.03				
23	Vial 23	EDB MDL8 0.03				
24	Vial 24	EDB MDL1 0.03				
25	Vial 25	Pest. Primer				
26	Vial 26	P.E.M. #7027				
27	Vial 27	AB/Sur 100#7180H				
28	Vial 28	1660 1000 #7302				
29	Vial 29	Chlor. 5ppb#7200				
30	Vial 30	Tox. 100ppb#6985				
31	Vial 31	PS1BLK0820	8142.1-7 x 1 (REDO)			
32	Vial 32	PS1BLK0820LCS				
33	Vial 33	PS1BLK0820LCSD				
34	Vial 34	PS1BLK0820LCSpcb				
35	Vial 35	PS1BLK0820LCSDpcb				
36	Vial 36	0808142-01	x 1			
37	Vial 37	0808142-02				
38	Vial 38	0808142-03				
39	Vial 39	0808142-04				
40	Vial 40	0808142-05				
41	Vial 41	0808142-06				
42	Vial 42	0808142-07				
43	Vial 43	LCS test 8/20/08				
44	Vial 44	LCSDtest 8/20/08				
45	Vial 45	LCS test 8/21/08				
46	Vial 46	LCSDtest 8/21/08				
47	Vial 47	AB/Sur 100#7180H				
48	Vial 48	1660 1000 #7302				
49	Vial 49	LCS test 8/22/08				
50	Vial 50	LCSDtest 8/22/08				
51	Vial 51	PW1BLK0821	8148.1-4; 8180.1-8; 8184.1-4 x 1			
52	Vial 52	PW1BLK0821LCS				
53	Vial 53	PW1BLK0821LCSD				
54	Vial 54	0808148-01	x 1			
55	Vial 55	0808148-02				
56	Vial 56	0808148-03				
57	Vial 57	0808148-04				
58	Vial 58	0808180-01				
59	Vial 59	0808180-02				

%SOLIDS

779

Client(s):

TTNUS

Date on: 8/15/2008
Time on: 11:30

Date off: 8/18/2008
Time off: 8:30

Empirical Laboratories

Analyst: GM/CAT
Method #: 2540
Method Type: Gravimetric

Analyst Authorization: _____
Balance: Wet Chem #2

Cruc. ID.	Sample Type	Sample Number	Field ID.	Client	Boat Mass (gm)	Sample Mass, Wet (gm)	Sample Mass, Dry + Boat Mass (gm)	% Solids DL = 1.0%	RPD %	Control Limit %	Comments
1	Sample	0808141-01			1.0101	5.1377	5.3906	85.3			
2	Sample	0808141-02			1.0138	5.0805	5.3765	85.9			
3	Sample	0808141-03			1.0004	5.1487	5.0577	78.8			DAMP
4	Sample	0808141-04			0.9921	5.2072	5.3754	84.2			DAMP
5	Sample	0808141-05			0.9887	8.2995	7.8730	82.9			DAMP
6	Sample	0808141-06			0.9962	7.3798	6.9993	81.3			DAMP
7	Sample	0808142-01		TTNUS	0.9963	8.4867	8.4083	87.3			DAMP
8	Sample	0808142-02		TTNUS	0.9991	5.2806	5.6262	87.6			DAMP
9	Sample	0808142-03		TTNUS	0.9905	8.3349	7.7287	80.8			WET SAMPLE
10	Sample	0808142-04		TTNUS	1.0091	5.4906	5.5857	83.4			WET SAMPLE
11	Sample	0808142-05		TTNUS	0.9666	6.5000	6.5444	85.8			DAMP
12	Sample	0808142-06		TTNUS	1.0003	7.1005	6.6170	79.1			WET SAMPLE
13	Sample	0808142-07		TTNUS	1.0063	7.1879	7.4336	89.4			MOIST
14	Sample										
15	Sample										
16	Sample										
17	Sample										
18	Sample										
19	Sample										
20	Sample										
21	Duplicate										

FORM 3
SOIL HERB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix Spike - Client Sample No.: HS1BLK0818

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
2,4-D	33.33	0.0000	36.16	108	35-145
2,4-DB	33.33	0.0000	34.63	104	50-155
2,4,5-TP (Silvex)	33.33	0.0000	31.33	94	45-125
2,4,5-T	33.33	0.0000	32.89	99	45-135
Dalapon	33.33	0.0000	8.664	26	10-110
Dicamba	33.33	0.0000	25.68	77	55-110
Dichloroprop	33.33	0.0000	36.15	108	75-140
Dinoseb	33.33	0.0000	19.87	60	5-130
MCPA	3333	0.0000	3803	114	30-115
MCPP	3333	0.0000	4345	130	35-135

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
2,4-D	33.33	36.70	110	1	30	35-145
2,4-DB	33.33	35.39	106	2	30	50-155
2,4,5-TP (Silvex)	33.33	32.34	97	3	30	45-125
2,4,5-T	33.33	33.37	100	1	30	45-135
Dalapon	33.33	6.765	20	25	30	10-110
Dicamba	33.33	26.42	79	3	30	55-110
Dichloroprop	33.33	37.15	111	3	30	75-140
Dinoseb	33.33	20.68	62	4	30	5-130
MCPA	3333	3986	120*	5	30	30-115
MCPP	3333	4472	134	3	30	35-135

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 10 outside limits

Spike Recovery: 1 out of 20 outside limits

COMMENTS: _____

FORM 1
HERB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

HS1BLK0818

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Matrix: (soil/water) SOIL Lab Sample ID: HS1BLK0818

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 003F0101

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SONC Date Extracted: 08/18/08

Concentrated Extract Volume: 10.0 (mL) Date Analyzed: 08/19/08 16:20

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:		UG/KG Q
		MDL	(ug/L or ug/Kg) RL CONC	
94-75-7-----	2,4-D	8.3	17	U
94-82-6-----	2,4-DB	8.3	17	U
93-72-1-----	2,4,5-TP (Silvex)	0.83	1.7	U
93-76-5-----	2,4,5-T	0.83	1.7	U
75-99-0-----	Dalapon	21	42	U
1918-00-9-----	Dicamba	0.83	1.7	U
120-36-5-----	Dichloroprop	8.3	17	U
88-85-7-----	Dinoseb	4.2	8.3	U
94-74-6-----	MCPA	830	1700	U
93-65-2-----	MCPP	830	1700	U

FORM 4
HERB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

HS1BLK0818

Lab Name: EMPIRICAL LABS Contract: TETRATECH
 Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009
 Lab Sample ID: HS1BLK0818 Lab File ID: 003F0101
 Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SONC
 Sulfur Cleanup (Y/N) N Date Extracted: 08/18/08
 Date Analyzed (1): 08/19/08 Date Analyzed (2): 08/19/08
 Time Analyzed (1): 1620 Time Analyzed (2): 1655
 Instrument ID (1): ECD2 Instrument ID (2): ECD2
 Column (1): RTX-CLP ID: 0.32 (mm) Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	HS1BLK0818LC	HS1BLK0818LCS	08/19/08	08/19/08
02	HS1BLK0818LC	HS1BLK0818LCSD	08/19/08	08/19/08
03	01SS01QT	0808142-01	08/19/08	08/19/08
04	01SS01QTDUP	0808142-02	08/19/08	08/19/08
05	01SS02QT	0808142-03	08/19/08	08/19/08
06	01SS03QT	0808142-04	08/19/08	08/19/08
07	01SS04QT	0808142-05	08/19/08	08/19/08
08	01SS05QT	0808142-06	08/19/08	08/19/08
09	01SS06QT	0808142-07	08/19/08	08/19/08
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1726 2120

LAB FILE ID: RF100: 003F0201 RF50: 004F0201 RF40: 005F0201
RF25: 006F0201 RF20: 007F0201

COMPOUND	RF100	RF50	RF40	RF25	RF20
2,4-D	-113.805	-138.985	-143.106	-166.219	-177.255
2,4-DB	59.410	69.073	71.277	76.995	81.909
2,4,5-TP (Silvex)	685.760	778.514	801.857	882.722	910.841
2,4,5-T	616.642	713.185	671.317	737.688	752.545
Dalapon	X144.890	X165.890	X173.886	X187.918	X194.702
Dicamba	492.421	572.528	598.900	658.389	689.397
Dichloroprop	95.028	114.454	121.722	137.270	145.390
Dinoseb	344.375	410.610	431.558	485.446	517.668
MCPA	0.415	0.489	0.517	0.579	0.618
MCPP	0.297	0.347	0.363	0.399	0.423
Pentachlorophenol					
DCAA	106.691	127.015	132.902	151.818	161.631

*J.H. 4.3.08
19 4/17/08*

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1726 2120

LAB FILE ID: RF10: 008F0201 RF5: 009F0201

COMPOUND	RF10	RF5
2,4-D	~ 214.004	~ 253.141
2,4-DB	90.774	98.948
2,4,5-TP (Silvex)	1024.300	1156.954
2,4,5-T	814.854	860.308
Dalapon	× 231.019	× 265.286
Dicamba	803.125	867.560
Dichloroprop	176.447	192.432
Dinoseb	613.153	706.843
MCPA	0.753	0.870
MCPP	0.497	0.540
Pentachlorophenol		
DCAA	188.162	204.973

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1726 2120

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	2ORDR	0.00000000	4.493e-003	4.047e-008	0.999
2,4-DB	AVRG		78.3409406		17.2
2,4,5-TP (Silvex)	AVRG		891.564002		17.8
2,4,5-T	AVRG		738.077161		11.2
Dalapon	2ORDR	0.00000000	4.553e-003	7.194e-009	0.999
Dicamba	AVRG		668.902798		19.6
Dichloroprop	2ORDR	0.00000000	5.49e-003	5.665e-008	0.999
Dinoseb	2ORDR	0.00000000	1.607e-003	8.05e-009	0.999
MCPA	2ORDR	0.00000000	1.35900950	2.751e-005	0.999
MCPP	2ORDR	0.00000000	2.06842314	4.683e-005	0.999
Pentachlorophenol	AVRG				
DCAA	2ORDR	0.00000000	5.205e-003	8.432e-008	0.999

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1726 2120

LAB FILE ID: RT1: 003F0201 RT2: 004F0201 RT3: 005F0201
RT4: 006F0201 RT5: 007F0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	16.160	16.163	16.163	16.167	16.167
2,4-DB	18.197	18.200	18.200	18.203	18.203
2,4,5-TP (Silvex)	17.263	17.263	17.263	17.267	17.267
2,4,5-T	17.600	17.607	17.607	17.610	17.613
Dalapon	5.563	5.560	5.570	5.570	5.563
Dicamba	14.610	14.613	14.613	14.617	14.613
Dichloroprop	15.823	15.827	15.827	15.827	15.827
Dinoseb	19.250	19.253	19.253	19.253	19.253
MCPA	15.260	15.250	15.250	15.247	15.243
MCPP	15.003	14.997	14.993	14.993	14.990
Pentachlorophenol					
DCAA	14.283	14.287	14.287	14.290	14.290

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP ID: 0.32 (mm) Calibration Time(s): 1726 2120

LAB FILE ID: RT6: 008F0201 RT7: 009F0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
=====	=====	=====	=====	=====	=====
2,4-D	16.173	16.173	16.167	16.143	16.203
2,4-DB	18.210	18.207	18.203	18.177	18.237
2,4,5-TP (Silvex)	17.267	17.263	17.265	17.233	17.293
2,4,5-T	17.620	17.617	17.611	17.587	17.647
Dalapon	5.567	5.563	5.565	5.533	5.593
Dicamba	14.617	14.610	14.613	14.580	14.640
Dichloroprop	15.830	15.827	15.827	15.797	15.857
Dinoseb	19.253	19.250	19.252	19.220	19.280
MCPA	15.243	15.237	15.247	15.207	15.267
MCPP	14.990	14.980	14.992	14.950	15.010
Pentachlorophenol					
=====	=====	=====	=====	=====	=====
DCAA	14.293	14.290	14.289	14.260	14.320

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION~~ COMPOUNDS

Instrument ID: ecd2.i Injection Date: 02-APR-2008 21:59
Lab File ID: 010F0201.D Init. Cal. Date(s): 10-JUL-2006 02-APR-2008
Analysis Type: WATER Init. Cal. Times: 17:39 21:20
Lab Sample ID: Herb ICV #6870 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\040208.b\8151F.m

COMPOUND	RRF	RF20	MIN	MAX
5 Dalapon	455	X 479	0.010	-5.3 | 15.0
6 Dicamba	669	689	0.010	3.0 | 15.0
10 MCPP	18779	18361	0.010	2.2 | 15.0
9 MCPA	18691	18712	0.010	-0.1 | 15.0
7 Dichloroprop	189	185	0.010	1.9 | 15.0
1 2,4-D	188	180	0.010	4.4 | 15.0
3 2,4,5-TP (Silvex)	892	936	0.010	5.0 | 15.0
4 2,4,5-T	738	764	0.010	3.5 | 15.0
2 2,4-DB	78.34094	76.71838	0.010	-2.1 | 15.0
8 Dinoseb	94.51800	93.93233	0.010	0.6 | 15.0

Page 2
 J.H. 8.22.08
 BM 5 Sep 08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 19-AUG-2008 15:36
 Lab File ID: 002F0101.D Init. Cal. Date(s): 02-APR-2008 02-APR-2008
 Analysis Type: Init. Cal. Times: 17:26 21:20
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151F.m

COMPOUND	RRF	RF20	MIN	%D	MAX
5 Dalapon	455	X 522	0.010	-14.7	15.0
\$ 12 DCAA	93.63300	111	0.010	118.2	15.0
6 Dicamba	669	733	0.010	9.6	15.0
10 MCPP	18779	24411	0.010	130.0	15.0
9 MCPA	18691	25275	0.010	135.2	15.0
7 Dichloroprop	189	203	0.010	-7.8	15.0
1 2,4-D	188	209	0.010	-10.9	15.0
3 2,4,5-TP (Silvex)	892	874	0.010	-2.0	15.0
4 2,4,5-T	738	744	0.010	0.9	15.0
2 2,4-DB	78.34094	89.35341	0.010	14.1	15.0
8 Dinoseb	94.51800	85.79928	0.010	9.2	15.0

HIGH - NA
 > HIGH -

J.H. 8.22.08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

BM
 5 sep 08

Instrument ID: ecd2.i Injection Date: 19-AUG-2008 22:47
 Lab File ID: 013F0101.D Init. Cal. Date(s): 02-APR-2008 02-APR-2008
 Analysis Type: Init. Cal. Times: 17:26 21:20
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151F.m

COMPOUND	RRF	RF20	MIN	RRF	%D	MAX	%D
5 Dalapon	455	515	0.010	-13.0	15.0		
\$ 12 DCAA	93.63300	106	0.010	-13.6	15.0		
6 Dicamba	669	721	0.010	7.9	15.0		
10 MCPP	18779	24598	0.010	131.0	15.0	<-	
9 MCPA	18691	24530	0.010	131.2	15.0	<-	
7 Dichloroprop	189	206	0.010	-9.1	15.0		
1 2,4-D	188	208	0.010	-10.8	15.0		
3 2,4,5-TP (Silvex)	892	905	0.010	1.5	15.0		
4 2,4,5-T	738	763	0.010	3.4	15.0		
2 2,4-DB	78.34094	92.89101	0.010	18.6	15.0	<-	HIGH
8 Dinoseb	94.51800	81.29910	0.010	14.0	15.0		

> HIGH

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

LAB FILE ID: RF500: 003R0201 RF400: 004R0201 RF250: 005R0201
RF200: 006R0201 RF100: 007R0201

COMPOUND	RF500	RF400	RF250	RF200	RF100
2,4-D	236.193	270.327	287.010	293.661	307.696
2,4-DB	~130.897	-146.623	-157.209	~158.789	-165.750
2,4,5-TP (Silvex)	1337.720	1416.546	1448.939	1375.231	1379.359
2,4,5-T	1131.169	1226.742	1269.260	1234.924	1251.569
Dalapon	*327.138	*364.972	*376.103	*392.379	*408.292
Dicamba	871.750	946.361	976.800	975.466	1006.962
Dichloroprop	210.509	248.727	264.197	283.715	303.001
Dinoseb	827.372	925.504	976.174	975.361	1003.312
MCPA	0.944	1.154	1.241	1.424	1.559
MCPP	0.697	0.876	0.947	1.114	1.236
Pentachlorophenol					
DCAA	195.190	226.104	237.774	249.245	262.012

J.H. 4.3.08
KP 4/10/08

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

LAB FILE ID: RF50: 008R0201 RF0: 009R0201

COMPOUND	RF50	RF0
2,4-D	345.317	389.544
2,4-DB	171.061	196.038
2,4,5-TP (Silvex)	1381.022	1404.166
2,4,5-T	1282.519	1360.202
Dalapon	* 441.088	* 476.867
Dicamba	1070.267	1248.937
Dichloroprop	311.724	343.947
Dinoseb	1070.590	1156.926
MCPA	2.005	2.711
MCPP	1.656	2.376
Pentachlorophenol		
DCAA	297.932	344.412

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		304.249666		16.5
2,4-DB	AVRG		160.909725		12.6
2,4,5-TP (Silvex)	AVRG		1391.85481		2.5
2,4,5-T	AVRG		1250.91244		5.5
Dalapon	AVRG		398.120002		12.5
Dicamba	AVRG		1013.79187		11.8
Dichloroprop	AVRG		280.831438		15.7
Dinoseb	AVRG		990.748405		10.5
MCPA	2ORDR	0.00000000	0.46793128	6.794e-006	0.998
MCPP	2ORDR	0.00000000	0.50082243	1.45e-005	0.997
Pentachlorophenol	AVRG				
DCAA	AVRG		258.952876		19.0

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

LAB FILE ID: RT1: 003R0201 RT2: 004R0201 RT3: 005R0201
RT4: 006R0201 RT5: 007R0201

COMPOUND	RT1	RT2	RT3	RT4	RT5
2,4-D	17.167	17.163	17.163	17.163	17.163
2,4-DB	19.123	19.120	19.120	19.120	19.120
2,4,5-TP (Silvex)	18.173	18.170	18.170	18.170	18.170
2,4,5-T	18.607	18.603	18.607	18.603	18.603
Dalapon	6.083	6.093	6.093	6.090	6.090
Dicamba	15.660	15.657	15.657	15.657	15.657
Dichloroprop	16.737	16.733	16.733	16.733	16.733
Dinoseb	19.437	19.433	19.433	19.433	19.433
MCPA	16.267	16.250	16.247	16.243	16.240
MCPP	15.893	15.880	15.877	15.873	15.870
Pentachlorophenol					
DCAA	15.363	15.360	15.360	15.360	15.360

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

LAB FILE ID: RT6: 008R0201 RT7: 009R0201

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
2,4-D	17.160	17.167	17.164	17.137	17.197
2,4-DB	19.117	19.123	19.120	19.093	19.153
2,4,5-TP (Silvex)	18.163	18.170	18.169	18.140	18.200
2,4,5-T	18.600	18.603	18.604	18.573	18.633
Dalapon	6.090	6.093	6.090	6.063	6.123
Dicamba	15.650	15.657	15.656	15.627	15.687
Dichloroprop	16.727	16.733	16.733	16.703	16.763
Dinoseb	19.430	19.437	19.434	19.407	19.467
MCPA	16.233	16.240	16.246	16.210	16.270
MCPP	15.863	15.870	15.875	15.840	15.900
Pentachlorophenol					
DCAA	15.353	15.360	15.359	15.330	15.390

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION~~ COMPOUNDS

J.H. 4.3.08
K1471-2

Instrument ID: ecd2.i Injection Date: 02-APR-2008 22:38
Lab File ID: 010R0201.D Init. Cal. Date(s): 07-MAR-2007 02-APR-2008
Analysis Type: WATER Init. Cal. Times: 12:18 21:59
Lab Sample ID: Herb ICV #6870 Quant Type: ESTD
Method: \\ELABNSH05\TARGET\chem\ecd2.i\040208.b\8151R.m

COMPOUND	RRF	RF100	MIN	MAX
5 Dalapon	398	X 422	0.010	6.0 | 15.0
6 Dicamba	1014	- 1037	0.010	2.3 | 15.0
10 MCPP	18779	18540	0.010	1.3 | 15.0
9 MCPA	18691	18593	0.010	0.5 | 15.0
7 Dichloroprop	281	302	0.010	7.6 | 15.0
1 2,4-D	304	331	0.010	8.9 | 15.0
3 2,4,5-TP (Silvex)	1392	1477	0.010	6.1 | 15.0
4 2,4,5-T	1251	1287	0.010	2.9 | 15.0
2 2,4-DB	161	160	0.010	-0.8 | 15.0
8 Dinoseb	991	982	0.010	-0.9 | 15.0

J.H. 8.22.08
BM 5 sep 08

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 19-AUG-2008 16:20
 Lab File ID: 002R0101.D Init. Cal. Date(s): 02-APR-2008 02-APR-2008
 Analysis Type: Init. Cal. Times: 18:05 21:59
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151R.m

COMPOUND	RRF	RF100	MIN	RRF	%D	MAX	%D
5 Dalapon	398	X 408	0.010	2.4	15.0		
\$ 12 DCAA	259	256	0.010	-1.3	15.0		
6 Dicamba	1014	1011	0.010	-0.2	15.0		
10 MCPP	18779	21220	0.010	-13.0	15.0		
9 MCPA	18691	21056	0.010	-12.7	15.0		
7 Dichloroprop	281	320	0.010	13.9	15.0		
1 2,4-D	304	300	0.010	-1.5	15.0		
3 2,4,5-TP (Silvex)	1392	1272	0.010	-8.6	15.0		
4 2,4,5-T	1251	1010	0.010	-19.2	15.0		<- Low
2 2,4-DE	161	137	0.010	-15.0	15.0		
8 Dinoseb	991	921	0.010	-7.1	15.0		

J.H. 8.22.08
BM 5 Sep 08

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

Instrument ID: ecd2.i Injection Date: 19-AUG-2008 23:26
 Lab File ID: 013R0101.D Init. Cal. Date(s): 02-APR-2008 02-APR-2008
 Analysis Type: Init. Cal. Times: 18:05 21:59
 Lab Sample ID: Herb/DCAA #7245H Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151R.m

COMPOUND	RRF	RF100	MIN RRF	%D	MAX %D
5 Dalapon	398	X 434	0.010	9.1	15.0
\$ 12 DCAA	259	/ 299	0.010	15.4	15.0 <- HIGH
6 Dicamba	1014	1160	0.010	14.4	15.0
10 MCPP	18779	24632	0.010	31.2	15.0 <-
9 MCPA	18691	25042	0.010	34.0	15.0 <-
7 Dichloroprop	281	328	0.010	16.9	15.0 <-
1 2,4-D	304	384	0.010	26.3	15.0 <-
3 2,4,5-TP (Silvex)	1392	1593	0.010	14.5	15.0
4 2,4,5-T	1251	1383	0.010	10.6	15.0
2 2,4-DB	161	187	0.010	16.2	15.0 <- HIGH
8 Dinoseb	991	1095	0.010	10.5	15.0

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS03QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-04 Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-DB	1	18.20	18.16	18.22	242.5	
	2	19.09	19.05	19.11	30.50	155.3
Dinoseb	1	19.23	19.20	19.26	6.029	
	2	19.41	19.36	19.42	8.848	37.9
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

01SS04QT

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: 0808142-05 Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-DB	1	18.17	18.16	18.22	136.7	
	2	19.09	19.05	19.11	29.83	128.3
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HS1BLK0818LCS

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: HS1BLK0818LCS Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-D	1	16.15	16.12	16.18	30.51	
	2	17.11	17.08	17.14	36.16	16.9
2,4-DB	1	18.19	18.16	18.22	24.94	
	2	19.08	19.05	19.11	34.63	32.5
2,4,5-TP (Silvex)	1	17.24	17.22	17.28	22.50	
	2	18.12	18.09	18.15	31.33	32.8
2,4,5-T	1	17.58	17.58	17.64	26.49	
	2	18.56	18.53	18.59	32.89	21.6
Dalapon	1	5.50	5.50	5.56	8.586	
	2	5.99	5.99	6.05	8.664	0.9
Dicamba	1	14.58	14.55	14.61	20.45	
	2	15.59	15.56	15.62	25.68	22.7
Dichloroprop	1	15.80	15.77	15.83	31.29	
	2	16.68	16.64	16.70	36.15	14.4
Dinoseb	1	19.23	19.20	19.26	17.70	
	2	19.39	19.36	19.42	19.87	11.6

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HS1BLK0818LCS

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: HS1BLK0818LCS Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
MCPA	1	15.21	15.19	15.25	3803	4.1
	2	16.17	16.15	16.21	3649	
MCPP	1	14.96	14.93	14.99	4345	21.6
	2	15.81	15.77	15.83	3497	
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HS1BLK0818LCSD

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: HS1BLK0818LCSD Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4-D	1	16.15	16.12	16.18	32.83	
	2	17.11	17.08	17.14	36.70	11.1
2,4-DB	1	18.19	18.16	18.22	32.20	
	2	19.07	19.05	19.11	35.39	9.4
2,4,5-TP (Silvex)	1	17.24	17.22	17.28	23.86	
	2	18.11	18.09	18.15	32.34	30.2
2,4,5-T	1	17.58	17.58	17.64	28.02	
	2	18.55	18.53	18.59	33.37	17.4
Dalapon	1	5.51	5.50	5.56	6.365	
	2	5.99	5.99	6.05	6.765	6.1
Dicamba	1	14.58	14.55	14.61	21.60	
	2	15.59	15.56	15.62	26.42	20.1
Dichloroprop	1	15.81	15.77	15.83	33.28	
	2	16.67	16.64	16.70	37.15	11.0
Dinoseb	1	19.23	19.20	19.26	18.04	
	2	19.39	19.36	19.42	20.68	13.6

FORM 10
 HERB IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

CLIENT SAMPLE NO.

HS1BLK0818LCSD

Lab Name: EMPIRICAL LABS Contract: TETRATECH

Lab Code: EL Case No.: SAS No.: NA SDG No.: GULFPORT-009

Lab Sample ID: HS1BLK0818LCSD Date(s) Analyzed: 08/19/08 08/19/08

Instrument ID (1): ECD2 Instrument ID (2): ECD2

Column(1): RTX-CLP ID: 0.32(mm) Column(2): RTX-CLP2 ID: 0.32(mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
MCPA	1	15.22	15.19	15.25	3986	
	2	16.17	16.15	16.21	3959	0.7
MCPP	1	14.96	14.93	14.99	4472	
	2	15.80	15.77	15.83	3491	24.6
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

J.H. 8.22.08
 BM 5 Sep 08

Empirical Laboratories, LLC

Sample #1 : \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\009F0101.D
 Sample #2 : \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\009R0101.D
 Inj Date : 19-AUG-2008 20:11
 Sample Info: 0808142-04
 Misc Info : Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008
 Cal Date : 22-AUG-2008 08:49
 Operator : JH
 Inst ID : ecd2.i
 Dil Factor : 1.000000

Method #1 : \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151F.m
 Method #2 : \\ELABNSH05\TARGET\chem\ecd2.i\081908A.b\8151R.m
 Sub List #1 : herbd.sub
 Sub List #2 : herbd.sub
 Col #1 Phase : RTX-CLP
 Col #2 Phase : RTX-CLP2

Concentration Formula: Amt * DF * Uf * Vt * Vi / (Amt * Vi * (Solids/100))

Name	Value	Description
- DF	1.000	Dilution Factor
- Uf	1.000	Unit Correction Factor
- Vt	10.000	Final Volume
- Amt	30.000	Sample Amount
- Vi	2.000	Injection Volume
- Solids	83.400	Percent Solids

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1 (ug/Kg)	Conc#2 (ug/Kg)
DCAA	14.250	15.300	11796	29911	29.23	46.17
2,4,5-T	0.000	18.550	0	18466	0.0000	5.900 NC
2,4-DB	18.203	19.090	47540	12279	242.5	30.50 (M) - R (MATRIX)
- Dinoseb	19.227	19.407	8984	21932	6.029	8.848

QC Flag Legend

M - Compound response manually integrated.

$$\text{Concentration (Column 2)} = \frac{A_x \times DF \times Uf \times V_t \times V_i}{\text{Amt} \times V_i \times \% \text{Solids} \times \text{RRF}} = \frac{21932 \times 1 \times 1 \times 10 \times 2}{30 \times 2 \times 0.834 \times 990.748405} = 8.8476$$

A_x = Area of analyte
 RRF = Initial Calibration
 Relative Response Factor

FORM 6
HERB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: EL Case No.: SAS No.: NA SDG No.: SDGA62817

Instrument ID: ECD2 Calibration Date(s): 04/02/08 04/02/08

Column: RTX-CLP2 ID: 0.32 (mm) Calibration Time(s): 1805 2159

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
2,4-D	AVRG		304.249666		16.5
2,4-DB	AVRG		160.909725		12.6
2,4,5-TP (Silvex)	AVRG		1391.85481		2.5
2,4,5-T	AVRG		1250.91244		5.5
Dalapon	AVRG		398.120002		12.5
Dicamba	AVRG		1013.79187		11.8
Dichloroprop	AVRG		280.831438		15.7
Dinoseb	AVRG		990.748405	RRF	10.5
MCPA	2ORDR	0.00000000	0.46793128	6.794e-006	0.998
MCPP	2ORDR	0.00000000	0.50082243	1.45e-005	0.997
Pentachlorophenol	AVRG				
DCAA	AVRG		258.952876		19.0



Empirical Laboratories
 Empirical Laboratories, LLC
LABORATORY SAMPLE CUSTODY FORM
SOIL REFRIGERATOR
 (all soils are assumed to be USDA regulated)

Sample Log # (s)	Time/Date/Initials Removed	Time/Date/Initials Returned (Note if all Sample Used)	Notes/Comments	Task Performed
8142-02	AM 8/26/08 7:40	AM 9:00 8/26/08		CN
8142-17	AM 8/26/08 10AM	AM 8/26/08		PIPCB
8130-07	11:06	KH 8/20/08 11:52		Tot Metals
8160-04	KH 8/20/08			% Moist
8171-0510		AM 8/20/08 12:30		TCLP
8157-02A	8/20/08 1:24	8/20/08 2:20 JG		FAL
8173-15	2:51 8/21/08	3:22 AM 8/20/08		Metals/Hg
8182-01-27	KH 8/21/08 9:24	KH 8/21/08 11:30		VOA
8182 (1-27)	8-21-08 9:40AM (A)	8-21-08 11:53 AM (B)	Screen	PMOIST
8182-01-27	AM 8/21/08 2:15	AM 8/21/08 4:10		VOA
8182 (1-27)	8-22-08 7:15AM (A)	8-22-08 8:30AM (B)	run A-walk	VOA
8182(1-20)	8:42 8/22/08	2:15 8/22/08		BKFA PCB
8192-01-23	KH 8/22/08 8:47	KH 8/24/08 10:57		Metals/Hg
8192-01-25	AM 8/22/08 12:00	2:00 AM 8/22/08		PMOIST
8192(1-23)	8-22-08 1:00 PM (A)	8-22-08 2:35 PM (B)	Screen	VOA
8192(1-23)	8-25-08 8:15AM (A)	8-25-08 12:05 PM (B)	run A-walk	VOA
8207-01	8-25-08 8:37AM (A)	8-25-08 9:10AM (B)	Screen	
8214 (1-17)		8-25-08 2:45 PM (A)		
8182-01-27	8/25/08 0950 (Cat)			Hg
8213-01A-06A	8/25/08 11:00 JG	8/26/08 7:15		TCLP
8215-01A-C				
8207-01; 8214-01	8/25/08	KH 8/25/08 12:00		Metals
8218-01-02	KH 11:23			

from log

HOBART SAMPLE EXTRACT CUSTODY FORM

Sample Eggs	Station	Time/Date/Initial		Requirements: Inserted, Removed, Cleaned, Examined, Analyzed, Diffused, Examined, Inserted, Removed, Completed							
		Inserted	Removed	Examined	Analyzed	Diffused	Examined	Inserted	Removed	Completed	
8161-1-4 8172-1-2 8176-1-5	8177-1-5 8178-1-3	EXP	17:30 AF 8/21/08								X
8148-1-4 8157-2,3		QNA	5:46 8/26/08	5:40 8/24/08						✓	
8144-1 8180-1-8										✓	
8161-1-4; 8172-1-2 8176-1-5; 8177-1-5 8178-1-3		QNA ETP	09:15 8/22/08 BTD	06:50 8/27/08 BTD						X	
8142-1-7; LCS (RAD) 8148-1-4; 8180-1-8; 8186-1-4		P/P	5:30 PM 8/22/08	2:50 PM 8/22/08						X	X
8182-1-20		BNA	3:30 8/22/08								
8154-1-3		SIM	17:20 AF 8/27/08								X
8154-1-3		FIMO	17:20 AF 8/27/08								X
8182-1-20		QNA	6:45 8/26/08 BTA	5:45 8/26/08						✓	
8142-1-7; LCS (RAD) 8148-1-4; 8180-1-8 8186-1-4; 8124-1-4		P/P	3:30 PM 8/25/08	11:00 AM 8/25/08						X	
8182-1-20		RCB	3:59 8/25/08								X
8184-1-5 8201-1-8		EXP	19:20 AF 8/25/08								X
8184-1-4 8191-3,4 8196-1-2 8202-1	8208-1-3 8212-1-4	BNA	19:20 AF 8/25/08								X
8186-1-4 8191-2-4 8196-1,2; 8204-1 8208-1,3		BNA	7:15 AM 8-27-08	06:55 8/26/08 BTD						X	

8209-1-3; 8212-01-04

Fraction: Herbicide Matrix: Water/Soil Empirical Laboratories EX077 Supervisor

#	Client	Lab No.	Date Extracted	Setup Initials	pH	Initial Vol/Wt	Final Volume	DCAA		Spike Added	Spike Initials	KD	10ml Conc.	TV Tube	Transf. Initials	Solvent Lot/Vendor				Diazo. Used	Date Ester.	Ester. Initials	Volume Check	Notes/ Comments	
								Added	Initials							MeCl2	Ether	30-octan	Methanol						
1	Tetra Tech	080812-01	08/18/08	AF	N/A	30	10	1.0	AF	NA	NA	N/A	N/A	G66	AF	0863	081150	992947	074801	R1182	8/19	AF	AF		
2	NUS	-02	10:30					#776		NA	NA			G70											
3		-03								NA	NA			G70											
4		-04								NA	NA			G103											
5		-05								NA	NA			G15											
6		-06								NA	NA			G99											
7		-07								NA	NA			G64											
8										NA	NA														
9										NA	NA														
10										NA	NA														
11										NA	NA														
12										NA	NA														
13										NA	NA														
14										NA	NA														
15										NA	NA														
16										NA	NA														
17										NA	NA														
18										NA	NA														
19										NA	NA														
20										NA	NA														
	MB	1-7	SAS	SAS	N/A	30	10	SAS	SAS	-	-	N/A	N/A	G27	AF	SAS	SAS	SAS	SAS	SAS	SAS	SAS	SAS	SAS	
	US		SAS	SAS				SAS	SAS	1.0	AF			G100		SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
	LCSD		SAS	SAS				SAS	SAS	#728				TAT		SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	
			SAS	SAS				SAS	SAS							SAS		SAS	SAS	SAS	SAS	SAS	SAS	SAS	

Note: All volumes are in milliliters (surrogate in microliters) and weights are in grams

ECD-2 \ HP.C/D \ 040208 \ 8151

PG.03

Frank J. Holl
4.7.08

```
NAME SeqFileMacro
DELSEQUENCE
VERSION 3
SETPARAMS "JH", "", 0, 0, 1
SETDATAPATH "040208"
SETMETHODPATH
SETPRESEQ ""
SETPOSTSEQ ""
SETCOMMENT
SETNAMEMODE 1
SETSIG1FLEX "SIG1", "0001"
SETSIG2FLEX "SIG2", "0001"
SETSEQLINE 1,1,"8151F",1,1,2,-1
SETSEQLINE 1,2,"8151F",3,23,1,-1
SETSEQLINE 2,1,"8151R",2,2,2,-1
SETSEQLINE 2,2,"8151R",3,23,1,-1
DELSAMPLE 1,100
SETSAMPLE 1,"Herb. Primer",,,,
SETINFO 1
SETINFO 1,";;;;;herbd.sub\"
SETSAMPLE 2,"Herb. Primer",,,,
SETINFO 2
SETINFO 2,";;;;;herbd.sub\"
SETSAMPLE 3,"Herb/DCAA #6867A",,,, 100/500 ppb
SETINFO 3
SETINFO 3,";;;;;herbd.sub\"
SETSAMPLE 4,"Herb/DCAA #6867B",,,, 50/250
SETINFO 4
SETINFO 4,";;;;;herbd.sub\"
SETSAMPLE 5,"Herb/DCAA #6867C",,,, 40/200
SETINFO 5
SETINFO 5,";;;;;herbd.sub\"
SETSAMPLE 6,"Herb/DCAA #6867D",,,, 25/125
SETINFO 6
SETINFO 6,";;;;;herbd.sub\"
SETSAMPLE 7,"Herb/DCAA #6867E",,,, 20/200
SETINFO 7
SETINFO 7,";;;;;herbd.sub\"
SETSAMPLE 8,"Herb/DCAA #6867F",,,, 10/50
SETINFO 8
SETINFO 8,";;;;;herbd.sub\"
SETSAMPLE 9,"Herb/DCAA #6867G",,,, 5/25
SETINFO 9
SETINFO 9,";;;;;herbd.sub\"
SETSAMPLE 10,"Herb ICV #6870",,,, 20
SETINFO 10
SETINFO 10,";;;;;herb.sub\"
SETSAMPLE 11,"Herb/DCAA #6867H",,,, 20/100
SETINFO 11
SETINFO 11,";;;;;herbd.sub\"
SETSAMPLE 12,"HW1BLK0326",,,, 3235.02, 9-14
SETINFO 12
SETINFO 12,"Gulfport-004;1000;10;032608HW1;ug/L;;herbd.sub;26-Mar-2008\"
SETSAMPLE 13,"HW1BLK0326LCS",,,,
SETINFO 13
SETINFO 13,"Gulfport-004;1000;10;032608HW1;ug/L;;herbd.sub;26-Mar-2008\"
SETSAMPLE 14,"0803235-02",,,,
```

x |

Paul Holt
8.22.08

```

NAME SeqFileMacro
DELSEQUENCE
VERSION 3
SETPARAMS "JH", "", 0, 0, 1
SETDATAPATH "081908A"
SETMETHODPATH
SETPRESEQ ""
SETPOSTSEQ ""
SETCOMMENT
SETNAMEMODE 1
SETSIG1FLEX "SIG1", "0001"
SETSIG2FLEX "SIG2", "0001"
SETSEQLINE 1,1,"8151F",1,21,1,-1
SETSEQLINE 2,1,"8151R",1,21,1,-1
DELSAMPLE 1,100
SETSAMPLE 1,"Herb. Primer",,,
SETINFO 1
SETINFO 1,";;;;;herbd.sub\"
SETSAMPLE 2,"Herb/DCAA #7245H",,, 20/100ppb
SETINFO 2
SETINFO 2,";;;;;herbd.sub\"
SETSAMPLE 3,"HS1BLK0818",,, 8142-1-7
SETINFO 3
SETINFO 3,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 4,"HS1BLK0818LCS",,,
SETINFO 4
SETINFO 4,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 5,"HS1BLK0818LCS",,,
SETINFO 5
SETINFO 5,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 6,"0808142-01",,,
SETINFO 6
SETINFO 6,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 7,"0808142-02",,,
SETINFO 7
SETINFO 7,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 8,"0808142-03",,,
SETINFO 8
SETINFO 8,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 9,"0808142-04",,,
SETINFO 9
SETINFO 9,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 10,"0808142-05",,,
SETINFO 10
SETINFO 10,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 11,"0808142-06",,,
SETINFO 11
SETINFO 11,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 12,"0808142-07",,,
SETINFO 12
SETINFO 12,"Gulfport-009;30.0;10;081808HS1;ug/Kg;;herbd.sub;18-Aug-2008\"
SETSAMPLE 13,"Herb/DCAA #7245H",,, 20/100ppb
SETINFO 13
SETINFO 13,";;;;;herbd.sub\"
SETSAMPLE 14,"HW1BLK0814",,, 8104-01,02 x 1
SETINFO 14
SETINFO 14,"dup.08104;1000;10;081408HW1;ug/L;;herbd.sub;14-Aug-2008\"

```

x 1

%SOLIDS

Client(s):

TTNUS

Date on: 8/15/2008
Time on: 11:30

Date off: 8/18/2008
Time off: 8:30

Empirical Laboratories

Analyst: GM/CAT
Method #: 2540
Method Type: Gravimetric

Analyst Authorization: _____
Balance: Wet Chem #2

Cruc. ID.	Sample Type	Sample Number	Field ID.	Client	Boat Mass (gm)	Sample Mass, Wet (gm)	Sample Mass, Dry + Boat Mass (gm)	% Solids DL = 1.0%	RPD %	Control Limit %	Comments
1	Sample	0808141-01			1.0101	5.1377	5.3906	85.3			
2	Sample	0808141-02			1.0138	5.0805	5.3765	85.9			
3	Sample	0808141-03			1.0004	5.1487	5.0577	78.8			DAMP
4	Sample	0808141-04			0.9921	5.2072	5.3754	84.2			DAMP
5	Sample	0808141-05			0.9887	8.2995	7.8730	82.9			DAMP
6	Sample	0808141-06			0.9962	7.3798	6.9993	81.3			DAMP
7	Sample	0808142-01		TTNUS	0.9963	8.4867	8.4083	87.3			DAMP
8	Sample	0808142-02		TTNUS	0.9991	5.2806	5.6262	87.6			DAMP
9	Sample	0808142-03		TTNUS	0.9905	8.3349	7.7287	80.8			WET SAMPLE
10	Sample	0808142-04		TTNUS	1.0091	5.4906	5.5857	83.4			WET SAMPLE
11	Sample	0808142-05		TTNUS	0.9666	6.5000	6.5444	85.8			DAMP
12	Sample	0808142-06		TTNUS	1.0003	7.1005	6.6170	79.1			WET SAMPLE
13	Sample	0808142-07		TTNUS	1.0063	7.1879	7.4336	89.4			MOIST
14	Sample										
15	Sample										
16	Sample										
17	Sample										
18	Sample										
19	Sample										
20	Sample										
21	Duplicate										

To: R. Fisher
Page: 2

the quality control limit for both PCB-1016 and PCB-1260. No sample data qualification was necessary as all SDG samples had non-detected results for all PCBs and the primary GC column had within the QC limit % recovery for surrogate tetrachloro-m-xylene.

Notes

There was no matrix spike / matrix spike duplicate performed on this SDG.

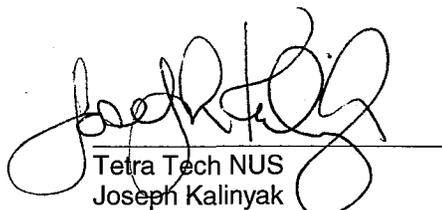
Executive Summary

Laboratory Performance: The LCS had a % recovery QC limit exceedance for both PCB-1016 and PCB-1260 which did not affect the SDG samples.

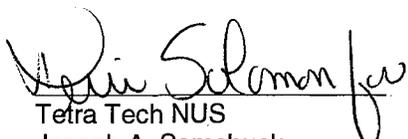
Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to the EPA Functional Guidelines for Organic Data Validation (October 1999) and the Department of Defense (DoD) document entitled "Quality Systems Manual (QSM) for Environmental Laboratories" (January 2006). The text of this report has been formulated to address only those problem areas affecting data quality.

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DoD Guidelines."



Tetra Tech NUS
Joseph Kalinyak
Chemist/Data Validator



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS - GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DDT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT-014 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SBDIT0402
 samp_date 10/29/2008
 lab_id 0810384-02
 qc_type NM
 units UG/KG
 Pct_Solids 77.8
 DUP_OF:

nsample 01SBDIT0445
 samp_date 10/29/2008
 lab_id 0810384-01
 qc_type NM
 units UG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SBDIT0502
 samp_date 10/29/2008
 lab_id 0810384-03
 qc_type NM
 units UG/KG
 Pct_Solids 91.4
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	21	U	
AROCLOR-1221	21	U	
AROCLOR-1232	21	U	
AROCLOR-1242	21	U	
AROCLOR-1248	21	U	
AROCLOR-1254	21	U	
AROCLOR-1260	21	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	19	U	
AROCLOR-1221	19	U	
AROCLOR-1232	19	U	
AROCLOR-1242	19	U	
AROCLOR-1248	19	U	
AROCLOR-1254	19	U	
AROCLOR-1260	19	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	

PROJ_NO: 00700

SDG: GULFPORT-014 MEDIA: SOIL DATA FRACTION: PEST/PCB

nsample 01SBDIT0502D
samp_date 10/29/2008
lab_id 0810384-04
qc_type NM
units UG/KG
Pct_Solids 93.4
DUP_OF: 01SBDIT0502

nsample 01SBDIT0602
samp_date 10/29/2008
lab_id 0810384-05
qc_type NM
units UG/KG
Pct_Solids 93.4
DUP_OF:

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	

Parameter	Result	Val Qual	Qual Code
AROCLOR-1016	18	U	
AROCLOR-1221	18	U	
AROCLOR-1232	18	U	
AROCLOR-1242	18	U	
AROCLOR-1248	18	U	
AROCLOR-1254	18	U	
AROCLOR-1260	18	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM 1
 PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT0402

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: 0810384-02

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 055F5501

% Moisture: 22 decanted: (Y/N) N Date Sampled: 10/29/08 11:00

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 09:31

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		
		MDL	RL	CONC Q
12674-11-2----	PCB-1016	5.4	21	U
11104-28-2----	PCB-1221	5.4	21	U
11141-16-5----	PCB-1232	5.4	21	U
53469-21-9----	PCB-1242	5.4	21	U
12672-29-6----	PCB-1248	5.4	21	U
11097-69-1----	PCB-1254	5.4	21	U
11096-82-5----	PCB-1260	5.4	21	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT0445

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: 0810384-01

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 054F5401

% Moisture: 13 decanted: (Y/N) N Date Sampled: 10/29/08 10:55

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 09:13

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

12674-11-2----	PCB-1016	4.8	19		U
11104-28-2----	PCB-1221	4.8	19		U
11141-16-5----	PCB-1232	4.8	19		U
53469-21-9----	PCB-1242	4.8	19		U
12672-29-6----	PCB-1248	4.8	19		U
11097-69-1----	PCB-1254	4.8	19		U
11096-82-5----	PCB-1260	4.8	19		U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBEDIT0502

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: 0810384-03

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 056F5601

% Moisture: 9 decanted: (Y/N) N Date Sampled: 10/29/08 11:10

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 09:49

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
MDL RL CONC Q

12674-11-2----	PCB-1016	4.6	18		U
11104-28-2----	PCB-1221	4.6	18		U
11141-16-5----	PCB-1232	4.6	18		U
53469-21-9----	PCB-1242	4.6	18		U
12672-29-6----	PCB-1248	4.6	18		U
11097-69-1----	PCB-1254	4.6	18		U
11096-82-5----	PCB-1260	4.6	18		U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT0502D

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: 0810384-04

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 057F5701

% Moisture: 7 decanted: (Y/N) N Date Sampled: 10/29/08 11:20

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 10:08

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
12674-11-2----	PCB-1016	4.5	18	U
11104-28-2----	PCB-1221	4.5	18	U
11141-16-5----	PCB-1232	4.5	18	U
53469-21-9----	PCB-1242	4.5	18	U
12672-29-6----	PCB-1248	4.5	18	U
11097-69-1----	PCB-1254	4.5	18	U
11096-82-5----	PCB-1260	4.5	18	U

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

01SBDIT0602

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: 0810384-05

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 058F5801

% Moisture: 7 decanted: (Y/N) N Date Sampled: 10/29/08 11:30

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 10:26

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)		UG/KG Q
		MDL	RL CONC	
12674-11-2----	PCB-1016	4.5	18	U
11104-28-2----	PCB-1221	4.5	18	U
11141-16-5----	PCB-1232	4.5	18	U
53469-21-9----	PCB-1242	4.5	18	U
12672-29-6----	PCB-1248	4.5	18	U
11097-69-1----	PCB-1254	4.5	18	U
11096-82-5----	PCB-1260	4.5	18	U

APPENDIX C

SUPPORT DOCUMENTATION

HOLD TIME

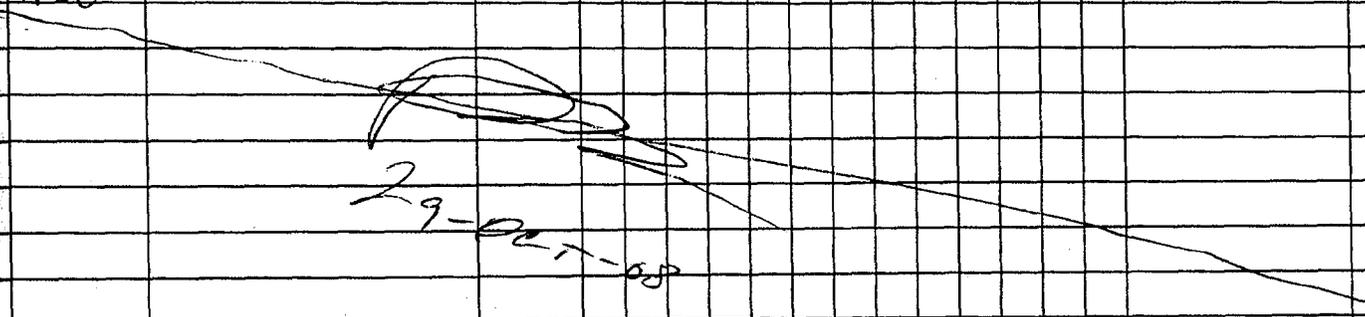
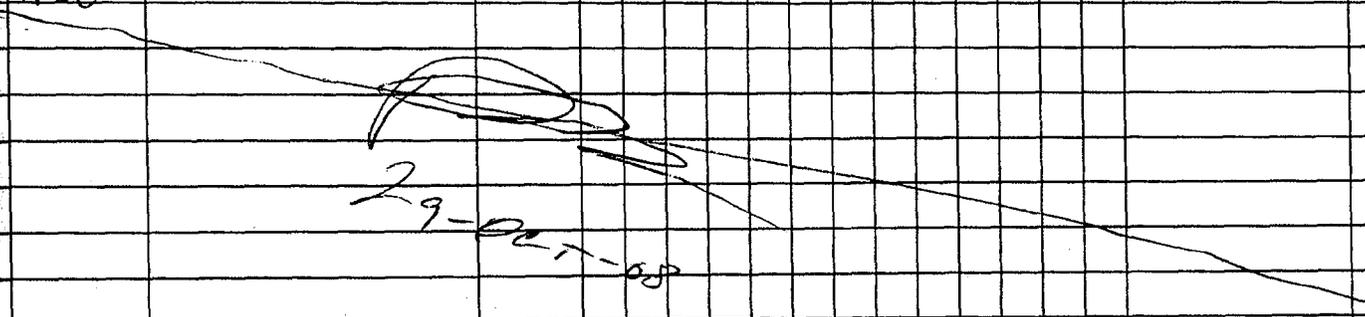
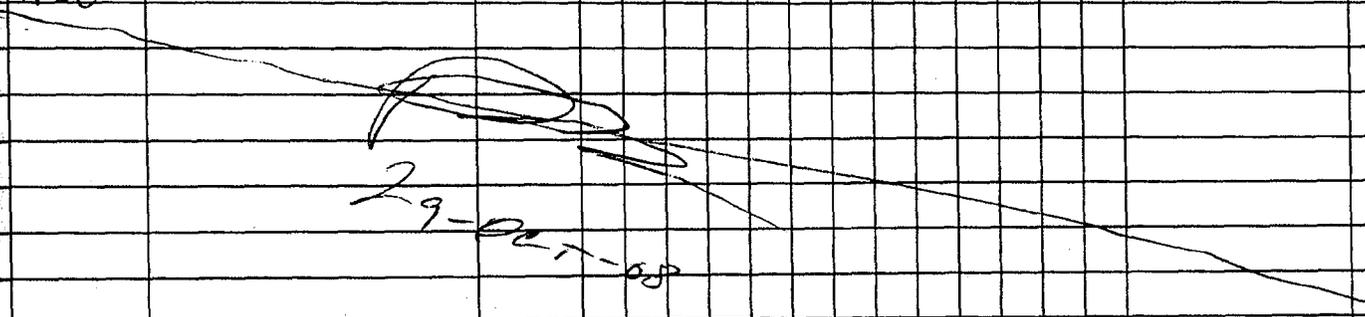
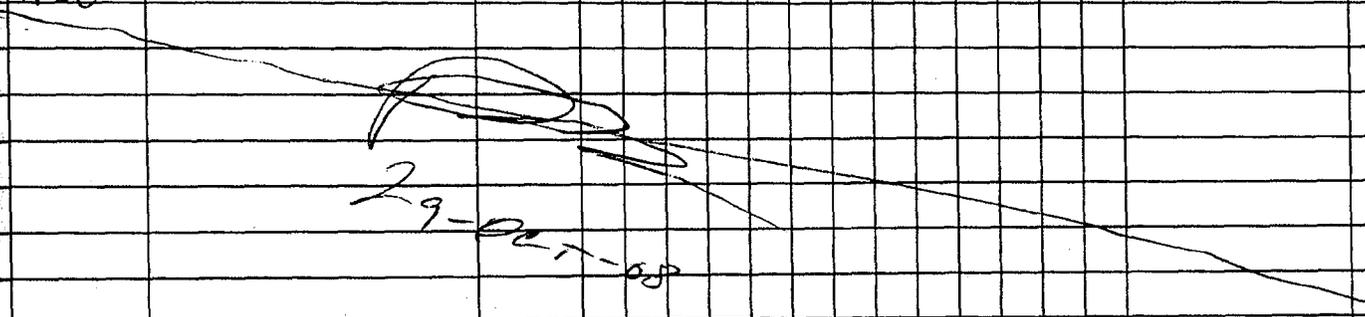
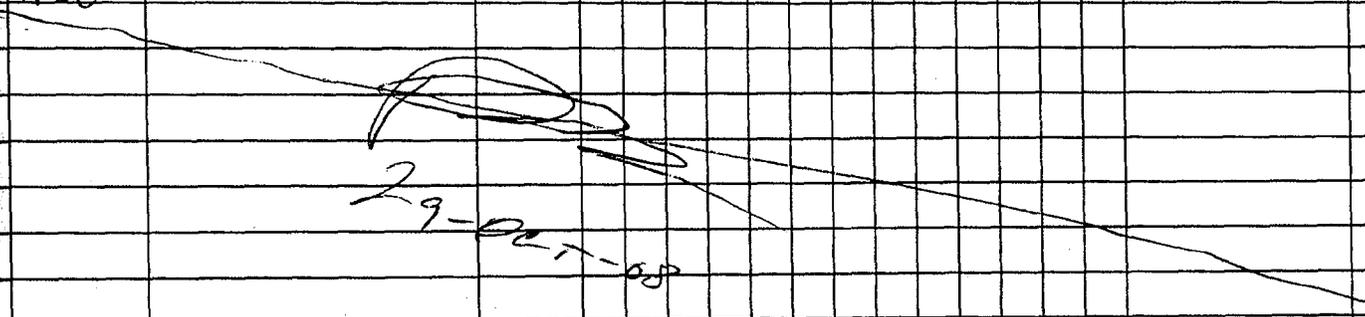
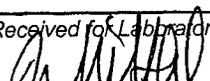
SDG GULFPORT-0

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
PCB	%	01SBDIT0602	0810384-05	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	%	01SBDIT0502D	0810384-04	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	%	01SBDIT0502	0810384-03	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	%	01SBDIT0445	0810384-01	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	%	01SBDIT0402	0810384-02	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	UG/KG	01SBDIT0602	0810384-05	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	UG/KG	01SBDIT0502D	0810384-04	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	UG/KG	01SBDIT0502	0810384-03	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	UG/KG	01SBDIT0445	0810384-01	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16
PCB	UG/KG	01SBDIT0402	0810384-02	NM	10/29/2008	11/7/2008	11/14/2008	9	7	16

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

42879

Send Results to:		Send Invoice to:		Analysis Requirements:												Lab Use Only:			
Name <u>Tetra Tech NUS</u>		Name <u>Tetra Tech NUS</u>		PCB Suite 8082												VOA Headspace	Y	N	NA
Company <u>per contract</u>		Company <u>per contract</u>														Field Filtered	Y	N	NA
Address _____		Address _____														Correct Containers	Y	N	NA
City _____		City _____														Discrepancies	Y	N	NA
State, Zip _____		State, Zip _____														Cust. Seals Intact	Y	N	NA
Phone _____		Phone _____		Containers Intact	Y	N	NA												
Fax _____		Fax _____		Airbill #: <u>2615</u>				CAR #: <u>-</u>											
E-mail _____		E-mail _____																	
Project No./Name: <u>SITE 1</u>				Sampler's (Signature):															
Lab Use Only	Date/Time	Sample Description	Sample Matrix													Comments	No. of Bottles	Lab Use Only Containers/Pres.	
<u>0810384-01</u>	<u>1055</u>	<u>DISBDIT0445</u>	<u>SOIL</u>														<u>1</u>	<u>IM</u>	
<u>-02</u>	<u>1100</u>	<u>01SBDIT0402</u>	<u>SOIL</u>														<u>1</u>		
<u>-03</u>	<u>1110</u>	<u>01SBDIT0502</u>	<u>SOIL</u>														<u>1</u>		
<u>-04</u>	<u>1120</u>	<u>01SBDIT0502D</u>	<u>SOIL</u>														<u>1</u>		
<u>-05</u>	<u>1130</u>	<u>01SBDIT0602</u>	<u>SOIL</u>														<u>1</u>	↓	
																			
																			
																			
																			
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)		REMARKS:												Details:		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)														Page _____ of _____		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)														Cooler No. _____ of _____		
Received for Laboratory by: (Signature)		Date/Time	Temperature														Date Shipped _____		
		<u>10/30/08</u>	<u>2.40C</u>		Shipped By _____														
		<u>09:00</u>			Turnaround _____														

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 0810384 Number of Coolers: 1 of 1
Client: Tetra Tech IUVS Project: Site 1
Date/Time Received: 10/30/08 09:00 Date cooler(s) opened: 10/30/08
Opened By (print): WILLIAM SCHWAB (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 2615

2. Were custody seals on outside of cooler(s)? Yes No
How many: 1 Seal date: 10/29/08 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A
7. Was project identifiable from custody papers? Yes No N/A
8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 2-4°C

Dates samples were logged-in: 10/30/08

9. Initial this form to acknowledge login of sample(s): (Name): WILLIAM SCHWAB (Initial): WS

10. Were all bottle lids intact and sealed tightly? Yes No N/A
11. Did all bottles arrive unbroken? Yes No N/A
12. Was all required bottle label information complete? Yes No N/A
13. Did all bottle labels agree with custody papers? Yes No N/A
14. Were correct containers used for the analyses indicated? Yes No N/A
15. Were preservative levels correct in all applicable sample containers? Yes No N/A
16. Was sufficient amount of sample sent for the analyses required? Yes No N/A
17. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

sample collection ~~for~~ dates taken from container labels.

CAR#: _____

ORGANIC CASE NARRATIVE
Tetra Tech NUS, Inc./NCBC Gulfport, MS CTO065
Project Manager: R. Fisher
SDG: Gulfport-014

Date Sampled	Date Received	Lab ID	Client ID
10/29/2008	10/30/2008	0810384-01	01SBDIT0445
10/29/2008	10/30/2008	0810384-02	01SBDIT0402
10/29/2008	10/30/2008	0810384-03	01SBDIT0502
10/29/2008	10/30/2008	0810384-04	01SBDIT0502D
10/29/2008	10/30/2008	0810384-05	01SBDIT0601

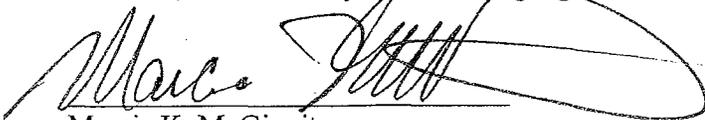
PCB Soil Samples

Method: The samples were analyzed by USEPA SW-846 Methods 3541/8082 (soxtherm extraction followed by capillary column GC/ECD) for IDW soils upon receipt to the laboratory in satisfactory condition.

Comments: The analyses for these samples were satisfactorily completed within sample holding times and met the corresponding specifications with the following exceptions:

- Initial Calibration Criteria: All method criteria were met.
- Continuing Calibration Criteria: All analytes were within 20% difference or exceeded with a positive bias and were non-detect.
- Blank Results: No target analytes were detected in the method blank.
- Surrogate Recoveries: All DCB surrogate recoveries were within limits. TCMX recoveries are not evaluated for PCBs.
- LCS/LCSD Results: All recoveries and relative percent differences were within limits or exceeded with a positive bias and were non-detect.
- MS/MSD Results: Not applicable.
- Dilutions: Not applicable.
- Manual Integrations: As is necessary for all GC/LC chromatography, manual integrations were performed to correctly quantitate target analytes. A "before" chromatogram and "after" chromatogram is provided for all sample analyses to provide information regarding the manual integrations performed.

I certify that, to the best of my knowledge and based upon my inquiry of those individuals immediately responsible for obtaining the information, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.



Marcia K. McGinnity
Senior Project Manager

ANALYTICAL REPORT TERMS AND QUALIFIERS (ORGANIC)

- MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix.
- EQL:** The estimated quantitation limit (EQL), also known as the reporting limit (RL), is defined as the estimated concentration above which quantitative results can be obtained with a specific degree of confidence. Empirical Laboratories defines the EQL to be at or near the lowest standard of the calibration curve.
- U:** The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the MDL.
- B:** The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.
- J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.
- P:** The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported.
- M:** The presence of an "M" to the right of an analytical result indicates that the sample matrix interfered with the quantitation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.
- I:** The presence of an "I" to the right of an analytical result that the presence of a qualitative interference could have caused a false positive or over estimation of the analyte. In GC and HPLC, results are reported from the column with the lower concentration.

CHROMATOGRAPHIC FLAGS FOR MANUAL INTEGRATIONS

- A:** The peak was manually integrated as it was not integrated in the original chromatogram.
- B:** The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
- C:** The peak was manually integrated to correct the baseline from the original chromatogram.
- D:** The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.
- E:** The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Column: (ZB MR-1) ID: 0.32 (mm) Cont. Calib. Date(s): 11/14/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 5.44 S2 : 11.91						
CLIENT	LAB	DATE	TIME	S1	S2	
SAMPLE NO.	SAMPLE ID	ANALYZED	ANALYZED	RT	RT	#
=====						
01		1660/D 1000	11/14/08	0400	5.45	11.91
02	PS1BLK1107	PS1BLK1107	11/14/08	0514	5.45	11.91
03	PS1BLK1107LC	PS1BLK1107LC	11/14/08	0532	5.45	11.91
04	PS1BLK1107LC	PS1BLK1107LC	11/14/08	0551	5.45	11.91
05		1660/D 1000	11/14/08	0759	5.45	11.91
06	01SBDIT0445	0810384-01	11/14/08	0913	5.45	11.91
07	01SBDIT0402	0810384-02	11/14/08	0931	5.45	11.91
08	01SBDIT0502	0810384-03	11/14/08	0949	5.45	11.91
09	01SBDIT0502D	0810384-04	11/14/08	1008	5.45	11.91
10	01SBDIT0602	0810384-05	11/14/08	1026	5.45	11.91
11		1660/D 1000	11/14/08	1044	5.45	11.91
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:
 Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809
 Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08
 Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1255~~ ^{11.24.05} 1908

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R ²
		A0	A1	
PCB-1016	LINR	0.00000000	1068.53828	0.999
	(2) LINR	0.00000000	543.328658	0.998
	(3) LINR	0.00000000	520.477458	0.998
	(4) LINR	0.00000000	765.437676	0.999
	(5) LINR	0.00000000	521.283195	0.999
	(6) LINR	0.00000000	431.045212	0.997
PCB-1260	AVRG		2379.10913	8.9
	(2) AVRG		1214.19021	14.4
	(3) AVRG		1399.28875	12.1
	(4) AVRG		564.746829	7.7
	(5) AVRG		1219.51658	12.8
TCMX	AVRG		24616.0700	12.3
DCB	AVRG		18499.0257	16.4

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1225~~ 1908

LAB FILE ID: RF5: 007F0701 RF1: 008F0801

COMPOUND	RF5	RF1
PCB-1016	1400.400	1573.560
(2)	796.920	867.480
(3)	735.560	811.960
(4)	1022.360	1184.920
(5)	682.160	778.520
(6)	660.500	784.160
PCB-1260	2544.340	2747.720
(2)	1403.820	1468.720
(3)	1593.000	1629.480
(4)	603.840	634.680
(5)	1345.980	1484.640
TCMX	27112.200	30117.000
DCB	21686.600	23330.000

BM
11-21-08

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1235~~ ¹¹⁻²⁴⁻⁰⁸ 1908

LAB FILE ID: RF200: 002F0201 RF50: 003F0301 RF40: 004F0401
RF25: 005F0501 RF10: 006F0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1016	1057.751	1088.755	1113.053	1129.514	1269.720
(2)	535.289	561.297	568.544	589.308	722.210
(3)	512.102	541.070	543.728	567.550	708.260
(4)	757.232	794.766	766.431	825.972	938.900
(5)	514.758	538.498	538.887	560.156	610.180
(6)	422.537	451.719	454.485	480.054	557.300
PCB-1260	2224.944	2229.151	2187.021	2259.878	2460.710
(2)	x 1044.959	x 1078.344	x 1076.051	x 1123.878	x 1303.560
(3)	1239.488	1261.071	1257.995	1314.078	1499.910
(4)	515.265	532.633	532.168	554.552	580.090
(5)	1071.816	1101.919	1096.175	1147.776	1288.310
TCMX	21580.370	22116.200	23027.840	23769.280	24589.600
DCB	15852.500	15643.900	16313.920	17346.960	19319.300

J.H. 11.24.08

BM
11-21-08

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1235~~ 1908

LAB FILE ID: RT1: 002F0201 RT2: 003F0301 RT3: 004F0401
RT4: 005F0501 RT5: 006F0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	6.790	6.789	6.790	6.790	6.790
(2)	6.230	6.234	6.240	6.240	6.240
(3)	6.453	6.451	6.453	6.453	6.450
(4)	6.760	6.764	6.770	6.770	6.760
(5)	6.970	6.973	6.980	6.970	6.970
(6)	7.090	7.089	7.090	7.090	7.090
PCB-1260	10.180	10.181	10.180	10.180	10.180
(2)	8.710	8.714	8.720	8.720	8.720
(3)	9.040	9.046	9.050	9.050	9.050
(4)	9.570	9.573	9.570	9.570	9.570
(5)	9.780	9.779	9.780	9.780	9.780
TCMX	5.440	5.448	5.450	5.450	5.450
DCB	11.910	11.911	11.910	11.910	11.910

BM
11.21.08

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): 09/26/08 11/13/08

Column: ZB MR-1 ID: 0.32 (mm) Calibration Time(s): ~~1235~~ ^{1124.08} 1908

LAB FILE ID: RT6: 007F0701 RT7: 008F0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	6.790	6.790	6.790	6.759	6.819
(2)	6.240	6.240	6.238	6.204	6.264
(3)	6.450	6.450	6.451	6.421	6.481
(4)	6.760	6.770	6.765	6.734	6.794
(5)	6.970	6.970	6.972	6.943	7.003
(6)	7.090	7.090	7.090	7.059	7.119
PCB-1260	10.180	10.180	10.180	10.151	10.211
(2)	8.720	8.710	8.716	8.684	8.744
(3)	9.050	9.050	9.048	9.016	9.076
(4)	9.570	9.570	9.570	9.543	9.603
(5)	9.780	9.780	9.780	9.749	9.809
TCMX	5.450	5.450	5.448	5.418	5.478
DCB	11.910	11.910	11.910	11.881	11.941

Bm
11-21-08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION~~ COMPOUNDS

BM
 11-21-08

Instrument ID: ecd4.i Injection Date: 13-NOV-2008 19:27
 Lab File ID: 009F0901.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D ICV 7349 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN	RRF	%D	MAX	%D
29 PCB-1016(1)	1000	1073	0.010	-7.3	15.0		
(2)	1000	1073	0.010	-7.3	15.0		
(3)	1000	1073	0.010	-7.3	15.0		
(4)	1000	1073	0.010	-7.3	15.0		
(5)	1000	1073	0.010	-7.3	15.0		
(6)	1000	1073	0.010	-7.3	15.0		
35 PCB-1260(1)	2379	2003	0.010	-15.8	15.0	<-	
(2)	1214	1104	0.010	-9.1	15.0		
(3)	1399	1250	0.010	-10.7	15.0		
(4)	1103	++++	0.010	++++	15.0	<-	
(5)	565	498	0.010	-11.8	15.0		
(6)	1220	1023	0.010	-16.1	15.0	<-	
(7)	1497	++++	0.010	++++	15.0	<-	
(8)	621	++++	0.010	++++	15.0	<-	
\$ 36 TCMX	24616	1018	0.010	-95.9	15.0	<-	
\$ 37 DCB	18499	++++	0.010	++++	15.0	<-	

-12.7%
 >NA

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

BM
11/17/08
JJ
11-18-08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 04:00
 Lab File ID: 037F3701.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	1117	0.010	-11.7	15.0
(2)	1000	1117	0.010	-11.7	15.0
(3)	1000	1117	0.010	-11.7	15.0
(4)	1000	1117	0.010	-11.7	15.0
(5)	1000	1117	0.010	-11.7	15.0
(6)	1000	1117	0.010	-11.7	15.0
35 PCB-1260(1)	2364	2486	0.010	5.1	15.0
(2)	1208	1200	0.010	-0.6	15.0
(3)	1410	1418	0.010	0.6	15.0
(4)	1103	++++	0.010	++++	15.0 <-
(5)	564	595	0.010	5.5	15.0
(6)	1211	1223	0.010	0.9	15.0
(7)	1497	++++	0.010	++++	15.0 <-
(8)	621	++++	0.010	++++	15.0 <-
\$ 36 TCMX	24418	25028	0.010	2.5	15.0
\$ 37 DCB	18529	18404	0.010	-0.7	15.0

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

BM
 11-18-08
 JJ
 11-18-08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 07:59
 Lab File ID: 050F5001.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
-----	-----	-----	-----	-----	-----
29 PCB-1016(1)	1000	1067	0.010	-6.7	15.0
(2)	1000	1067	0.010	-6.7	15.0
(3)	1000	1067	0.010	-6.7	15.0
(4)	1000	1067	0.010	-6.7	15.0
(5)	1000	1067	0.010	-6.7	15.0
(6)	1000	1067	0.010	-6.7	15.0
35 PCB-1260(1)	2364	2392	0.010	1.2	15.0
(2)	1208	1138	0.010	-5.8	15.0
(3)	1410	1359	0.010	-3.6	15.0
(4)	1103	++++	0.010	++++	15.0|<-
(5)	564	532	0.010	-5.8	15.0
(6)	1211	1129	0.010	-6.8	15.0
(7)	1497	++++	0.010	++++	15.0|<-
(8)	621	++++	0.010	++++	15.0|<-
\$ 36 TCMX	24418	23251	0.010	-4.8	15.0
\$ 37 DCB	18529	17269	0.010	-6.8	15.0

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

Bm
111808
11-18-08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 10:44
 Lab File ID: 059F5901.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82F.m

COMPOUND	RRF	RF50	MIN	MAX
			RRF	%D
29 PCB-1016(1)	1000	1115	0.010	-11.5
(2)	1000	1115	0.010	15.0
(3)	1000	1115	0.010	15.0
(4)	1000	1115	0.010	15.0
(5)	1000	1115	0.010	15.0
(6)	1000	1115	0.010	15.0
35 PCB-1260(1)	2364	2481	0.010	4.9
(2)	1208	1170	0.010	-3.1
(3)	1410	1425	0.010	1.1
(4)	1103	++++	0.010	15.0 <-
(5)	564	537	0.010	-4.9
(6)	1211	1184	0.010	-2.3
(7)	1497	++++	0.010	15.0 <-
(8)	621	++++	0.010	15.0 <-
\$ 36 TCMX	24418	25696	0.010	5.2
\$ 37 DCB	18529	17947	0.010	-3.1

FORM 8
PCB ANALYTICAL SEQUENCE

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Column: ZB MR-2 ID: 0.32 (mm) Cont. Calib. Date(s): 11/14/08

Instrument ID: ECD4

THE ANALYTICAL SEQUENCE OF PERFORMANCE BLANKS, AND SAMPLES
GIVEN BELOW:

SURROGATE RT FROM CONTINUING CALIBRATION						
S1 : 4.56 S2 : 10.42						
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#
					S2 RT	#
01		1660/D 1000	11/14/08	0400	4.56	10.42
02	PS1BLK1107	PS1BLK1107	11/14/08	0514	4.56	10.42
03	PS1BLK1107LC	PS1BLK1107LC	11/14/08	0532	4.56	10.42
04	PS1BLK1107LC	PS1BLK1107LC	11/14/08	0551	4.56	10.42
05		1660/D 1000	11/14/08	0759	4.56	10.42
06	01SBDIT0445	0810384-01	11/14/08	0913	4.56	10.42
07	01SBDIT0402	0810384-02	11/14/08	0931	4.56	10.42
08	01SBDIT0502	0810384-03	11/14/08	0949	4.56	10.42
09	01SBDIT0502D	0810384-04	11/14/08	1008	4.56	10.42
10	01SBDIT0602	0810384-05	11/14/08	1026	4.56	10.42
11		1660/D 1000	11/14/08	1044	4.56	10.42
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
S1 = TCMX (+/- 0.03 MINUTES)
S2 = DCB (+/- 0.03 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1255~~ ^{J.H. 11.24.08} 1908

COMPOUND	CURVE	COEFFICIENTS			%RSD OR R ²
		A0	A1	A2	
PCB-1016	2ORDR	0.00000000	3.53e-004	1.067e-011	1.000
	(2) 2ORDR	0.00000000	7.584e-004	8.256e-011	1.000
	(3) 2ORDR	0.00000000	5.045e-004	4.17e-011	1.000
	(4) 2ORDR	0.00000000	6.831e-004	2.73e-011	1.000
	(5) 2ORDR	0.00000000	7.62e-004	5.166e-011	1.000
PCB-1260	AVRG		7802.45118		9.8
	(2) AVRG		4403.03862		7.9
	(3) AVRG		4524.29503		3.6
	(4) AVRG		4178.44810		14.4
	(5) AVRG		1802.41568		4.2
TCMX	AVRG		77535.5633		10.0
DCB	AVRG		57105.3490		14.7

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/25/08~~ 11/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1905~~ ¹¹⁻²⁴⁻⁰⁸ 1908

LAB FILE ID: RF5: 007R0701 RF1: 008R0801

COMPOUND	RF5	RF1
PCB-1016	3225.980	3657.920
(2)	1687.780	1865.640
(3)	2389.280	2686.200
(4)	1642.300	1906.720
(5)	1568.060	1846.960
PCB-1260	8373.500	8546.000
(2)	*4502.960	*4895.720
(3)	4470.220	4499.520
(4)	4640.680	4921.040
(5)	1766.700	1853.840
TCMX	88645.000	82391.000
DCB	67994.000	66875.000

Bm
11-21-08

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~09/26/08~~ 11/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1255~~ 1908

LAB FILE ID: RF200: 002R0201 RF50: 003R0301 RF40: 004R0401
RF25: 005R0501 RF10: 006R0601

COMPOUND	RF200	RF50	RF40	RF25	RF10
PCB-1016	2398.751	2625.824	2621.907	2784.834	3130.250
(2)	1030.301	1165.564	1193.731	1239.880	1541.470
(3)	1511.645	1717.244	1769.096	1891.872	2306.630
(4)	1296.520	1380.720	1396.229	1447.080	1599.410
(5)	1105.553	1214.329	1212.561	1280.034	1493.020
PCB-1260	6636.350	7365.376	7362.567	7619.016	8714.350
(2)	X3862.310	X4234.287	X4242.161	X4325.232	X4758.600
(3)	4222.219	4549.494	4534.740	4632.802	4761.070
(4)	3213.116	3809.751	3880.485	4097.814	4686.250
(5)	1668.920	1797.148	1795.297	1823.174	1911.830
TCMX	64982.110	71849.000	75507.013	77621.120	81753.700
DCB	46945.130	49849.400	51981.413	54575.400	61517.100

J.H. 11.24.08

*BM
11-21-08*

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~08/26/08~~ 11/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1235~~ 1908

LAB FILE ID: RT1: 002R0201 RT2: 003R0301 RT3: 004R0401
RT4: 005R0501 RT5: 006R0601

COMPOUND	RT1	RT2	RT3	RT4	RT5
PCB-1016	5.720	5.716	5.720	5.720	5.720
(2)	4.940	4.935	4.940	4.940	4.930
(3)	5.240	5.245	5.250	5.250	5.240
(4)	5.890	5.891	5.890	5.890	5.890
(5)	5.950	5.950	5.950	5.950	5.950
PCB-1260	8.710	8.716	8.720	8.720	8.720
(2)	7.820	7.816	7.820	7.820	7.820
(3)	8.030	8.028	8.030	8.030	8.030
(4)	8.090	8.091	8.090	8.090	8.090
(5)	8.520	8.518	8.520	8.520	8.520
TCMX	4.570	4.565	4.570	4.570	4.560
DCB	10.420	10.420	10.420	10.420	10.420

*BM
11-21-08*

FORM 6
PCB ORGANICS INITIAL CALIBRATION DATA

Lab Name: EMPIRICAL LABS Contract:

Lab Code: Case No.: SAS No.: NA SDG No.: SDGA73809

Instrument ID: ECD4 Calibration Date(s): ~~08/26/08~~ 11/13/08

Column: ZB MR-2 ID: 0.32 (mm) Calibration Time(s): ~~1255~~ 1908

LAB FILE ID: RT6: 007R0701 RT7: 008R0801

COMPOUND	RT6	RT7	MEAN RT	RT WINDOW	
				FROM	TO
PCB-1016	5.720	5.720	5.720	5.686	5.746
(2)	4.930	4.940	4.936	4.905	4.965
(3)	5.240	5.240	5.244	5.215	5.275
(4)	5.890	5.890	5.890	5.861	5.921
(5)	5.950	5.950	5.950	5.920	5.980
PCB-1260	8.720	8.720	8.718	8.686	8.746
(2)	7.820	7.820	7.819	7.786	7.846
(3)	8.030	8.030	8.030	7.998	8.058
(4)	8.090	8.090	8.090	8.061	8.121
(5)	8.520	8.520	8.520	8.488	8.548
TCMX	4.560	4.560	4.565	4.535	4.595
DCB	10.420	10.420	10.420	10.390	10.450

*BM
11-21-08*

J.H. 11-24-08
RM 11-21-08

Empirical Laboratories, LLC

ICV ~~CONTINUING CALIBRATION COMPOUNDS~~

Instrument ID: ecd4.i Injection Date: 13-NOV-2008 19:27
 Lab File ID: 009R0901.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D ICV 7349 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82R.m

COMPOUND	RRF	RFS0	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	* 1038	0.010	-3.8	15.0
(2)	1000	1038	0.010	-3.8	15.0
(3)	1000	1038	0.010	-3.8	15.0
(4)	1000	1038	0.010	-3.8	15.0
(5)	1000	1038	0.010	-3.8	15.0
(6)	1000	1038	0.010	-3.8	15.0
35 PCB-1260(1)	7802	6957	0.010	-10.8	15.0
(2)	++++	++++	0.010	++++	15.0 <-
(3)	4403	4280	0.010	-2.8	15.0
(4)	4524	4647	0.010	2.7	15.0
(5)	4178	3626	0.010	-13.2	15.0
(6)	1802	1590	0.010	-11.8	15.0
(7)	++++	++++	0.010	++++	15.0 <-
(8)	++++	++++	0.010	++++	15.0 <-
\$ 36 TCMX	77536	++++	0.010	++++	15.0 <-
\$ 37 DCB	57105	++++	0.010	++++	15.0 <-

> NA

Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
11/17/08
11:15-08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 04:00
 Lab File ID: 037R3701.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	1177	0.010	-17.7	15.0
(2)	1000	1177	0.010	-17.7	15.0
(3)	1000	1177	0.010	-17.7	15.0
(4)	1000	1177	0.010	-17.7	15.0
(5)	1000	1177	0.010	-17.7	15.0
(6)	1000	1177	0.010	-17.7	15.0
35 PCB-1260(1)	7509	8490	0.010	13.1	15.0
(2)	++++	++++	0.010	++++	15.0
(3)	4216	4565	0.010	8.3	15.0
(4)	4370	4328	0.010	-1.0	15.0
(5)	4033	3945	0.010	-2.2	15.0
(6)	1740	1905	0.010	9.5	15.0
(7)	++++	++++	0.010	++++	15.0
(8)	++++	++++	0.010	++++	15.0
\$ 36 TCMX	77103	87535	0.010	13.5	15.0
\$ 37 DCB	56675	62286	0.010	9.9	15.0

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Empirical Laboratories, LLC

CONTINUING CALIBRATION COMPOUNDS

BM
11/18/08
JJ
11/18/08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 07:59
 Lab File ID: 050R5001.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN RRF	%D	MAX %D
29 PCB-1016(1)	1000	960	0.010	4.0	15.0
(2)	1000	960	0.010	4.0	15.0
(3)	1000	960	0.010	4.0	15.0
(4)	1000	960	0.010	4.0	15.0
(5)	1000	960	0.010	4.0	15.0
(6)	1000	960	0.010	4.0	15.0
35 PCB-1260(1)	7509	7288	0.010	-2.9	15.0
(2)	++++	++++	0.010	++++	15.0 |<-
(3)	4216	4119	0.010	-2.3	15.0
(4)	4370	4405	0.010	0.8	15.0
(5)	4033	3364	0.010	-16.6	15.0 |<-
(6)	1740	1705	0.010	-2.0	15.0
(7)	++++	++++	0.010	++++	15.0 |<-
(8)	++++	++++	0.010	++++	15.0 |<-
\$ 36 TCMX	77103	69647	0.010	-9.7	15.0
\$ 37 DCB	56675	52176	0.010	-7.9	15.0

Empirical Laboratories, LLC
 CONTINUING CALIBRATION COMPOUNDS

BM
 11-21-08
 11-21-08

Instrument ID: ecd4.i Injection Date: 14-NOV-2008 10:44
 Lab File ID: 059R5901.D Init. Cal. Date(s): 26-SEP-2008 13-NOV-2008
 Analysis Type: Init. Cal. Times: 12:35 19:08
 Lab Sample ID: 1660/D 1000 7426 Quant Type: ESTD
 Method: \\ELABNSH05\TARGET\chem\ecd4.i\111308.b\8081_82R.m

COMPOUND	RRF	RF50	MIN	MAX
			RRF	%D
29 PCB-1016(1)	1000	1196	0.010	-19.6
(2)	1000	1196	0.010	-19.6
(3)	1000	1196	0.010	-19.6
(4)	1000	1196	0.010	-19.6
(5)	1000	1196	0.010	-19.6
(6)	1000	1196	0.010	-19.6
35 PCB-1260(1)	7509	7881	0.010	5.0
(2)	++++	++++	0.010	++++
(3)	4216	4592	0.010	8.9
(4)	4370	4602	0.010	5.3
(5)	4033	3748	0.010	-7.1
(6)	1740	1870	0.010	7.5
(7)	++++	++++	0.010	++++
(8)	++++	++++	0.010	++++
\$ 36 TCMX	77103	88130	0.010	14.3
\$ 37 DCB	56675	58640	0.010	3.5

Avg 19.6 ↑

FORM 4
PCB METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

PS1BLK1107

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Lab Sample ID: PS1BLK1107 Lab File ID: 041F4101

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Soxh) SOXH

Sulfur Cleanup (Y/N) N Date Extracted: 11/07/08

Date Analyzed (1): 11/14/08 Date Analyzed (2): 11/14/08

Time Analyzed (1): 0514 Time Analyzed (2): 0514

Instrument ID (1): ECD4 Instrument ID (2): ECD4

Column (1): ZB MR-1 ID: 0.32 (mm) Column (2): ZB MR-2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PS1BLK1107LC	PS1BLK1107LCS	11/14/08	11/14/08
02	PS1BLK1107LC	PS1BLK1107LCSD	11/14/08	11/14/08
03	01SBDIT0445	0810384-01	11/14/08	11/14/08
04	01SBDIT0402	0810384-02	11/14/08	11/14/08
05	01SBDIT0502	0810384-03	11/14/08	11/14/08
06	01SBDIT0502D	0810384-04	11/14/08	11/14/08
07	01SBDIT0602	0810384-05	11/14/08	11/14/08
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

FORM 1
PCB ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PS1BLK1107

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix: (soil/water) SOIL Lab Sample ID: PS1BLK1107

Sample wt/vol: 15.0 (g/mL) G Lab File ID: 041F4101

% Moisture: 0 decanted: (Y/N) N Date Sampled: _____

Extraction: (SepF/Cont/Sonc/Soxh) SOXH Date Extracted: 11/07/08

Concentrated Extract Volume: 5.0 (mL) Date Analyzed: 11/14/08 05:14

Injection Volume: .2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)			UG/KG Q
		MDL	RL	CONC	
12674-11-2----	PCB-1016	4.2	17		U
11104-28-2----	PCB-1221	4.2	17		U
11141-16-5----	PCB-1232	4.2	17		U
53469-21-9----	PCB-1242	4.2	17		U
12672-29-6----	PCB-1248	4.2	17		U
11097-69-1----	PCB-1254	4.2	17		U
11096-82-5----	PCB-1260	4.2	17		U

FORM 2
SOIL PCB SURROGATE RECOVERY

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Column(1): ZB MR-1 ID: 0.32 (mm) Column(2): ZB MR-2 ID: 0.32 (mm)

	CLIENT SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PS1BLK1107	93	104	94	110			0
02	PS1BLK1107LC	116	130*	123	140			1
03	PS1BLK1107LC	96	110	106	117			0
04	01SBDIT0445	91	103	88	95			0
05	01SBDIT0402	82	93	80	83			0
06	01SBDIT0502	103	109	103	105			0
07	01SBDIT0502D	85	94	90	92			0
08	01SBDIT0602	88	94	85	91			0
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

(S1)	(TCMX)	EL	SPIKE
S2	= DCB	QC LIMITS	CONC (ug/Kg)
		(30-120)	17
		(35-140)	17

Column to be used to flag recovery values
 * Values outside of QC limits
 D Surrogate results reported from a diluted analysis

FORM 3
SOIL PCB LAB CONTROL SAMPLE

Lab Name: EMPIRICAL LABS Contract: TETRA TECH.

Lab Code: Case No.: SAS No.: NA SDG No.: TET.P10384

Matrix Spike - Client Sample No.: PS1BLK1107

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
PCB-1016	166.7	0.0000	232.4	139*	45-120
PCB-1260	166.7	0.0000	224.2	134*	40-125

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	REC.
PCB-1016	166.7	196.0	118	17	50	45-120
PCB-1260	166.7	194.0	116	14	50	40-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 2 out of 4 outside limits

COMMENTS: _____



Tetra Tech NUS

INTERNAL CORRESPONDENCE

TO: R. FISHER DATE: NOVEMBER 25, 2008

FROM: TERRI L. SOLOMON COPIES: DV FILE

**SUBJECT: INORGANIC DATA VALIDATION –TAL METALS, CYANIDE
CTO – 0065 NCBC GULFPORT
SAMPLE DELIVERY GROUP (SDG) – GULFPORT012**

SAMPLES: 14/Soil

01SBDIT01	01SBIT02	01SBDIT03
01SS01401	01SS01401DUP	01SS01501
01SS01701	01SS02401	01SS02501
01SS13701	01SS13801	01SS13901
01SS13901DUP	01SS42001	

Overview

The sample set for CTO 0065, NCBC Gulfport, SDG GULFPORT012, consists of fourteen (14) soil environmental samples. Two (2) field duplicate pairs (01SS01401 / 01SS01401DUP and 01SS13901 / 01SS13901DUP) were included within this SDG.

All samples were analyzed for Target Analyte List (TAL) metals and cyanide. The samples were collected by Tetra Tech NUS on September 30 and October 1, 2008. Metals and cyanide were analyzed by Empirical Laboratories and analyzed under Naval Facilities Engineering Service Center (NFESC) Quality Assurance/Quality Control (QA/QC) criteria. Metals analyses were conducted using SW-846 method 6010B. Mercury analyses were conducted using SW-846 method 7471A. Cyanide analyses were conducted using SW-846 method 9012A.

These data were evaluated based on the following parameters:

- * • Data Completeness
- * • Holding Times
- Calibration Verification Results
- * • Laboratory Blank Analyses
- * • ICP Interference Check Sample Results
- Matrix Spike / Matrix Spike Duplicate Sample Results
- * • Post Digestion Spike Sample Results
- * • Laboratory Duplicate Sample Results
- * • Laboratory Control Sample Results
- ICP Serial Dilution Results
- Field Duplicate Sample Results
- * • Sample Quantitation
- * • Detection Limits

* - All quality control criteria were met for this parameter.

TO: R. FISHER – PAGE 2
DATE: NOVEMBER 25, 2008

Matrix Spike / Matrix Spike Duplicate Sample Results

The matrix spike / matrix spike duplicate percent recoveries for antimony were < 75% quality control limit. Positive and nondetected results reported for antimony were qualified as estimated, "J" and "UJ", respectively.

ICP Serial Dilution Results

The ICP serial dilution percent difference was > 10% and the sample result was > 50X instrument detection limit for lead. The positive results reported for lead were qualified as estimated, "J".

Field Duplicate Results

Field duplicate imprecision (RPD > 50%) was noted for iron for sample pair 01SS13901 / 01SS13901DUP. The positive results reported for iron for samples 01SS13901 and 01SS13901DUP were qualified as estimated, "J".

Notes

The continuing calibration percent recovery for sodium was > 110% quality control limit affecting sample 01SS13901DUP. However, no validation actions are required as the result reported for sodium was nondetected.

The Contract Required Detection Limit (CRDL) percent recoveries for selenium, lead and thallium were > 100% quality control limit. However, no validation actions are required for this noncompliance.

The matrix spike / matrix spike duplicate percent recoveries for potassium were > 125% quality control limit for potassium. However, no validation actions are required as all potassium results were nondetects.

Executive Summary

Laboratory Performance: None.

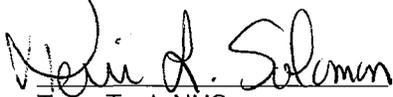
Other Factors Affecting Data Quality: The matrix spike / matrix spike duplicate percent recoveries for antimony were < 75% quality control limit. The ICP serial dilution percent difference was > 10% for lead. Field duplicate imprecision (RPD > 50%) was noted for iron for sample pair 01SS13901 / 01SS13901DUP.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", October 2004 and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (January 2006).

The text of this report has been formulated to address only those problem areas affecting data quality.

TO: R. FISHER – PAGE 3
DATE: NOVEMBER 25, 2008

"I attest that the data referenced herein were validated according to the agreed upon validation criteria as specified in the DOD QSM."



Tetra Tech NUS
Terri L. Solomon
Environmental Scientist



Tetra Tech NUS
Joseph A. Samchuck
Quality Assurance Officer

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

APPENDIX A
QUALIFIED ANALYTICAL RESULTS

Data Validation Qualifier Codes:

- A = Lab Blank Contamination
- B = Field Blank Contamination
- C = Calibration Noncompliance (e.g. % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
- C01 = GC/MS Tuning Noncompliance
- D = MS/MSD Recovery Noncompliance
- E = LCS/LCSD Recovery Noncompliance
- F = Lab Duplicate Imprecision
- G = Field Duplicate Imprecision
- H = Holding Time Exceedance
- I = ICP Serial Dilution Noncompliance
- J = GFAA PDS-GFAA MSA's $r < 0.995$ / ICP PDS Recovery Noncompliance
- K = ICP Interference - includes ICS % R Noncompliance
- L = Instrument Calibration Range Exceedance
- M = Sample Preservation Noncompliance
- N = Internal Standard Noncompliance
- N01 = Internal Standard Recovery Noncompliance Dioxins
- N02 = Recovery Standard Noncompliance Dioxins
- N03 = Clean-up Standard Noncompliance Dioxins
- O = Poor Instrument Performance (e.g. base-line drifting)
- P = Uncertainty near detection limit ($< 2 \times$ IDL for inorganics and $<$ CRQL for organics)
- Q = Other problems (can encompass a number of issues; e.g. chromatography,interferences, etc.)
- R = Surrogates Recovery Noncompliance
- S = Pesticide/PCB Resolution
- T = % Breakdown Noncompliance for DOT and Endrin
- U = % Difference between columns/detectors $>25\%$ for positive results determined via GC/HPLC
- V = Non-linear calibrations; correlation coefficient $r < 0.995$
- W = EMPC result
- X = Signal to noise response drop
- Y = Percent solids $<30\%$
- Z = Uncertainty at 2 sigma deviation is greater than sample activity

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: M

nsample 01SBDIT01
 samp_date 10/1/2008
 lab_id 0810033-01
 qc_type NM
 units MG/KG
 Pct_Solids 91.2
 DUP_OF:

nsample 01SBDIT02
 samp_date 10/1/2008
 lab_id 0810033-02
 qc_type NM
 units MG/KG
 Pct_Solids 80.1
 DUP_OF:

nsample 01SBDIT03
 samp_date 10/1/2008
 lab_id 0810033-03
 qc_type NM
 units MG/KG
 Pct_Solids 70.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	2910		
ANTIMONY	1.1	UJ	D
ARSENIC	2		
BARIUM	7.8		
BERYLLIUM	0.44	U	
CADMIUM	0.22	U	
CALCIUM	582		
CHROMIUM	3.8		
COBALT	1.1	U	
COPPER	2.2		
IRON	2060		
LEAD	7.5	J	I
MAGNESIUM	220	U	
MANGANESE	8		
MERCURY	0.019		
NICKEL	1.1	U	
POTASSIUM	220	U	
SELENIUM	0.66	U	
SILVER	0.22	U	
SODIUM	220	U	
THALLIUM	0.88	U	
VANADIUM	5.4		
ZINC	22.6		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	4230		
ANTIMONY	1.2	UJ	D
ARSENIC	0.75	U	
BARIUM	10.8		
BERYLLIUM	0.5	U	
CADMIUM	0.25	U	
CALCIUM	511		
CHROMIUM	3		
COBALT	1.2	U	
COPPER	1.2	U	
IRON	908		
LEAD	2.5	J	I
MAGNESIUM	250	U	
MANGANESE	3.7		
MERCURY	0.017	U	
NICKEL	1.2	U	
POTASSIUM	250	U	
SELENIUM	0.75	U	
SILVER	0.25	U	
SODIUM	250	U	
THALLIUM	1.0	U	
VANADIUM	2.9		
ZINC	5.3		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	9700		
ANTIMONY	1.4	UJ	D
ARSENIC	1.3		
BARIUM	15.6		
BERYLLIUM	0.57	U	
CADMIUM	0.28	U	
CALCIUM	283	U	
CHROMIUM	9.8		
COBALT	1.4	U	
COPPER	2.2		
IRON	1040		
LEAD	4.8	J	I
MAGNESIUM	283	U	
MANGANESE	3.9		
MERCURY	0.073		
NICKEL	3.9		
POTASSIUM	283	U	
SELENIUM	0.85	U	
SILVER	0.28	U	
SODIUM	283	U	
THALLIUM	1.1	U	
VANADIUM	5.2		
ZINC	4.2		

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: M

nsample 01SS01401
 samp_date 9/30/2008
 lab_id 0810010-03
 qc_type NM
 units MG/KG
 Pct_Solids 86.6
 DUP_OF:

nsample 01SS01401 DUP
 samp_date 9/30/2008
 lab_id 0810010-04
 qc_type NM
 units MG/KG
 Pct_Solids 86.8
 DUP_OF: 01SS01401

nsample 01SS01501
 samp_date 9/30/2008
 lab_id 0810010-05
 qc_type NM
 units MG/KG
 Pct_Solids 89.8
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	7490		
ANTIMONY	1.1	UJ	D
ARSENIC	1.8		
BARIUM	13.8		
BERYLLIUM	0.23	U	
CADMIUM	0.32		
CALCIUM	28700		
CHROMIUM	7.5		
COBALT	1.1	U	
COPPER	11.1		
IRON	7210		
LEAD	47.3	J	I
MAGNESIUM	363		
MANGANESE	67.4		
MERCURY	0.018		
NICKEL	2		
POTASSIUM	230	U	
SELENIUM	0.69	U	
SILVER	0.23	U	
SODIUM	266		
THALLIUM	0.69	U	
VANADIUM	13.8		
ZINC	34.5		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	5680		
ANTIMONY	1.1	UJ	D
ARSENIC	1.7		
BARIUM	11.7		
BERYLLIUM	0.22	U	
CADMIUM	0.3		
CALCIUM	21600		
CHROMIUM	5.7		
COBALT	1.1	U	
COPPER	9.2		
IRON	4530		
LEAD	42	J	I
MAGNESIUM	261		
MANGANESE	49.6		
MERCURY	0.016		
NICKEL	1.8		
POTASSIUM	223	U	
SELENIUM	0.67	U	
SILVER	0.22	U	
SODIUM	223	U	
THALLIUM	0.67	U	
VANADIUM	9.8		
ZINC	34		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	9110		
ANTIMONY	1.1	UJ	D
ARSENIC	1		
BARIUM	32.7		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	2090		
CHROMIUM	7.5		
COBALT	1.1	U	
COPPER	210		
IRON	5680		
LEAD	53	J	I
MAGNESIUM	233		
MANGANESE	10.7		
MERCURY	0.019		
NICKEL	2.5		
POTASSIUM	214	U	
SELENIUM	0.64	U	
SILVER	0.21	U	
SODIUM	214	U	
THALLIUM	0.64	U	
VANADIUM	9.8		
ZINC	32		

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: M

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 units MG/KG
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 units MG/KG
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 units MG/KG
 Pct_Solids 89.3
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	7300		
ANTIMONY	1.1	UJ	D
ARSENIC	2.7		
BARIUM	70		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	32900		
CHROMIUM	9.4		
COBALT	6.8		
COPPER	3.3		
IRON	9050		
LEAD	10.9	J	I
MAGNESIUM	337		
MANGANESE	358		
MERCURY	0.015	U	
NICKEL	2.4		
POTASSIUM	220	U	
SELENIUM	0.66	U	
SILVER	0.22	U	
SODIUM	271		
THALLIUM	0.66	U	
VANADIUM	16		
ZINC	12.3		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	2600		
ANTIMONY	1.1	UJ	D
ARSENIC	0.78		
BARIUM	12.8		
BERYLLIUM	0.23	U	
CADMIUM	0.23	U	
CALCIUM	600		
CHROMIUM	3		
COBALT	1.1	U	
COPPER	3.6		
IRON	1690		
LEAD	7.9	J	I
MAGNESIUM	228	U	
MANGANESE	12.3		
MERCURY	0.016	U	
NICKEL	1.3		
POTASSIUM	228	U	
SELENIUM	0.68	U	
SILVER	0.23	U	
SODIUM	228	U	
THALLIUM	0.68	U	
VANADIUM	4.8		
ZINC	8		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	4810		
ANTIMONY	1.1	UJ	D
ARSENIC	1.1		
BARIUM	10.6		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	233		
CHROMIUM	4.3		
COBALT	1.1	U	
COPPER	1.7		
IRON	2360		
LEAD	5.8	J	I
MAGNESIUM	222	U	
MANGANESE	3.5		
MERCURY	0.023		
NICKEL	1.7		
POTASSIUM	222	U	
SELENIUM	0.67	U	
SILVER	0.22	U	
SODIUM	222	U	
THALLIUM	0.67	U	
VANADIUM	5.8		
ZINC	8		

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: M

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 units MG/KG
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 units MG/KG
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 units MG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	7320		
ANTIMONY	1.1	UJ	D
ARSENIC	1.9		
BARIUM	20.7		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	42400		
CHROMIUM	10.5		
COBALT	1.1	U	
COPPER	4.5		
IRON	3840		
LEAD	14.7	J	I
MAGNESIUM	401		
MANGANESE	89		
MERCURY	0.022		
NICKEL	3.2		
POTASSIUM	215	U	
SELENIUM	0.65	U	
SILVER	0.21	U	
SODIUM	329		
THALLIUM	0.65	U	
VANADIUM	8.5		
ZINC	89		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	12300		
ANTIMONY	1.1	UJ	D
ARSENIC	1.2		
BARIUM	25		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	235		
CHROMIUM	8.2		
COBALT	1.1	U	
COPPER	2.7		
IRON	4180		
LEAD	5.7	J	I
MAGNESIUM	267		
MANGANESE	5.5		
MERCURY	0.029		
NICKEL	5.7		
POTASSIUM	221	U	
SELENIUM	0.66	U	
SILVER	0.22	U	
SODIUM	221	U	
THALLIUM	0.66	U	
VANADIUM	12		
ZINC	7.4		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	6210		
ANTIMONY	1.0	UJ	D
ARSENIC	0.63	U	
BARIUM	11.3		
BERYLLIUM	0.21	U	
CADMIUM	0.21	U	
CALCIUM	1170		
CHROMIUM	4.9		
COBALT	1.0	U	
COPPER	1.6		
IRON	1500	J	G
LEAD	4.6	J	I
MAGNESIUM	209	U	
MANGANESE	5.7		
MERCURY	0.016		
NICKEL	2.6		
POTASSIUM	209	U	
SELENIUM	0.63	U	
SILVER	0.21	U	
SODIUM	209	U	
THALLIUM	0.63	U	
VANADIUM	5.2		
ZINC	6.2		

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: M

nsample 01SS13901 DUP
 samp_date 9/30/2008
 lab_id 0810010-11
 qc_type NM
 units MG/KG
 Pct_Solids 82.9
 DUP_OF: 01SS13901

nsample 01SS42001
 samp_date 9/30/2008
 lab_id 0810010-02
 qc_type NM
 units MG/KG
 Pct_Solids 90.6
 DUP_OF:

Parameter	Result	Val Qual	Qual Code
ALUMINUM	7010		
ANTIMONY	1.2	UJ	D
ARSENIC	1.5		
BARIUM	13.6		
BERYLLIUM	0.24	U	
CADMIUM	0.24	U	
CALCIUM	838		
CHROMIUM	6.7		
COBALT	1.2	U	
COPPER	2		
IRON	3920	J	G
LEAD	5.3	J	I
MAGNESIUM	239	U	
MANGANESE	6.8		
MERCURY	0.015	U	
NICKEL	2.7		
POTASSIUM	239	U	
SELENIUM	0.72	U	
SILVER	0.24	U	
SODIUM	239	U	
THALLIUM	0.72	U	
VANADIUM	9.7		
ZINC	6.6		

Parameter	Result	Val Qual	Qual Code
ALUMINUM	8910		
ANTIMONY	3.6	J	D
ARSENIC	1.5		
BARIUM	17.4		
BERYLLIUM	0.22	U	
CADMIUM	0.22	U	
CALCIUM	5030		
CHROMIUM	11		
COBALT	1.1	U	
COPPER	3		
IRON	4130		
LEAD	70.6	J	I
MAGNESIUM	258		
MANGANESE	20.5		
MERCURY	0.029		
NICKEL	3.4		
POTASSIUM	222	U	
SELENIUM	0.67	U	
SILVER	0.22	U	
SODIUM	222	U	
THALLIUM	0.67	U	
VANADIUM	10.5		
ZINC	27.7		

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SBDIT01
samp_date 10/1/2008
lab_id 0810033-01
qc_type NM
Pct_Solids 91.2
DUP_OF:

nsample 01SBDIT02
samp_date 10/1/2008
lab_id 0810033-02
qc_type NM
Pct_Solids 80.1
DUP_OF:

nsample 01SBDIT03
samp_date 10/1/2008
lab_id 0810033-03
qc_type NM
Pct_Solids 70.3
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.13	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.18	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS01401
samp_date 9/30/2008
lab_id 0810010-03
qc_type NM
Pct_Solids 86.6
DUP_OF:

nsample 01SS01401 DUP
samp_date 9/30/2008
lab_id 0810010-04
qc_type NM
Pct_Solids 86.8
DUP_OF: 01SS01401

nsample 01SS01501
samp_date 9/30/2008
lab_id 0810010-05
qc_type NM
Pct_Solids 89.8
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS01701
 samp_date 9/30/2008
 lab_id 0810010-01
 qc_type NM
 Pct_Solids 90.9
 DUP_OF:

nsample 01SS02401
 samp_date 9/30/2008
 lab_id 0810010-06
 qc_type NM
 Pct_Solids 82.1
 DUP_OF:

nsample 01SS02501
 samp_date 9/30/2008
 lab_id 0810010-07
 qc_type NM
 Pct_Solids 89.3
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS13701
 samp_date 9/30/2008
 lab_id 0810010-08
 qc_type NM
 Pct_Solids 92.7
 DUP_OF:

nsample 01SS13801
 samp_date 9/30/2008
 lab_id 0810010-09
 qc_type NM
 Pct_Solids 87.2
 DUP_OF:

nsample 01SS13901
 samp_date 9/30/2008
 lab_id 0810010-10
 qc_type NM
 Pct_Solids 90.6
 DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.13	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

PROJ_NO: 00700

SDG: GULFPORT12 MEDIA: SOIL DATA FRACTION: MISC

nsample 01SS13901 DUP
samp_date 9/30/2008
lab_id 0810010-11
qc_type NM
Pct_Solids 82.9
DUP_OF: 01SS13901

nsample 01SS42001
samp_date 9/30/2008
lab_id 0810010-02
qc_type NM
Pct_Solids 90.6
DUP_OF:

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.15	U	

Parameter	units	Result	Val Qual	Qual Code
CYANIDE	MG/KG	0.14	U	

APPENDIX B
RESULTS AS REPORTED BY THE LABORATORY

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SBDIT01

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810033-01
 Level (low/med): LOW Date Received: 10/02/08
 % Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2910			P
7440-36-0	Antimony	1.1	U		P
7440-38-2	Arsenic	2.0	J		P
7440-39-3	Barium	7.8	J		P
7440-41-7	Beryllium	0.44	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	582	J		P
7440-47-3	Chromium	3.8			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	2.2	J		P
57-12-5	Cyanide	0.13	U		AS
7439-89-6	Iron	2060			P
7439-92-1	Lead	7.5			P
7439-95-4	Magnesium	220	U		P
7439-96-5	Manganese	8.0			P
7439-97-6	Mercury	0.019	J		AV
7440-02-0	Nickel	1.1	U		P
7440-09-7	Potassium	220	U		P
7782-49-2	Selenium	0.66	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	220	U		P
7440-28-0	Thallium	0.88	U		P
7440-62-2	Vanadium	5.4	J		P
7440-66-6	Zinc	22.6			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SBDIT02

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810033-02
 Level (low/med): LOW Date Received: 10/02/08
 % Solids: 80.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4230			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	0.75	U		P
7440-39-3	Barium	10.8	J		P
7440-41-7	Beryllium	0.50	U		P
7440-43-9	Cadmium	0.25	U		P
7440-70-2	Calcium	511	J		P
7440-47-3	Chromium	3.0			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	1.2	U		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	908			P
7439-92-1	Lead	2.5			P
7439-95-4	Magnesium	250	U		P
7439-96-5	Manganese	3.7	J		P
7439-97-6	Mercury	0.017	U		AV
7440-02-0	Nickel	1.2	U		P
7440-09-7	Potassium	250	U		P
7782-49-2	Selenium	0.75	U		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	250	U		P
7440-28-0	Thallium	1.0	U		P
7440-62-2	Vanadium	2.9	J		P
7440-66-6	Zinc	5.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SBDIT03

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I:
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810033-03
 Level (low/med): LOW Date Received: 10/02/08
 % Solids: 70.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9700			P
7440-36-0	Antimony	1.4	U		P
7440-38-2	Arsenic	1.3	J		P
7440-39-3	Barium	15.6	J		P
7440-41-7	Beryllium	0.57	U		P
7440-43-9	Cadmium	0.28	U		P
7440-70-2	Calcium	283	U		P
7440-47-3	Chromium	9.8			P
7440-48-4	Cobalt	1.4	U		P
7440-50-8	Copper	2.2	J		P
57-12-5	Cyanide	0.18	U		AS
7439-89-6	Iron	1040			P
7439-92-1	Lead	4.8			P
7439-95-4	Magnesium	283	U		P
7439-96-5	Manganese	3.9	J		P
7439-97-6	Mercury	0.073			AV
7440-02-0	Nickel	3.9	J		P
7440-09-7	Potassium	283	U		P
7782-49-2	Selenium	0.85	U		P
7440-22-4	Silver	0.28	U		P
7440-23-5	Sodium	283	U		P
7440-28-0	Thallium	1.1	U		P
7440-62-2	Vanadium	5.2	J		P
7440-66-6	Zinc	4.2	J		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01401

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-03
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7490			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.8	J		P
7440-39-3	Barium	13.8	J		P
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.32	J		P
7440-70-2	Calcium	28700			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	11.1			P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	7210			P
7439-92-1	Lead	47.3			P
7439-95-4	Magnesium	363	J		P
7439-96-5	Manganese	67.4			P
7439-97-6	Mercury	0.018	J		AV
7440-02-0	Nickel	2.0	J		P
7440-09-7	Potassium	230	U	N	P
7782-49-2	Selenium	0.69	U		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	266	J		P
7440-28-0	Thallium	0.69	U		P
7440-62-2	Vanadium	13.8			P
7440-66-6	Zinc	34.5			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01401 DUP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-04
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5680			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.7	J		P
7440-39-3	Barium	11.7	J		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.30	J		P
7440-70-2	Calcium	21600			P
7440-47-3	Chromium	5.7			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	9.2			P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	4530			P
7439-92-1	Lead	42.0			P
7439-95-4	Magnesium	261	J		P
7439-96-5	Manganese	49.6			P
7439-97-6	Mercury	0.016	J		AV
7440-02-0	Nickel	1.8	J		P
7440-09-7	Potassium	223	U	N	P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	223	U		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	9.8	J		P
7440-66-6	Zinc	34.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01501

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I.
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-05
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 90.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9110			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.0	J		P
7440-39-3	Barium	32.7	J		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	2090			P
7440-47-3	Chromium	7.5			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	210			P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	5680			P
7439-92-1	Lead	53.0			P
7439-95-4	Magnesium	233	J		P
7439-96-5	Manganese	10.7			P
7439-97-6	Mercury	0.019	J		AV
7440-02-0	Nickel	2.5	J		P
7440-09-7	Potassium	214	U	N	P
7782-49-2	Selenium	0.64	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	214	U		P
7440-28-0	Thallium	0.64	U		P
7440-62-2	Vanadium	9.8	J		P
7440-66-6	Zinc	32.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS01701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-01
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7300			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	2.7			P
7440-39-3	Barium	70.0			P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	32900			P
7440-47-3	Chromium	9.4			P
7440-48-4	Cobalt	6.8	J		P
7440-50-8	Copper	3.3	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	9050			P
7439-92-1	Lead	10.9			P
7439-95-4	Magnesium	337	J		P
7439-96-5	Manganese	358			P
7439-97-6	Mercury	0.015	U		AV
7440-02-0	Nickel	2.4	J		P
7440-09-7	Potassium	220	U	N	P
7782-49-2	Selenium	0.66	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	271	J		P
7440-28-0	Thallium	0.66	U		P
7440-62-2	Vanadium	16.0			P
7440-66-6	Zinc	12.3			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS02401

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-06
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2600			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	0.78	J		P
7440-39-3	Barium	12.8	J		P
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	600	J		P
7440-47-3	Chromium	3.0			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	3.6	J		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	1690			P
7439-92-1	Lead	7.9			P
7439-95-4	Magnesium	228	U		P
7439-96-5	Manganese	12.3			P
7439-97-6	Mercury	0.016	U		AV
7440-02-0	Nickel	1.3	J		P
7440-09-7	Potassium	228	U	N	P
7782-49-2	Selenium	0.68	U		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	228	U		P
7440-28-0	Thallium	0.68	U		P
7440-62-2	Vanadium	4.8	J		P
7440-66-6	Zinc	8.0			P

Color Before: _____ Clarity Before: _____ Texture: _____
 Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS02501

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-07
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4810			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.1	J		P
7440-39-3	Barium	10.6	J		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	233	J		P
7440-47-3	Chromium	4.3			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	1.7	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	2360			P
7439-92-1	Lead	5.8			P
7439-95-4	Magnesium	222	U		P
7439-96-5	Manganese	3.5			P
7439-97-6	Mercury	0.023	J		AV
7440-02-0	Nickel	1.7	J		P
7440-09-7	Potassium	222	U	N	P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	222	U		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	5.8	J		P
7440-66-6	Zinc	8.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS13701

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-08
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 93.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7320			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.9	J		P
7440-39-3	Barium	20.7	J		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	42400			P
7440-47-3	Chromium	10.5			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	4.5	J		P
57-12-5	Cyanide	0.13	U		AS
7439-89-6	Iron	3840			P
7439-92-1	Lead	14.7			P
7439-95-4	Magnesium	401	J		P
7439-96-5	Manganese	89.0			P
7439-97-6	Mercury	0.022	J		AV
7440-02-0	Nickel	3.2	J		P
7440-09-7	Potassium	215	U	N	P
7782-49-2	Selenium	0.65	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	329	J		P
7440-28-0	Thallium	0.65	U		P
7440-62-2	Vanadium	8.5	J		P
7440-66-6	Zinc	89.0			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS13801

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-09
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 87.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	12300			P
7440-36-0	Antimony	1.1	U	N	P
7440-38-2	Arsenic	1.2	J		P
7440-39-3	Barium	25.0	J		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	235	J		P
7440-47-3	Chromium	8.2			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	2.7	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	4180			P
7439-92-1	Lead	5.7			P
7439-95-4	Magnesium	267	J		P
7439-96-5	Manganese	5.5			P
7439-97-6	Mercury	0.029	J		AV
7440-02-0	Nickel	5.7	J		P
7440-09-7	Potassium	221	U	N	P
7782-49-2	Selenium	0.66	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	221	U		P
7440-28-0	Thallium	0.66	U		P
7440-62-2	Vanadium	12.0			P
7440-66-6	Zinc	7.4			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS13901

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-10
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6210			P
7440-36-0	Antimony	1.0	U	N	P
7440-38-2	Arsenic	0.63	U		P
7440-39-3	Barium	11.3	J		P
7440-41-7	Beryllium	0.21	U		P
7440-43-9	Cadmium	0.21	U		P
7440-70-2	Calcium	1170			P
7440-47-3	Chromium	4.9			P
7440-48-4	Cobalt	1.0	U		P
7440-50-8	Copper	1.6	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	1500			P
7439-92-1	Lead	4.6			P
7439-95-4	Magnesium	209	U		P
7439-96-5	Manganese	5.7			P
7439-97-6	Mercury	0.016	J		AV
7440-02-0	Nickel	2.6	J		P
7440-09-7	Potassium	209	U	N	P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.21	U		P
7440-23-5	Sodium	209	U		P
7440-28-0	Thallium	0.63	U		P
7440-62-2	Vanadium	5.2	J		P
7440-66-6	Zinc	6.2			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS13901 DUP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-11
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 83.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7010			P
7440-36-0	Antimony	1.2	U	N	P
7440-38-2	Arsenic	1.5	J		P
7440-39-3	Barium	13.6	J		P
7440-41-7	Beryllium	0.24	U		P
7440-43-9	Cadmium	0.24	U		P
7440-70-2	Calcium	838	J		P
7440-47-3	Chromium	6.7			P
7440-48-4	Cobalt	1.2	U		P
7440-50-8	Copper	2.0	J		P
57-12-5	Cyanide	0.15	U		AS
7439-89-6	Iron	3920			P
7439-92-1	Lead	5.3			P
7439-95-4	Magnesium	239	U		P
7439-96-5	Manganese	6.8			P
7439-97-6	Mercury	0.015	U		AV
7440-02-0	Nickel	2.7	J		P
7440-09-7	Potassium	239	U	N	P
7782-49-2	Selenium	0.72	U		P
7440-22-4	Silver	0.24	U		P
7440-23-5	Sodium	239	U		P
7440-28-0	Thallium	0.72	U		P
7440-62-2	Vanadium	9.7	J		P
7440-66-6	Zinc	6.6			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

01SS42001

Lab Name: Empirical Laboratories Contract: TetraTech NUS, I
 Lab Code: TetraTech Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Matrix (soil/water): SOIL Lab Sample ID: 0810010-02
 Level (low/med): LOW Date Received: 10/01/08
 % Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8910			P
7440-36-0	Antimony	3.6	J	N	P
7440-38-2	Arsenic	1.5	J		P
7440-39-3	Barium	17.4	J		P
7440-41-7	Beryllium	0.22	U		P
7440-43-9	Cadmium	0.22	U		P
7440-70-2	Calcium	5030			P
7440-47-3	Chromium	11.0			P
7440-48-4	Cobalt	1.1	U		P
7440-50-8	Copper	3.0	J		P
57-12-5	Cyanide	0.14	U		AS
7439-89-6	Iron	4130			P
7439-92-1	Lead	70.6			P
7439-95-4	Magnesium	258	J		P
7439-96-5	Manganese	20.5			P
7439-97-6	Mercury	0.029	J		AV
7440-02-0	Nickel	3.4	J		P
7440-09-7	Potassium	222	U	N	P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.22	U		P
7440-23-5	Sodium	222	U		P
7440-28-0	Thallium	0.67	U		P
7440-62-2	Vanadium	10.5	J		P
7440-66-6	Zinc	27.7			P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

APPENDIX C
SUPPORT DOCUMENTATION

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 012
Work Order # 0810010, 0810033
October, 2008

Empirical Laboratories ID	Client ID
0810010-01	01SS01701
0810010-02	01SS42001
0810010-03	01SS01401
0810010-04	01SS01401DUP
0810010-05	01SS01501
0810010-06	01SS02401
0810010-07	01SS02501
0810010-08	01SS13701
0810010-09	01SS13801
0810010-10	01SS13901
0810010-11	01SS13901DUP
0810033-01	01SBDIT01
0810033-02	01SBDIT02
0810033-03	01SBDIT03

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.


 Betty DeVille
 Inorganic Lab Manager

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

I. HOLDING TIMES

- A. Sample Preparation:** All holding times were met.
- B. Sample Analysis:** All holding times were met .

II. METHODS

US EPA SW846 Method 3050B was used to digest and method 6010B was used for analysis of ICAP metals. Method 7471A was used to digest and analyze mercury and method 9012A was used to distill and analyze cyanide. Note: The "U" flag indicates that the sample concentration is reported down to the laboratory MDL. The "J" flag indicates that the analyte result is between the

INORGANIC CASE NARRATIVE
TETRA TECH NUS
SDG# Gulfport 012
Work Order # 0810010, 0810033
October, 2008

laboratory reporting limit and the laboratory MDL. All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

III. PREPARATION

All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

IV. ANALYSIS

A. Calibration: All calibration criteria were met with the following exception: The initial calibration verification and first CCV for cyanide on the first cyanide analysis was out of the specification limits of 90 to 110% for cyanide at 111.0 and 112.4%. All sample concentrations were less than the MDL. There is no impact to the sample data.

The second and fourth CCV on the first ICAP analysis was out of the specification limits of 90 to 110% for potassium at 110.8 and 111.0%. The second CCV impacts 01SS01701, 01SS42001, 01SS01401, 01SS01401 DUP, 01SS01501, 01SS02401, 01S02501, 01SS13701, 01SS13801, 01SS13901 and their associated QC. The fourth CCV impacts 01SS13901 DUP.

B. Blanks: All blank criteria were met.

C. Spikes: All matrix spikes quality control criteria were met with the following exceptions: The matrix spike and the matrix spike duplicate were out of the specification limits for antimony at 58.4 and 61.7% and for potassium at 126.6 and 126.1% on sample 01SS02501. The post digestion spike recovery was at 97.8% for antimony and 120.9% for potassium. **All associated data are flagged with an "N" on the final report.**

D. Duplicates: All duplicate quality control criteria were met.

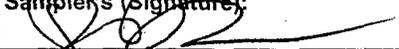
E. Samples: All sample analysis proceeded normally.

F. Laboratory Control Samples: All percent recovery quality control criteria were met.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42079

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:								Lab Use Only:			
Name <u>Per Contract</u>		Name <u>PER CONTRACT</u>		VOC B260 SVOC B270 PEST PCB B081/B2 HCB B151 TALMET Hg B010/H2 CN G012 ASBESTOS								VOA Headspace Y N <u>NA</u>			
Company <u>Pros</u>		Company <u>Project</u>										Field Filtered Y N <u>NA</u>			
Address <u>0700</u>		Address <u>1126 00 700</u>										Correct Containers <u>Y</u> N NA			
City <u>Tech NUS</u>		City _____										Discrepancies Y <u>N</u> NA			
State, Zip _____		State, Zip <u>P.O. 1028532</u>										Cust. Seals Intact <u>Y</u> N NA			
Phone _____		Phone _____		Containers Intact <u>Y</u> N NA											
Fax _____		Fax _____		Airbill #: <u>7685, 1281</u>											
E-mail _____		E-mail _____		CAR #: _____											
Project No./Name: <u>00700/SITE 1 R1</u>		Sampler's (Signature): 													
Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix									Comments	No. of Bottles	Lab Use Only Containers/Pres.	
<u>0810010-01</u>	<u>9/30/08 10:35</u>	<u>015501701</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>1-0, 1L, 3-0</u>
<u>-02 W5 -02</u>	<u>9/30/08 11:05</u>	<u>015542001</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	
<u>-03 -03</u>	<u>9/30/08 11:30</u>	<u>015501401</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	
<u>-04 -04</u>	<u>9/30/08 11:30</u>	<u>015501401 DUP</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	<u>1L, 3-0</u>
<u>-05 -05</u>	<u>9/30/08 11:40</u>	<u>015501501</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>Rows 4-0, 1L</u>
<u>-06 -06</u>	<u>9/30/08 14:20</u>	<u>015502401</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	
<u>-07 -07</u>	<u>9/30/08 14:45</u>	<u>015502501</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	
<u>↓ -08</u>	<u>9/30/08 14:50</u>	<u>015502501 MS</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	<u>3-0, 1L, 1M</u>
<u>↓ -09</u>	<u>9/30/08 14:55</u>	<u>015502501 MD</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>5*</u>	
<u>-08 -10</u>	<u>9/30/08 15:20</u>	<u>015513701</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	<u>4-0, 1L, 1M</u>
<u>-09 -11</u>	<u>9/30/08 15:40</u>	<u>015513801</u>	<u>Soil</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>		<u>6</u>	
Sample Kit Prep'd by: (Signature)		Date/Time	Received By: (Signature)		REMARKS: * NO DUP FOR ASBESTOS * RAPID TURN AROUND * TIME REQUIRED								Details:		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)										Page <u>1</u> of <u>2</u>		
Relinquished by: (Signature)		Date/Time	Received By: (Signature)										Cooler No. <u>1</u> of <u>2</u>		
Received for Laboratory by: (Signature)		Date/Time	Temperature										Date Shipped <u>9/30/08</u>		
		<u>10/1/08</u>	<u>0-8°C, 0-10°C</u>		Shipped By <u>Fed Ex</u>										
					Turnaround <u>RAPID</u>										

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

09:00

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42010

SHIP TO: 227 French Landing Drive, Suite 550 ♦ Nashville, TN 37228 ♦ 615-345-1115 ♦ (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:						Lab Use Only:				
Name _____		Name <u>P.O. 1028532</u>		VDC SVDC PEST/PCB HERB TAL METACT HY+CN ASBESTOS	Company _____		Company _____		VOA Headspace	Y	N	NA		
Address _____		Address _____			City _____		City _____		Field Filtered	Y	N	NA		
State, Zip _____		State, Zip _____			Phone _____		Phone _____		Correct Containers	Y	N	NA		
E-mail _____		E-mail _____			Project No./Name:		Sampler's (Signature):		Discrepancies	Y	N	NA		
Lab Use Only Lab # <u>WS</u>		Date/Time Sampled			Sample Description		Sample Matrix		Comments		No. of Bottles		Lab Use Only Containers/Pres.	
<u>0810010-12</u>		<u>9/30/08 16:00</u>			<u>015513901</u>		<u>soil</u>				<u>6</u>		<u>4-0, 1L, 1M</u>	
<u>-11-15</u>		<u>9/30/08 16:00</u>		<u>015513901 DUP</u>		<u>soil</u>				<u>5</u>		<u>3-0, 1L, 1M</u>		
Sample Kit Prep'd by: (Signature)		Date/Time		Received By: (Signature)		REMARKS: ✘ Quick Turn ✘ Around TIME						Details:		
Relinquished by: (Signature)		Date/Time		Received By: (Signature)								Page <u>2</u> of <u>2</u>		
Relinquished by: (Signature)		Date/Time		Received By: (Signature)								Cooler No. <u>2</u> of <u>2</u>		
Received on Laboratory by: (Signature)		Date/Time		Temperature								Date Shipped <u>9/30/08</u>		
<u>[Signature]</u>		<u>10/1/08 09:00</u>		<u>0-80C, 0-100</u>		Shipped By <u>FedEx</u>								
						Turnaround <u>RAPID</u>								

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD

42214

SHIP TO: 227 French Landing Drive, Suite 550 + Nashville, TN 37228 + 615-345-1115 + (fax) 615-846-5426

Send Results to:		Send Invoice to:		Analysis Requirements:						Lab Use Only:				
Name <u>PIED PA</u>		Name _____		VOC 8260B SVOC 8270C PEST/PCB 80812 HERB 8151A TRACE METS + Hg 6010B CN 9012A							VOA Headspace	Y	N	(NA)
Company <u>Tetra Tech, LLC</u>		Company _____									Field Filtered	Y	N	(NA)
Address _____		Address <u>532</u>									Correct Containers	(Y)	N	(NA)
City <u>1028</u>		City _____									Discrepancies	Y	(N)	(NA)
State, Zip _____		State, Zip _____									Cust. Seals Intact	(Y)	N	(NA)
Phone _____		Phone _____									Containers Intact	(Y)	N	(NA)
Fax _____		Fax _____		Airbill #: <u>5899</u>		CAR #: _____								
E-mail _____		E-mail _____		Project No./Name: _____		Sampler's (Signature): _____								

Lab Use Only Lab #	Date/Time Sampled	Sample Description	Sample Matrix								Comments	No. of Bottles	Lab Use Only Containers/Pres.
6810033-01	10/18/08 10:00	015BDIT01	Soil	✓	✓	✓	✓	✓	✓	✓		5	3-0, 1L, 1M
-02	10:30	015BDIT02	Soil	✓	✓	✓	✓	✓	✓	✓		5	↓
-03	1100	015BDIT03	Soil	✓	✓	✓	✓	✓	✓	✓		5	↓
		TEMP BLANK											
<div style="font-size: 2em; opacity: 0.5; transform: rotate(-15deg); position: absolute; top: 50%; left: 50%;"> [Signature] 10/18/08 </div>													

Sample Kit Prep'd by: (Signature)	Date/Time	Received By: (Signature)	REMARKS: <div style="font-size: 1.5em; font-family: cursive;">* Quick Turn *</div>	Details:
Relinquished by: (Signature)	Date/Time	Received By: (Signature)		Page <u>1</u> of <u>1</u>
Relinquished by: (Signature)	Date/Time	Received By: (Signature)		Cooler No. <u>1</u> of <u>1</u>
Received for Laboratory by: (Signature)	Date/Time	Temperature		Date Shipped <u>12/01/08</u>
	<u>10/2/08 09:00</u>	<u>3.0°C</u>	Shipped By <u>[Signature]</u>	Turnaround <u>3-7D</u>

Distribution: Original and yellow copies accompany sample shipment to laboratory; Pink retained by samplers.

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HERB	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HERB	UG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/10/2008	5	4	9
HERB	UG/KG	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/10/2008	3	7	10
HG	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
HG	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/8/2008	10/8/2008	7	0	7
HG	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
HG	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/3/2008	2	1	3
M	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
M	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
M	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/8/2008	10/9/2008	7	1	8
M	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/2/2008	10/7/2008	2	5	7
CN	MG/KG	01SS13701	0810010-08	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5
CN	MG/KG	01SS13901 DUP	0810010-11	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS13901	0810010-10	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS13801	0810010-09	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS02501	0810010-07	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS02401	0810010-06	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT01	0810033-01	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5
CN	MG/KG	01SS01701	0810010-01	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01501	0810010-05	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01401 DUP	0810010-04	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SS01401	0810010-03	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
CN	MG/KG	01SBDIT03	0810033-03	NM	10/1/2008	10/6/2008	10/6/2008	5	0	5

SORT	UNITS	NSAMPLE	LAB ID	QC TYPE	SAMP DATE	EXTR DATE	ANAL DATE	SMP EXTR	EXTR ANL	SMP ANL
CN	MG/KG	01SS42001	0810010-02	NM	9/30/2008	10/6/2008	10/6/2008	6	0	6
OS	%	01SS42001	0810010-02	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01401 DUP	0810010-04	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13901 DUP	0810010-11	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13801	0810010-09	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS02501	0810010-07	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01501	0810010-05	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01401	0810010-03	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SBDIT03	0810033-03	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SBDIT02	0810033-02	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SBDIT01	0810033-01	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	%	01SS02401	0810010-06	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	%	01SS01701	0810010-01	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SBDIT02	0810033-02	NM	10/1/2008	10/7/2008	10/8/2008	6	1	7
OS	UG/KG	01SS13901	0810010-10	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7
OS	UG/KG	01SS13701	0810010-08	NM	9/30/2008	10/3/2008	10/7/2008	3	4	7

**NCBC GULFPORT
SOIL DATA
GULFPORT12**

FRACTION	CHEMICAL	01SS01401	UNITS	01SS01401 DUP	RPD	D
M	ALUMINUM	7490	MG/KG	5680	27.49	1810.00
M	ARSENIC	1.8	MG/KG	1.7	5.71	0.10
M	BARIUM	13.8	MG/KG	11.7	16.47	2.10
M	CADMIUM	0.32	MG/KG	0.3	6.45	0.02
M	CALCIUM	28700	MG/KG	21600	28.23	7100.00
M	CHROMIUM	7.5	MG/KG	5.7	27.27	1.80
M	COPPER	11.1	MG/KG	9.2	18.72	1.90
M	IRON	7210	MG/KG	4530	45.66	2680.00
M	LEAD	47.3	MG/KG	42	11.87	5.30
M	MAGNESIUM	363	MG/KG	261	32.69	102.00
M	MANGANESE	67.4	MG/KG	49.6	30.43	17.80
M	MERCURY	0.018	MG/KG	0.016	11.76	0.00
M	NICKEL	2	MG/KG	1.8	10.53	0.20
M	SODIUM	266	MG/KG	ND	200.00	266.00
M	VANADIUM	13.8	MG/KG	9.8	33.90	4.00
M	ZINC	34.5	MG/KG	34	1.46	0.50

Current RPD Quality Control Limit: 50 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

**NCBC GULFPORT
SOIL DATA
GULFPORT12**

FRACTION	CHEMICAL	01SS13901	UNITS	01SS13901 DUP	RPD	D
M	ALUMINUM	6210	MG/KG	7010	12.10	800.00
M	ARSENIC	ND	MG/KG	1.5	200.00	1.50
M	BARIUM	11.3	MG/KG	13.6	18.47	2.30
M	CALCIUM	1170	MG/KG	838	33.07	332.00
M	CHROMIUM	4.9	MG/KG	6.7	31.03	1.80
M	COPPER	1.6	MG/KG	2	22.22	0.40
M	IRON	1500	MG/KG	3920	89.30	2420.00
M	LEAD	4.6	MG/KG	5.3	14.14	0.70
M	MANGANESE	5.7	MG/KG	6.8	17.60	1.10
M	MERCURY	0.016	MG/KG	ND	200.00	0.02
M	NICKEL	2.6	MG/KG	2.7	3.77	0.10
M	VANADIUM	5.2	MG/KG	9.7	60.40	4.50
M	ZINC	6.2	MG/KG	6.6	6.25	0.40

Current RPD Quality Control Limit: 50 %.

Shaded cells indicate RPDs that exceed the applicable quality control limit.

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Initial Calibration Source: AccustandardContinuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10300.18	103.0	10000.0	10606.79	106.1	10934.54	109.3	P
Antimony	1000.0	968.70	96.9	1000.0	1011.17	101.1	1021.59	102.2	P
Arsenic	1000.0	1043.70	104.4	1000.0	1040.66	104.1	1040.11	104.0	P
Barium	1000.0	996.38	99.6	1000.0	1024.60	102.5	1038.52	103.9	P
Beryllium	1000.0	1020.29	102.0	1000.0	1012.57	101.3	1047.07	104.7	P
Cadmium	1000.0	1053.38	105.3	1000.0	1026.49	102.6	1033.78	103.4	P
Calcium	1000.0	976.50	97.6	1000.0	953.59	95.4	967.01	96.7	P
Chromium	1000.0	1003.74	100.4	1000.0	1007.14	100.7	1015.93	101.6	P
Cobalt	1000.0	977.59	97.8	1000.0	968.18	96.8	1001.92	100.2	P
Copper	1000.0	1029.94	103.0	1000.0	1047.20	104.7	1067.81	106.8	P
Cyanide	100.0	111.00	111.0	100.0	112.40	112.4	104.50	104.5	AS
Iron	10000.0	10126.20	101.3	10000.0	10125.12	101.3	10261.85	102.6	P
Lead	1000.0	1000.51	100.1	1000.0	1006.34	100.6	1020.74	102.1	P
Magnesium	1000.0	948.21	94.8	1000.0	941.62	94.2	948.99	94.9	P
Manganese	1000.0	1039.03	103.9	1000.0	1033.94	103.4	1034.59	103.5	P
Mercury	4.0	4.36	109.0	4.0	3.99	99.8	3.95	98.8	AV
Nickel	1000.0	1020.03	102.0	1000.0	1008.63	100.9	1016.37	101.6	P
Potassium	10000.0	10473.94	104.7	10000.0	10962.37	109.6	11080.09	110.8	P
Selenium	1000.0	1022.49	102.2	1000.0	1018.04	101.8	1034.60	103.5	P
Silver	500.0	475.35	95.1	500.0	481.44	96.3	492.41	98.5	P
Sodium	11000.0	11459.57	104.2	11000.0	11520.72	104.7	11863.40	107.8	P
Thallium	1000.0	972.23	97.2	1000.0	1015.89	101.6	1026.58	102.7	P
Vanadium	1000.0	1004.59	100.5	1000.0	1003.86	100.4	1017.82	101.8	P
Zinc	1000.0	1011.21	101.1	1000.0	986.36	98.6	1007.87	100.8	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Initial Calibration Source: Accustandard

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				10000.0	10839.29	108.4	10908.53	109.1	P
Antimony				1000.0	995.43	99.5	1001.51	100.2	P
Arsenic				1000.0	1059.52	106.0	1057.05	105.7	P
Barium				1000.0	1033.04	103.3	1038.46	103.8	P
Beryllium				1000.0	1038.04	103.8	1054.89	105.5	P
Cadmium				1000.0	1063.09	106.3	1066.24	106.6	P
Calcium				1000.0	998.78	99.9	1012.63	101.3	P
Chromium				1000.0	1016.65	101.7	1021.01	102.1	P
Cobalt				1000.0	1017.84	101.8	1029.41	102.9	P
Copper				1000.0	1073.19	107.3	1080.08	108.0	P
Iron				10000.0	10288.17	102.9	10349.50	103.5	P
Lead				1000.0	1033.27	103.3	1035.64	103.6	P
Magnesium				1000.0	960.61	96.1	959.27	95.9	P
Manganese				1000.0	1048.00	104.8	1055.06	105.5	P
Nickel				1000.0	1037.31	103.7	1037.94	103.8	P
Potassium				10000.0	10948.66	109.5	10963.91	109.6	P
Selenium				1000.0	1069.36	106.9	1075.23	107.5	P
Silver				500.0	492.99	98.6	497.10	99.4	P
Sodium				11000.0	12130.16	110.3	12210.72	111.0	P
Thallium				1000.0	999.71	100.0	1006.52	100.7	P
Vanadium				1000.0	1027.23	102.7	1033.08	103.3	P
Zinc				1000.0	1033.30	103.3	1039.92	104.0	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Initial Calibration Source: Accustandard

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	10000.0	10510.01	105.1	10000.0	10705.17	107.1	10164.30	101.6	P
Antimony	1000.0	936.86	93.7	1000.0	985.19	98.5	941.29	94.1	P
Arsenic	1000.0	1009.32	100.9	1000.0	1029.58	103.0	980.54	98.1	P
Barium	1000.0	986.75	98.7	1000.0	1009.01	100.9	957.88	95.8	P
Beryllium	1000.0	1020.06	102.0	1000.0	1004.67	100.5	968.02	96.8	P
Cadmium	1000.0	1019.04	101.9	1000.0	1007.48	100.7	969.52	97.0	P
Calcium	1000.0	1040.81	104.1	1000.0	1052.12	105.2	967.09	96.7	P
Chromium	1000.0	972.73	97.3	1000.0	987.83	98.8	950.85	95.1	P
Cobalt	1000.0	977.74	97.8	1000.0	948.70	94.9	915.49	91.5	P
Copper	1000.0	1001.89	100.2	1000.0	1036.55	103.7	985.99	98.6	P
Iron	10000.0	10119.02	101.2	10000.0	10066.61	100.7	9663.18	96.6	P
Lead	1000.0	976.54	97.7	1000.0	983.94	98.4	943.42	94.3	P
Magnesium	1000.0	937.97	93.8	1000.0	951.63	95.2	906.63	90.7	P
Manganese	1000.0	1012.71	101.3	1000.0	1017.64	101.8	972.23	97.2	P
Mercury	4.0	3.77	94.2	4.0	4.18	104.5			AV
Nickel	1000.0	987.42	98.7	1000.0	985.13	98.5	945.50	94.6	P
Potassium	10000.0	10511.22	105.1	10000.0	10943.68	109.4	10296.76	103.0	P
Selenium	1000.0	1014.06	101.4	1000.0	1000.82	100.1	953.80	95.4	P
Silver	500.0	482.10	96.4	500.0	476.76	95.4	459.21	91.8	P
Sodium	11000.0	11712.08	106.5	11000.0	11790.35	107.2	11279.53	102.5	P
Thallium	1000.0	948.29	94.8	1000.0	1002.50	100.2	961.72	96.2	P
Vanadium	1000.0	976.88	97.7	1000.0	986.16	98.6	944.14	94.4	P
Zinc	1000.0	998.14	99.8	1000.0	963.10	96.3	932.63	93.3	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Initial Calibration Source: Accustandard

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				10000.0	10133.62	101.3	10542.01	105.4	P
Antimony				1000.0	937.95	93.8	954.30	95.4	P
Arsenic				1000.0	975.92	97.6	983.47	98.3	P
Barium				1000.0	955.00	95.5	980.45	98.0	P
Beryllium				1000.0	966.15	96.6	977.20	97.7	P
Cadmium				1000.0	958.13	95.8	965.38	96.5	P
Calcium				1000.0	954.98	95.5	966.93	96.7	P
Chromium				1000.0	944.02	94.4	951.45	95.1	P
Cobalt				1000.0	909.25	90.9	938.29	93.8	P
Copper				1000.0	985.31	98.5	1015.61	101.6	P
Iron				10000.0	9596.36	96.0	9702.39	97.0	P
Lead				1000.0	930.63	93.1	954.84	95.5	P
Magnesium				1000.0	899.36	89.9	910.24	91.0	P
Manganese				1000.0	968.13	96.8	981.85	98.2	P
Nickel				1000.0	935.67	93.6	949.84	95.0	P
Potassium				10000.0	10313.99	103.1	10682.78	106.8	P
Selenium				1000.0	946.74	94.7	980.32	98.0	P
Silver				500.0	459.47	91.9	474.12	94.8	P
Sodium				11000.0	11217.37	102.0	11833.79	107.6	P
Thallium				1000.0	955.39	95.5	976.48	97.6	P
Vanadium				1000.0	939.03	93.9	951.19	95.1	P
Zinc				1000.0	919.55	92.0	935.96	93.6	P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Initial Calibration Source: Accustandard

Continuing Calibration Source: Spex

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration				M	
	True	Found	%R(1)	True	Found	%R(1)	Found		%R(1)
Aluminum				10000.0	10239.36	102.4			P
Antimony				1000.0	944.78	94.5			P
Arsenic				1000.0	983.81	98.4			P
Barium				1000.0	963.02	96.3			P
Beryllium				1000.0	982.03	98.2			P
Cadmium				1000.0	968.34	96.8			P
Calcium				1000.0	1004.47	100.4			P
Chromium				1000.0	952.05	95.2			P
Cobalt				1000.0	929.50	93.0			P
Copper				1000.0	990.65	99.1			P
Iron				10000.0	9694.32	96.9			P
Lead				1000.0	950.49	95.0			P
Magnesium				1000.0	904.04	90.4			P
Manganese				1000.0	977.79	97.8			P
Nickel				1000.0	947.11	94.7			P
Potassium				10000.0	10311.25	103.1			P
Selenium				1000.0	969.88	97.0			P
Silver				500.0	465.95	93.2			P
Sodium				11000.0	11361.15	103.3			P
Thallium				1000.0	962.91	96.3			P
Vanadium				1000.0	946.33	94.6			P
Zinc				1000.0	939.36	93.9			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	124.16	103.5		
Arsenic				20.0	22.10	110.5		
Barium								
Beryllium				10.0	10.61	106.1		
Cadmium				10.0	10.47	104.7		
Calcium								
Chromium				20.0	19.82	99.1		
Cobalt				100.0	96.98	97.0		
Copper				50.0	50.39	100.8		
Iron								
Lead				6.0	5.80	96.7		
Magnesium								
Manganese				30.0	30.88	102.9		
Nickel				80.0	80.07	100.1		
Potassium								
Selenium				10.0	12.14	121.4		
Silver				20.0	19.01	95.0		
Sodium								
Thallium				20.0	20.99	105.0		
Vanadium				100.0	99.23	99.2		
Zinc				40.0	39.77	99.4		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

AA CRDL Standard Source: _____

ICP CRDL Standard Source: Spex

Concentration Units: ug/L

Analyte	True	Found	%R	CRDL Standard for ICP				
				Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum								
Antimony				120.0	125.10	104.2		
Arsenic				20.0	22.07	110.4		
Barium								
Beryllium				10.0	10.88	108.8		
Cadmium				10.0	10.56	105.6		
Calcium								
Chromium				20.0	19.78	98.9		
Cobalt				100.0	95.49	95.5		
Copper				50.0	51.41	102.8		
Iron								
Lead				6.0	6.98	116.3		
Magnesium								
Manganese				30.0	31.11	103.7		
Nickel				80.0	78.40	98.0		
Potassium								
Selenium				10.0	10.45	104.5		
Silver				20.0	19.14	95.7		
Sodium								
Thallium				20.0	24.59	123.0		
Vanadium				100.0	99.71	99.7		
Zinc				40.0	38.98	97.4		

Control Limits: no limits have been established by EPA at this time

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Preparation Blank Matrix (soil/water): SOILPreparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	50.0	U	50.0	U	50.0	U	50.0	U	10.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Cyanide	5.0	U	5.0	U	5.0	U			0.125	U	AS
Iron	30.0	U	30.0	U	30.0	U	30.0	U	6.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	0.300	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Mercury	0.080	U	0.080	U	0.080	U			0.013	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Thallium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank		M
			1	C	2	C	3	C	C		
Aluminum			50.0	U							P
Antimony			5.0	U							P
Arsenic			3.0	U							P
Barium			5.0	U							P
Beryllium			1.0	U							P
Cadmium			1.0	U							P
Calcium			1000.0	U							P
Chromium			2.0	U							P
Cobalt			5.0	U							P
Copper			5.0	U							P
Iron			30.0	U							P
Lead			1.5	U							P
Magnesium			1000.0	U							P
Manganese			3.0	U							P
Nickel			5.0	U							P
Potassium			1000.0	U							P
Selenium			3.0	U							P
Silver			1.0	U							P
Sodium			1000.0	U							P
Thallium			3.0	U							P
Vanadium			5.0	U							P
Zinc			5.0	U							P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	85.0	U	85.0	U	85.0	U	85.0	U	17.000	U	P
Antimony	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Arsenic	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Barium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Beryllium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cobalt	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Copper	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Iron	30.0	U	30.0	U	30.0	U	30.0	U	6.000	U	P
Lead	1.5	U	1.5	U	1.5	U	1.5	U	0.300	U	P
Magnesium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Manganese	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Mercury	0.080	U	0.080	U					0.013	U	AV
Nickel	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Potassium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Selenium	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	1000.0	U	1000.0	U	1000.0	U	1000.0	U	200.000	U	P
Thallium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P

USEPA - CLP

3

BLANKS

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank		M
			1	C	2	C	3	C	C		
Aluminum			85.0	U	85.0	U					P
Antimony			5.0	U	5.0	U					P
Arsenic			3.0	U	3.0	U					P
Barium			5.0	U	5.0	U					P
Beryllium			2.0	U	2.0	U					P
Cadmium			1.0	U	1.0	U					P
Calcium			1000.0	U	1000.0	U					P
Chromium			2.0	U	2.0	U					P
Cobalt			5.0	U	5.0	U					P
Copper			5.0	U	5.0	U					P
Iron			30.0	U	30.0	U					P
Lead			1.5	U	1.5	U					P
Magnesium			1000.0	U	1000.0	U					P
Manganese			3.0	U	3.0	U					P
Nickel			5.0	U	5.0	U					P
Potassium			1000.0	U	1000.0	U					P
Selenium			3.0	U	3.0	U					P
Silver			1.0	U	1.0	U					P
Sodium			1000.0	U	1000.0	U					P
Thallium			4.0	U	4.0	U					P
Vanadium			5.0	U	5.0	U					P
Zinc			5.0	U	5.0	U					P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	524420	528631.8	105.7			
Antimony	0	600	3	641.2	106.9			
Arsenic	0	100	1	107.1	107.1			
Barium	0	500	2	562.3	112.5			
Beryllium	0	500	1	510.4	102.1			
Cadmium	0	1000	2	985.1	98.5			
Calcium	500000	500000	460145	465839.7	93.2			
Chromium	0	500	1	502.8	100.6			
Cobalt	0	500	-1	470.0	94.0			
Copper	0	500	0	572.2	114.4			
Iron	200000	200000	197428	198856.1	99.4			
Lead	0	50	5	54.8	109.6			
Magnesium	500000	500000	511526	514039.9	102.8			
Manganese	0	500	-1	515.9	103.2			
Nickel	0	1000	-1	960.1	96.0			
Potassium	0	0	52	52.4				
Selenium	0	50	-2	52.5	105.0			
Silver	0	200	0	213.1	106.6			
Sodium	0	0	211	227.1				
Thallium	0	100	-10	92.3	92.3			
Vanadium	0	500	0	508.7	101.7			
Zinc	0	1000	-13	912.8	91.3			

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP ICS Source: Spex, CPI

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	522796	524000.0	104.8			
Antimony	0	600	4	628.8	104.8			
Arsenic	0	100	1	110.7	110.7			
Barium	0	500	2	559.3	111.9			
Beryllium	0	500	1	491.5	98.3			
Cadmium	0	1000	1	959.2	95.9			
Calcium	500000	500000	459013	464405.8	92.9			
Chromium	0	500	1	487.4	97.5			
Cobalt	0	500	-1	451.1	90.2			
Copper	0	500	0	569.3	113.9			
Iron	200000	200000	192815	193640.7	96.8			
Lead	0	50	3	50.0	100.0			
Magnesium	500000	500000	503115	503210.7	100.6			
Manganese	0	500	-1	502.1	100.4			
Nickel	0	1000	-2	934.7	93.5			
Potassium	0	0	46	49.0				
Selenium	0	50	-7	41.1	82.2			
Silver	0	200	0	209.7	104.8			
Sodium	0	0	113	130.0				
Thallium	0	100	-10	90.6	90.6			
Vanadium	0	500	1	495.2	99.0			
Zinc	0	1000	-13	864.4	86.4			

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS02501S

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		6075.6650	4814.9750	444.99	283.3		P
Antimony	75 - 125	32.4738	1.1125 U	55.62	58.4	N	P
Arsenic	75 - 125	59.5380	1.0505 J	55.62	105.2		P
Barium	75 - 125	491.5017	10.5943 J	444.99	108.1		P
Beryllium	75 - 125	11.9917	0.2225 U	11.12	107.8		P
Cadmium	75 - 125	29.7187	0.2225 U	27.81	106.9		P
Calcium	75 - 125	1376.7830	233.0604 J	1112.47	102.8		P
Chromium	75 - 125	50.7338	4.2680	44.50	104.4		P
Cobalt	75 - 125	112.9595	1.1125 U	111.25	101.5		P
Copper	75 - 125	62.8314	1.7374 J	55.62	109.8		P
Cyanide	75 - 125	2.2931	0.1377 U	2.78	82.5		AS
Iron		2418.4970	2360.9550	222.49	25.9		P
Lead	75 - 125	64.1899	5.8361	55.62	104.9		P
Magnesium	75 - 125	1214.6650	222.4942 U	1112.47	109.2		P
Manganese	75 - 125	121.1661	3.4583	111.25	105.8		P
Mercury	75 - 125	0.4047	0.0227 J	0.36	106.1		AV
Nickel	75 - 125	116.1075	1.6954 J	111.25	102.8		P
Potassium	75 - 125	1408.6570	222.4942 U	1112.47	126.6	N	P
Selenium	75 - 125	55.8998	0.6675 U	55.62	100.5		P
Silver	75 - 125	57.1801	0.2225 U	55.62	102.8		P
Sodium	75 - 125	1271.0420	222.4942 U	1112.47	114.3		P
Thallium	75 - 125	55.8103	0.6675 U	55.62	100.3		P
Vanadium	75 - 125	121.0140	5.8440 J	111.25	103.5		P
Zinc	75 - 125	122.1815	8.0420	111.25	102.6		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS02501SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 89.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		5629.4630	4814.9750	444.99	183.0		P
Antimony	75 - 125	34.3334	1.1125 U	55.62	61.7	N	P
Arsenic	75 - 125	59.6893	1.0505 J	55.62	105.4		P
Barium	75 - 125	492.5650	10.5943 J	444.99	108.3		P
Beryllium	75 - 125	11.9133	0.2225 U	11.12	107.1		P
Cadmium	75 - 125	29.6877	0.2225 U	27.81	106.8		P
Calcium	75 - 125	1386.0140	233.0604 J	1112.47	103.6		P
Chromium	75 - 125	50.5071	4.2680	44.50	103.9		P
Cobalt	75 - 125	112.5064	1.1125 U	111.25	101.1		P
Copper	75 - 125	62.7005	1.7374 J	55.62	109.6		P
Cyanide	75 - 125	2.3295	0.1377 U	2.81	82.9		AS
Iron		2063.8470	2360.9550	222.49	-133.5		P
Lead	75 - 125	63.6887	5.8361	55.62	104.0		P
Magnesium	75 - 125	1206.4530	222.4942 U	1112.47	108.4		P
Manganese	75 - 125	120.8829	3.4583	111.25	105.6		P
Mercury	75 - 125	0.4163	0.0227	0.36	109.3		AV
Nickel	75 - 125	116.1680	1.6954 J	111.25	102.9		P
Potassium	75 - 125	1402.3630	222.4942 U	1112.47	126.1	N	P
Selenium	75 - 125	56.4574	0.6675 U	55.62	101.5		P
Silver	75 - 125	57.0846	0.2225 U	55.62	102.6		P
Sodium	75 - 125	1265.5020	222.4942 U	1112.47	113.8		P
Thallium	75 - 125	56.3799	0.6675 U	55.62	101.4		P
Vanadium	75 - 125	120.0923	5.8440 J	111.25	102.7		P
Zinc	75 - 125	121.1014	8.0420	111.25	101.6		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

01SS02501A

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS _____ SDG No.: Gulfport-012Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		23834.70	21640.90	2000.0	109.7		P
Antimony		244.62	5.00 U	250.0	97.8		P
Arsenic		279.30	4.72 J	250.0	109.8		P
Barium		2129.68	47.62 J	2000.0	104.1		P
Beryllium		51.32	1.00 U	50.0	102.6		P
Cadmium		136.47	1.00 U	125.0	109.2		P
Calcium		6361.01	1047.49 J	5000.0	106.3		P
Chromium		218.39	19.18	200.0	99.6		P
Cobalt		485.20	5.00 U	500.0	97.0		P
Copper		270.97	7.81 J	250.0	105.3		P
Iron		11520.42	10611.31	1000.0	90.9		P
Lead		279.12	26.23	250.0	101.2		P
Magnesium		5175.08	1000.00 U	5000.0	103.5		P
Manganese		519.41	15.54	500.0	100.8		P
Nickel		500.93	7.62 J	500.0	98.7		P
Potassium		6045.98	1000.00 U	5000.0	120.9		P
Selenium		260.42	3.00 U	250.0	104.2		P
Silver		267.37	1.00 U	250.0	106.9		P
Sodium		5489.00	1000.00 U	5000.0	109.8		P
Thallium		244.36	3.00 U	250.0	97.7		P
Vanadium		521.08	26.27 J	500.0	99.0		P
Zinc		524.61	36.14	500.0	97.7		P

Comments: _____

USEPA - CLP

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DUPLICATES

SAMPLE NO.

01SS02501SD

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Matrix (soil/water): SOIL Level (low/med): LOW% Solids for Sample: 89.0 % Solids for Duplicate: 89.0Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		6075.6650		5629.4630		7.6		P
Antimony		32.4738		34.3334		5.6		P
Arsenic		59.5380		59.6893		0.3		P
Barium		491.5017		492.5650		0.2		P
Beryllium		11.9917		11.9133		0.7		P
Cadmium		29.7187		29.6877		0.1		P
Calcium		1376.7830		1386.0140		0.7		P
Chromium		50.7338		50.5071		0.4		P
Cobalt		112.9595		112.5064		0.4		P
Copper		62.8314		62.7005		0.2		P
Cyanide		2.2931		2.3295		1.6		AS
Iron		2418.4970		2063.8470		15.8		P
Lead		64.1899		63.6887		0.8		P
Magnesium		1214.6650		1206.4530		0.7		P
Manganese		121.1661		120.8829		0.2		P
Mercury		0.4047		0.4163		2.8		AV
Nickel		116.1075		116.1680		0.1		P
Potassium		1408.6570		1402.3630		0.4		P
Selenium		55.8998		56.4574		1.0		P
Silver		57.1801		57.0846		0.2		P
Sodium		1271.0420		1265.5020		0.4		P
Thallium		55.8103		56.3799		1.0		P
Vanadium		121.0140		120.0923		0.8		P
Zinc		122.1815		121.1014		0.9		P

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Solid LCS Source: HighPurity
 Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum				400.0	469.3		320.0 | 480.0	117.3
Antimony				50.0	52.5		40.0 | 60.0	105.0
Arsenic				50.0	53.6		40.0 | 60.0	107.2
Barium				400.0	436.5		320.0 | 480.0	109.1
Beryllium				10.0	10.7		8.0 | 12.0	107.0
Cadmium				25.0	27.0		20.0 | 30.0	108.0
Calcium				1000.0	1034.0		800.0 | 1200.0	103.4
Chromium				40.0	41.9		32.0 | 48.0	104.8
Cobalt				100.0	102.0		80.0 | 120.0	102.0
Copper				50.0	54.9		40.0 | 60.0	109.8
Cyanide				7.1	7.45		5.7 | 8.5	104.9
Iron				200.0	215.3		160.0 | 240.0	107.6
Lead				50.0	52.5		40.0 | 60.0	105.0
Magnesium				1000.0	971.9	J	800.0 | 1200.0	97.2
Manganese				100.0	106.0		80.0 | 120.0	106.0
Mercury				0.33	0.36		0.3 | 0.4	109.1
Nickel				100.0	103.6		80.0 | 120.0	103.6
Potassium				1000.0	1190.9		800.0 | 1200.0	119.1
Selenium				50.0	51.7		40.0 | 60.0	103.4
Silver				50.0	51.7		40.0 | 60.0	103.4
Sodium				1000.0	1120.0		800.0 | 1200.0	112.0
Thallium				50.0	50.8		40.0 | 60.0	101.6
Vanadium				100.0	104.8		80.0 | 120.0	104.8
Zinc				100.0	103.8		80.0 | 120.0	103.8

USEPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Solid LCS Source: HighPurity

Aqueous LCS Source: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)				%R
	True	Found	%R	True	Found C	Limits	%R	
Aluminum				400.0	421.2	320.0 | 480.0	105.3	
Antimony				50.0	48.1	40.0 | 60.0	96.2	
Arsenic				50.0	49.7	40.0 | 60.0	99.4	
Barium				400.0	389.4	320.0 | 480.0	97.4	
Beryllium				10.0	9.5	8.0 | 12.0	95.0	
Cadmium				25.0	24.6	20.0 | 30.0	98.4	
Calcium				1000.0	971.1 | J	800.0 | 1200.0	97.1	
Chromium				40.0	37.9	32.0 | 48.0	94.8	
Cobalt				100.0	89.3	80.0 | 120.0	89.3	
Copper				50.0	48.6	40.0 | 60.0	97.2	
Iron				200.0	192.3	160.0 | 240.0	96.2	
Lead				50.0	47.5	40.0 | 60.0	95.0	
Magnesium				1000.0	886.9 | J	800.0 | 1200.0	88.7	
Manganese				100.0	95.7	80.0 | 120.0	95.7	
Mercury				0.33	0.32	0.3 | 0.4	97.0	
Nickel				100.0	92.5	80.0 | 120.0	92.5	
Potassium				1000.0	1083.8	800.0 | 1200.0	108.4	
Selenium				50.0	46.0	40.0 | 60.0	92.0	
Silver				50.0	46.8	40.0 | 60.0	93.6	
Sodium				1000.0	1025.0	800.0 | 1200.0	102.5	
Thallium				50.0	46.1	40.0 | 60.0	92.2	
Vanadium				100.0	93.7	80.0 | 120.0	93.7	
Zinc				100.0	91.7	80.0 | 120.0	91.7	

USEPA - CLP

9
ICP SERIAL DILUTIONS

SAMPLE NO.

01SS02501L

Lab Name: Empirical Laboratories

Contract: TetraTech NU

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-012

Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	21640.90		22176.35		2.5		P
Antimony	5.00	U	25.00	U			P
Arsenic	4.72	J	15.00	U	100.0		P
Barium	47.62	J	48.71	J	2.3		P
Beryllium	1.00	U	5.00	U			P
Cadmium	1.00	U	5.00	U			P
Calcium	1047.49	J	26862.70		2464.5		P
Chromium	19.18		18.15	J	5.4		P
Cobalt	5.00	U	25.00	U			P
Copper	7.81	J	25.00	U	100.0		P
Iron	10611.31		10649.55		0.4		P
Lead	26.23		20.54		21.7		P
Magnesium	1000.00	U	5000.00	U			P
Manganese	15.54		16.77	J	7.9		P
Nickel	7.62	J	25.00	U	100.0		P
Potassium	1000.00	U	5000.00	U			P
Selenium	3.00	U	15.00	U			P
Silver	1.00	U	5.00	U			P
Sodium	1000.00	U	5000.00	U			P
Thallium	3.00	U	15.00	U			P
Vanadium	26.27	J	25.71	J	2.1		P
Zinc	36.14		56.74	J	57.0		P

USEPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 02/04/08

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Aluminum	308.22		200.0	50.0	P
Antimony	206.84		60.0	5.0	P
Arsenic	189.04		10.0	3.0	P
Barium	493.41		200.0	5.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	226.50		5.0	1.0	P
Calcium	317.93		5000.0	1000.0	P
Chromium	267.72		10.0	2.0	P
Cobalt	228.62		50.0	5.0	P
Copper	324.75		25.0	5.0	P
Iron	271.44		100.0	30.0	P
Lead	220.35		3.0	1.5	P
Magnesium	279.08		5000.0	1000.0	P
Manganese	257.61		15.0	3.0	P
Nickel	231.60		40.0	5.0	P
Potassium	766.49		5000.0	1000.0	P
Selenium	196.02		5.0	3.0	P
Silver	328.07		10.0	1.0	P
Sodium	330.23		5000.0	1000.0	P
Thallium	190.86		10.0	3.0	P
Vanadium	292.40		50.0	5.0	P
Zinc	206.84		20.0	5.0	P

Comments: _____

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories

Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____

SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: _____

Date: 03/18/08

Flame AA ID Number: PE CVAA

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.20	0.08	AV

Comments:

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: _____ Date: 01/15/08

Flame AA ID Number: Lachat Cyanide

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	MDL (ug/L)	M
Cyanide	570		10.0	5.00	AS

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	As
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Arsenic	189.04	0.0000030	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000240	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001100	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000140	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0001910	0.0000000
Lead	220.35	0.0002530	0.0000000	0.0001120	0.0000000	0.0000000
Lead	220.35	-0.0001600	0.0000000	0.0000450	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000120	0.0216570	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000130	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0003400	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	-0.0001200	0.0000000	0.0000000
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0018200	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000210	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	-0.0000700	0.0282910	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		B	Ba	Be	Cd	Co
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	-0.0139700
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0017660
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000900
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	-0.0014600	0.0000000	-0.000190	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0865310
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	-0.0019300
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000700
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	-0.0009900
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0025020
Tin	189.99	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Cu	K	Mn	Mo
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0071840
Antimony	206.84	0.0031350	0.0000000	0.0000000	0.0000000	-0.0027800
Arsenic	189.04	0.0001610	0.0000000	0.0000000	0.0000000	0.0003200
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	-0.0001000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001310	-0.0003400
Cobalt	228.62	-0.0000200	0.0000000	0.0000000	0.0000000	0.0000290
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0004170
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000160	-0.0000800	0.0000000	0.0000840	-0.0001300
Lead	220.35	-0.0000500	0.0000000	0.0000000	0.0000510	-0.0011800
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000140
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	-0.0000700	0.0000000	0.0000000	0.0001750	0.0000000
Selenium	196.02	-0.0001100	0.0000000	0.0000000	0.0001450	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000350	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0002970	0.0000000	0.0000000	0.0004160	-0.0026800
Tin	189.99	0.0000000	0.0000000	0.0000000	-0.000110	0.0000000
Titanium	334.94	0.0000430	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0004700
Zinc	206.20	0.0003790	0.0000000	0.0000000	0.0000000	0.0003690

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Na	Ni	Pb	Si	Sn
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000400
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	-0.0000600	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0002750	0.0000000	0.0000000	-0.0000100
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	-0.0007000	-0.0008700	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	331.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.99	0.0000000	-0.0000700	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000670	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Wave-length (nm)	Interelement Correction Factors for:			
		Ti	Tl	V	Zn
Aluminum	308.22	0.0000000	0.0000000	0.0028970	0.0000000
Antimony	206.84	0.0000870	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	-0.0030300	0.0000000	0.0005980	0.0000000
Boron	249.68	-0.0002400	0.0000000	-0.0000600	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000790	0.0000000	-0.0000500	0.0000000
Cobalt	228.62	0.0020140	0.0000000	0.0000000	0.0000000
Copper	324.75	-0.0001600	0.0000000	-0.0001000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0089800	0.0000000
Lead	220.35	0.0000260	0.0000000	-0.0000500	0.0000000
Lead	220.35	-0.0008800	0.0000000	-0.0001300	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	279.08	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0001020	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0000500	0.0000000
Selenium	196.02	0.0000000	0.0000000	-0.0001000	0.0000000
Selenium	196.02	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.22	0.0000000	0.0000000	0.0000390	0.0000000
Sodium	331.23	-0.0000300	0.0000000	0.0000000	0.0000230
Thallium	190.86	0.0002100	0.0000000	0.0017130	0.0000000
Tin	189.99	0.0007090	0.0000000	0.0000000	0.0000000
Titanium	334.94	0.0000000	0.0000000	0.0000220	0.0000000
Vanadium	292.40	0.0004080	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000770	0.0000000	0.0000000	0.0000000

Comments: _____

USEPA - CLP

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012ICP ID Number: TJA61E TRACE ICP Date: 06/16/08

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	15.00	500000.0	P
Antimony	15.00	10000.0	P
Arsenic	15.00	10000.0	P
Barium	15.00	5000.0	P
Beryllium	15.00	10000.0	P
Cadmium	15.00	10000.0	P
Calcium	15.00	250000.0	P
Chromium	15.00	10000.0	P
Cobalt	15.00	10000.0	P
Copper	15.00	10000.0	P
Iron	15.00	500000.0	P
Lead	15.00	10000.0	P
Magnesium	15.00	500000.0	P
Manganese	15.00	10000.0	P
Nickel	15.00	10000.0	P
Potassium	15.00	100000.0	P
Selenium	15.00	10000.0	P
Silver	15.00	2000.0	P
Sodium	15.00	250000.0	P
Thallium	15.00	10000.0	P
Vanadium	15.00	50000.0	P
Zinc	15.00	10000.0	P

Comments: _____

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Method: P

EPA Sample No.	Preparation Date	Initial Weight (α)	Volume (mL)
PBS100208C	10/02/08	1.00	200.0
LCSS100208C	10/02/08	1.00	200.0
01SS01701	10/02/08	1.00	200.0
01SS42001	10/02/08	0.99	200.0
01SS01401	10/02/08	1.00	200.0
01SS01401 DUP	10/02/08	1.03	200.0
01SS01501	10/02/08	1.04	200.0
01SS02401	10/02/08	1.07	200.0
01SS02501	10/02/08	1.01	200.0
01SS02501S	10/02/08	1.01	200.0
01SS02501SD	10/02/08	1.01	200.0
01SS13701	10/02/08	1.00	200.0
01SS13801	10/02/08	1.04	200.0
01SS13901	10/02/08	1.05	200.0
01SS13901 DUP	10/02/08	1.01	200.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012

Method: P

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
PBS100808C	10/08/08	1.00	200.0
LCSS100808C	10/08/08	1.00	200.0
01SBDIT01	10/08/08	1.00	200.0
01SBDIT02	10/08/08	1.00	200.0
01SBDIT03	10/08/08	1.01	200.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Method: CV

EPA Sample No.	Preparation Date	Initial Weight (α)	Volume (mL)
LCSS100208A	10/02/08	0.30	50.0
PBS100208A	10/02/08	0.30	50.0
01SS01701	10/02/08	0.29	50.0
01SS42001	10/02/08	0.31	50.0
01SS01401	10/02/08	0.32	50.0
01SS01401 DUP	10/02/08	0.29	50.0
01SS01501	10/02/08	0.30	50.0
01SS02401	10/02/08	0.30	50.0
01SS02501	10/02/08	0.33	50.0
01SS02501S	10/02/08	0.31	50.0
01SS02501SD	10/02/08	0.31	50.0
01SS13701	10/02/08	0.29	50.0
01SS13801	10/02/08	0.30	50.0
01SS13901	10/02/08	0.33	50.0
01SS13901 DUP	10/02/08	0.31	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Method: CV

EPA Sample No.	Preparation Date	Initial Weight (α)	Volume (mL)
LCSS100808A	10/08/08	0.30	50.0
PBS100808A	10/08/08	0.30	50.0
01SBDIT01	10/08/08	0.32	50.0
01SBDIT02	10/08/08	0.29	50.0
01SBDIT03	10/08/08	0.33	50.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012Method: AS
and 10/25/08

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
PBS100608	10/06/08	1.00	25.0
LCSS100608	10/06/08	1.00	25.0
01SS01701	10/06/08	1.00	25.0
01SS42001	10/06/08	1.00	25.0
01SS01401	10/06/08	1.01	25.0
01SS01401 DUP	10/06/08	1.00	25.0
01SS01501	10/06/08	1.02	25.0
01SS02401	10/06/08	1.03	25.0
01SS02501	10/06/08	1.02	25.0
01SS02501S	10/06/08	1.01	25.0
01SS13701	10/06/08	1.01	25.0
01SS13801	10/06/08	1.02	25.0
01SS13901	10/06/08	1.00	25.0
01SS02501SD	10/06/08	1.00	25.0
01SS13901 DUP	10/06/08	1.02	25.0
01SBDIT01	10/06/08	1.03	25.0
01SBDIT02	10/06/08	1.04	25.0
01SBDIT03	10/06/08	1.00	25.0

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/06/08 End Date: 10/07/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N				
S0	1.00	0943		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	0949			X	X		X	X		X	X	X		X		X		X		X		X	X	X						
S	1.00	1003		X			X						X	X							X										
S	1.00	1008							X										X			X									
ZZZZZZ	1.00	1017																													
ZZZZZZ	1.00	1023																													
ZZZZZZ	1.00	1029																													
S0	1.00	1035																		X											
ZZZZZZ	1.00	1039																													
S0	1.00	1046				X																									
ZZZZZZ	1.00	1049																													
ZZZZZZ	1.00	1056																													
ZZZZZZ	1.00	1102																													
ZZZZZZ	1.00	1109																													
ZZZZZZ	1.00	1118																													
ZZZZZZ	1.00	1124																													
ICV1	1.00	1144		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB1	1.00	1155		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1202																													
ZZZZZZ	1.00	1208																													
ZZZZZZ	1.00	1222																													
ZZZZZZ	1.00	1229																													
ZZZZZZ	1.00	1237																													
ZZZZZZ	1.00	1243																													
ZZZZZZ	1.00	1250																													
ZZZZZZ	1.00	1256																													
ZZZZZZ	1.00	1318																													
ZZZZZZ	1.00	1324																													
CRDL1	1.00	1333		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA-0	1.00	1339		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB-0	1.00	1346		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1354																													
CCV1	1.00	1405		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1421		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1433																													
ZZZZZZ	1.00	1439																													
ZZZZZZ	1.00	1448																													
ZZZZZZ	1.00	1454																													

USEPA - CLP
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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/06/08 End Date: 10/07/08

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N
ZZZZZZ	1.00	1501																									
ZZZZZZ	1.00	1507																									
ZZZZZZ	1.00	1514																									
ZZZZZZ	1.00	1520																									
ZZZZZZ	1.00	1526																									
ZZZZZZ	1.00	1533																									
ZZZZZZ	1.00	1539																									
ZZZZZZ	1.00	1545																									
ZZZZZZ	1.00	1552																									
ZZZZZZ	1.00	1558																									
ZZZZZZ	5.00	1606																									
ZZZZZZ	1.00	1612																									
ZZZZZZ	1.00	1621																									
ZZZZZZ	1.00	1639																									
ZZZZZZ	1.00	1645																									
ZZZZZZ	1.00	1651																									
ZZZZZZ	1.00	1658																									
ZZZZZZ	1.00	1704																									
ZZZZZZ	1.00	1710																									
ZZZZZZ	1.00	1717																									
ZZZZZZ	1.00	1723																									
ZZZZZZ	1.00	1730																									
ZZZZZZ	1.00	1736																									
ZZZZZZ	1.00	1742																									
ZZZZZZ	1.00	1751																									
ZZZZZZ	1.00	1802																									
ZZZZZZ	1.00	1809																									
ZZZZZZ	1.00	1815																									
ZZZZZZ	1.00	1824																									
ZZZZZZ	1.00	1830																									
ZZZZZZ	1.00	1836																									
ZZZZZZ	1.00	1843																									
ZZZZZZ	1.00	1849																									
ZZZZZZ	1.00	1856																									
ZZZZZZ	5.00	1903																									
ZZZZZZ	1.00	1910																									
ZZZZZZ	1.00	1916																									
ZZZZZZ	1.00	1922																									

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/06/08 End Date: 10/07/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T L	V N	Z N	C N				
ZZZZZZ	1.00	1929																													
ZZZZZZ	1.00	1935																													
ZZZZZZ	1.00	1941																													
ZZZZZZ	5.00	1949																													
ZZZZZZ	1.00	1955																													
ZZZZZZ	1.00	2002																													
ZZZZZZ	1.00	2008																													
ZZZZZZ	1.00	2015																													
ZZZZZZ	1.00	2023																													
ZZZZZZ	1.00	2034																													
ZZZZZZ	1.00	2041																													
ZZZZZZ	1.00	2047																													
ZZZZZZ	1.00	2054																													
ZZZZZZ	1.00	2100																													
ZZZZZZ	5.00	2108																													
ZZZZZZ	1.00	2114																													
ZZZZZZ	1.00	2120																													
ZZZZZZ	1.00	2127																													
ZZZZZZ	1.00	2133																													
ZZZZZZ	1.00	2139																													
ZZZZZZ	1.00	2146																													
ZZZZZZ	1.00	2152																													
ZZZZZZ	1.00	2159																													
ZZZZZZ	1.00	2205																													
ZZZZZZ	1.00	2216																													
ZZZZZZ	1.00	2227																													
ZZZZZZ	1.00	2234																													
ZZZZZZ	1.00	2240																													
ZZZZZZ	1.00	2249																													
ZZZZZZ	1.00	2255																													
ZZZZZZ	1.00	2302																													
ZZZZZZ	1.00	2309																													
ZZZZZZ	1.00	2316																													
ZZZZZZ	1.00	2322																													
ZZZZZZ	1.00	2328																													
ZZZZZZ	1.00	2335																													
ZZZZZZ	1.00	2341																													
ZZZZZZ	1.00	2348																													

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/06/08 End Date: 10/07/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
CCV2	1.00	2358		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	0009		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PBS100208C	1.00	0015		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCSS100208C	1.00	0022		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS01701	1.00	0030		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS42001	1.00	0037		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS01401	1.00	0043		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS01401 DUP	1.00	0050		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS01501	1.00	0056		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02401	1.00	0102		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02501	1.00	0109		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02501S	1.00	0115		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02501SD	1.00	0121		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02501A	1.00	0128		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS02501L	5.00	0136		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS13701	1.00	0142		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS13801	1.00	0148		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS13901	1.00	0155		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV3	1.00	0204		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB3	1.00	0215		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SS13901 DUP	1.00	0221		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	0227																													
CCV4	1.00	0236		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB4	1.00	0247		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/08/08 End Date: 10/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C F	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
S0	1.00	1018		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
S	1.00	1024			X	X		X	X		X	X	X		X		X		X				X	X	X						
S	1.00	1032		X			X						X		X						X										
S	1.00	1039							X										X			X									
ZZZZZZ	1.00	1044																													
ZZZZZZ	1.00	1049																													
ZZZZZZ	1.00	1055																													
ZZZZZZ	1.00	1100																													
ZZZZZZ	1.00	1106																													
ZZZZZZ	1.00	1111																													
ZZZZZZ	1.00	1118																													
ZZZZZZ	1.00	1126																													
ZZZZZZ	1.00	1133																													
ZZZZZZ	1.00	1147																													
ZZZZZZ	1.00	1153																													
ICV2	1.00	1215		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICB2	1.00	1233		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1243																													
ZZZZZZ	1.00	1250																													
ZZZZZZ	1.00	1308																													
ZZZZZZ	1.00	1314																													
ZZZZZZ	1.00	1320																													
ZZZZZZ	1.00	1333																													
ZZZZZZ	1.00	1351																													
ZZZZZZ	1.00	1357																													
CRDL1	1.00	1413		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSA-0	1.00	1419		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ICSAB-0	1.00	1425		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1434																													
CCV1	1.00	1443		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB1	1.00	1500		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	1507																													
ZZZZZZ	1.00	1513																													
ZZZZZZ	1.00	1519																													
ZZZZZZ	1.00	1526																													
ZZZZZZ	1.00	1532																													
ZZZZZZ	1.00	1539																													
ZZZZZZ	1.00	1545																													

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/08/08 End Date: 10/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	A L	N T	T V	V N	Z N	C N			
ZZZZZZ	1.00	1551																													
ZZZZZZ	1.00	1600																													
ZZZZZZ	1.00	1611																													
ZZZZZZ	1.00	1618																													
ZZZZZZ	1.00	1624																													
ZZZZZZ	1.00	1633																													
ZZZZZZ	1.00	1639																													
ZZZZZZ	1.00	1645																													
ZZZZZZ	1.00	1652																													
ZZZZZZ	1.00	1658																													
ZZZZZZ	1.00	1704																													
ZZZZZZ	1.00	1711																													
ZZZZZZ	1.00	1720																													
ZZZZZZ	1.00	1726																													
ZZZZZZ	1.00	1733																													
ZZZZZZ	1.00	1739																													
ZZZZZZ	1.00	1748																													
ZZZZZZ	1.00	1759																													
ZZZZZZ	1.00	1805																													
ZZZZZZ	1.00	1812																													
ZZZZZZ	1.00	1820																													
ZZZZZZ	1.00	1827																													
ZZZZZZ	1.00	1833																													
ZZZZZZ	1.00	1840																													
ZZZZZZ	1.00	1846																													
ZZZZZZ	1.00	1852																													
ZZZZZZ	1.00	1859																													
ZZZZZZ	1.00	1905																													
ZZZZZZ	1.00	1911																													
ZZZZZZ	1.00	1918																													
ZZZZZZ	1.00	1924																													
ZZZZZZ	1.00	1931																													
ZZZZZZ	1.00	1937																													
ZZZZZZ	5.00	1944																													
ZZZZZZ	1.00	1953																													
ZZZZZZ	1.00	2004																													
ZZZZZZ	1.00	2011																													
ZZZZZZ	1.00	2017																													

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/08/08 End Date: 10/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	A L	N T	T V	Z N	C N				
ZZZZZZ	1.00	0050																													
ZZZZZZ	1.00	0101																													
ZZZZZZ	1.00	0108																													
ZZZZZZ	1.00	0114																													
ZZZZZZ	1.00	0123																													
ZZZZZZ	1.00	0129																													
ZZZZZZ	1.00	0135																													
ZZZZZZ	1.00	0142																													
ZZZZZZ	1.00	0148																													
ZZZZZZ	1.00	0155																													
ZZZZZZ	1.00	0201																													
ZZZZZZ	5.00	0209																													
ZZZZZZ	1.00	0215																													
ZZZZZZ	-1.00	0221																													
ZZZZZZ	1.00	0228																													
ZZZZZZ	1.00	0234																													
ZZZZZZ	1.00	0241																													
ZZZZZZ	1.00	0247																													
CCV2	1.00	0256		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB2	1.00	0307		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
PBS100808C	1.00	0313		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
LCSS100808C	1.00	0320		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	0329																													
ZZZZZZ	1.00	0335																													
ZZZZZZ	1.00	0341																													
ZZZZZZ	1.00	0348																													
ZZZZZZ	5.00	0355																													
ZZZZZZ	1.00	0402																													
ZZZZZZ	1.00	0408																													
ZZZZZZ	1.00	0415																													
CCV3	1.00	0423		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB3	1.00	0435		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCV4	1.00	0820		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CCB4	1.00	0834		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SBDIT01	1.00	0840		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SBDIT02	1.00	0846		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
01SBDIT03	1.00	0853		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
ZZZZZZ	1.00	0859																													

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: TJA61E TRACE ICP Method: P
 Start Date: 10/08/08 End Date: 10/09/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K I	S E	A G	N A	T L	V L	Z N	C N				
ZZZZZZ	1.00	0906																													
ZZZZZZ	1.00	0929																													
ZZZZZZ	1.00	0935																													
ZZZZZZ	1.00	0944																													
ZZZZZZ	1.00	0950																													
ZZZZZZ	1.00	1003																													
ZZZZZZ	1.00	1010																													
CCV5	1.00	1019		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB5	1.00	1035		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 10/06/08 End Date: 10/06/08

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N				
S1000	1.00	1200																										X			
S500	1.00	1201																										X			
S200	1.00	1202																										X			
S100	1.00	1203																										X			
S20	1.00	1204																										X			
S10	1.00	1205																										X			
S5.0	1.00	1206																										X			
S0	1.00	1207																										X			
ICV1	1.00	1209																										X			
ICB1	1.00	1210																										X			
ZZZZZZ	1.00	1211																													
ZZZZZZ	1.00	1212																													
ZZZZZZ	1.00	1213																													
ZZZZZZ	1.00	1214																													
ZZZZZZ	1.00	1215																													
ZZZZZZ	1.00	1216																													
PBS100608	1.00	1217																										X			
LCSS100608	1.00	1219																										X			
01SS01701	1.00	1220																										X			
01SS42001	1.00	1221																										X			
01SS01401	1.00	1222																										X			
01SS01401 DUP	1.00	1223																										X			
01SS01501	1.00	1224																										X			
01SS02401	1.00	1225																										X			
01SS02501	1.00	1226																										X			
01SS02501S	1.00	1227																										X			
ZZZZZZ	1.00	1229																													
01SS13701	1.00	1230																										X			
01SS13801	1.00	1231																										X			
01SS13901	1.00	1232																										X			
CCV1	1.00	1233																										X			
CCB1	1.00	1234																										X			
01SS02501SD	1.00	1235																										X			
01SS13901 DUP	1.00	1236																										X			
01SBDIT01	1.00	1238																										X			
01SBDIT02	1.00	1239																										X			
01SBDIT03	1.00	1240																										X			
ZZZZZZ	1.00	1241																													

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Empirical Laboratories Contract: TetraTech NUS, Inc.
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: Gulfport-012
 Instrument ID Number: Lachat Cyanide Method: AS
 Start Date: 10/06/08 End Date: 10/06/08

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V L	Z N	C N		
ZZZZZZ	1.00	1242																											
CCV2	1.00	1246																									X		
CCB2	1.00	1247																									X		

Sample 01SS01701 Chromium rep. result 9.4 mg/kg

$$(42.768 \text{ ug}) \left(\frac{200 \text{ ml}}{1 \text{ g}} \right) \left(\frac{1}{1000} \right) \left(\frac{1}{100} \right) = 9.41$$

Analysis Report

10/07/08 00:37:07 AM

page 1

Method: TESTING Sample Name: 0810010-01,TS,TETRA Operator: RGB
 Run Time: 10/07/08 00:30:50
 Comment: 200.7 / 6010B
 Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1890	B_2496	Ba4934	Be3130	Ca3179
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppm
Avg	-.22789	33212.	12.063	4.1542	318.50	.85680	H149.61
SDev	.03319	488.	1.513	.3690	4.92	.05660	2.27
%RSD	14.564	1.4697	12.545	8.8827	1.5433	6.6060	1.5197
#1	-.19461	33511.	10.541	4.0283	322.18	.88545	H151.33
#2	-.22808	33476.	12.082	3.8646	320.40	.89336	H150.48
#3	-.26099	32649.	13.567	4.5696	312.92	.79161	H147.04
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2000.0	500000.	10000.	50000.	5000.0	10000.	100.00
Low	-1.0000	-50.0000	-3.0000	-10.0000	-5.0000	-1.0000	-1.0000
Elem	Cd2265	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790
Units	ppb	ppb	ppb	ppb	ppb	ppm	ppm
Avg	.33278	30.903	42.768	14.863	41181.	.47949	1.5311
SDev	.10808	.695	.550	.291	634.	.01160	.0211
%RSD	32.479	2.2491	1.2853	1.9571	1.5398	2.4194	1.3778
#1	.28377	31.446	43.174	15.118	41655.	.48477	1.5464
#2	.45668	31.143	42.987	14.924	41428.	.48751	1.5399
#3	.25788	30.119	42.142	14.546	40460.	.46619	1.5071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	10000.	10000.	500000.	100.00	500.00
Low	-1.0000	-5.0000	-2.0000	-5.0000	-30.000	-1.0000	-1.0000
Elem	Mn2576	Mo2020	Na3302	Ni2316	Pb2203	Se1960	Sb2068
Units	ppb	ppb	ppm	ppb	ppb	ppb	ppb
Avg	1628.4	1.0403	1.2337	10.716	49.608	2.4565	-.28668
SDev	25.7	.3107	.0170	.294	.377	.1439	1.64995
%RSD	1.5776	29.862	1.3818	2.7473	.75979	5.8572	575.54
#1	1648.0	1.3861	1.2529	10.434	49.852	2.4122	-1.2863
#2	1637.9	.78461	1.2205	11.021	49.174	2.3400	-1.1915
#3	1599.3	.95035	1.2275	10.694	49.798	2.6174	1.6177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	10000.	100.00	10000.	10000.	10000.	10000.
Low	-3.0000	-5.0000	-1.0000	-5.0000	-3.0000	-3.0000	-10.000
Elem	Sn1899	Ti3349	Tl1908	V_2924	Zn2062	2203/1	2203/2
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	13.211	283.80	-2.0890	72.660	56.073	50.348	49.237
SDev	.557	4.14	1.8531	1.359	1.120	1.307	.421
%RSD	4.2156	1.4571	88.705	1.8707	1.9978	2.5952	.85478
#1	12.573	286.83	-2.8273	73.732	56.904	51.796	48.880
#2	13.460	285.49	L-3.4592	73.117	56.515	49.258	49.131
#3	13.600	279.09	.01938	71.131	54.799	49.989	49.701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK

Sample 015BDI T01
 $(\frac{0.1090 \text{ ug}}{L}) \times (\frac{50 \text{ ml}}{.32 \text{ g}}) \times (\frac{1}{1000}) \times (\frac{1}{.912}) = 0.0187 \text{ mg/kg}$
 Mercury

Client:

TETRA
 ARCADIS
 SAIC

Curve Date: 10/9/2008 Curve age OK

Correlation: 0.99971 Corr. OK

Slope: 0.008999
 Intercept: 0.000405

RL= 0.20 ug/l for H2O and TCLP
 0.033 mg/kg (using 0.30 g) for soils or other

MDL= 0.08 ug/L WATER AND 0.013 mg/Kg SOIL

QC Criteria: Method Blank < 1/2 RL for CORP Samples

LCS = ±20% of True Value

CCB =<MDL

Analysis Time	Curve Data	
	Conc.(ug/L)	Pk Height
10:28:27	0	0.0006
10:29:22	0.2	0.0029
10:30:16	0.5	0.0055
10:31:33	1	0.0093
10:32:52	2	0.0168
10:34:11	4	
10:35:32	6	
10:36:53	10	0.0907

Empirical Laboratories

Digestion Date: 10/8/2008

Digestion by: KH

Analysis Date: 10/9/08

Analyst: KH

Analyst Authorization: KH

Method#: 245.1/7470A for H2O

7471A for soils

Method Type: Cold Vapor

Concentration (ug/L) = (Peak Height - intercept)/slope * dilution

Conversion for soils from concentration (ug/L) to mg/kg (wet weight) = concentration (ug/L) * final volume (mL)/initial weight (g) * 1L/1000mL * 1000g/1kg * 1g/1000mg

Lab. #	Client	Waste Description	T.V. (ug/L) (mg/kg)	Analysis Time HH:MM (Military)	Matrix Type	Digestion		Analysis		Dilution	Peak Height	[Hg] ug/L	[Hg] mg/kg	Recovery %	Control Limits		RPD	Method
						Initial Sample Volume	Final Sample Volume (mL)	Initial Sample Volume (mL)	Final Sample Volume (mL)						Low Limit %	High Limit %		
ICV		ISA080195	4.0000	10:39:13	H2O	50.00	50.0	50.0	50.0	1.00	0.0344	3.7725		94.31	90.0	110.0		7471A
ICB		DI H2O		10:40:27	H2O	50.00	50.0	50.0	50.0	1.00	0.0004	-0.0042						7471A
LCSS100808A		ISA080195	0.3333	10:41:43	SOIL	0.30	50.0	50.0	50.0	1.00	0.0178	1.9293	0.32155	96.48	80.0	120.0		7471A
PBS100808A		DI H2O		10:43:00	SOIL	0.30	50.0	50.0	50.0	1.00	0.0006	0.0220	0.00367					7471A
0810033-01	TETRA			10:44:17	SOIL	0.32	50.0	50.0	50.0	1.00	0.0014	0.1090	0.01704					7471A
0810033-02	TETRA			10:45:36	SOIL	0.29	50.0	50.0	50.0	1.00	0.0008	0.0480	0.00827					7471A
0810033-03	TETRA			10:46:56	SOIL	0.33	50.0	50.0	50.0	1.00	0.0034	0.3380	0.05122					7471A
0810049-01				10:48:16	SOIL	0.31	50.0	50.0	50.0	1.00	0.0008	0.0397	0.00640					7471A
0810049-02				10:49:33	SOIL	0.33	50.0	50.0	50.0	1.00	0.0006	0.0170	0.00258					7471A
0809286-17				10:50:47	SOIL	0.31	50.0	50.0	50.0	1.00	0.0343	3.7647	0.60720					7471A
0809286-18				10:52:01	SOIL	0.34	50.0	50.0	50.0	1.00	0.0276	3.0219	0.44439					7471A
0809286-19				10:53:16	SOIL	0.29	50.0	50.0	50.0	1.00	0.0009	0.0542	0.00935					7471A
CCV		ISA080069	4.0000	10:54:32	H2O	50.00	50.0	50.0	50.0	1.00	0.0380	4.1784		104.46	85.0	115.0		7471A
CCB		DI H2O		10:55:47	H2O	50.00	50.0	50.0	50.0	1.00	0.0007	0.0334						7471A
0809286-20				10:57:02	SOIL	0.35	50.0	50.0	50.0	1.00	0.0008	0.0476	0.00680					7471A
0809286-21				10:58:19	SOIL	0.28	50.0	50.0	50.0	1.00	0.0127	1.3666	0.24404					7471A
0809286-22				10:59:36	SOIL	0.30	50.0	50.0	50.0	1.00	0.0007	0.0361	0.00602					7471A
0809286-23				11:00:54	SOIL	0.34	50.0	50.0	50.0	1.00	0.2170	24.0674	3.88184					7471A
0809286-24				11:02:12	SOIL	0.30	50.0	50.0	50.0	1.00	0.2423	26.8802	4.48003					7471A
0809286-25				11:03:31	SOIL	0.30	50.0	50.0	50.0	1.00	0.0074	0.7770	0.12950					7471A
0809286-26				11:04:50	SOIL	0.33	50.0	50.0	50.0	1.00	0.0139	1.4941	0.22638					7471A
0809286-27				11:06:09	SOIL	0.32	50.0	50.0	50.0	1.00	0.3034	33.6700	5.26093					7471A
0809286-28				11:07:28	SOIL	0.33	50.0	50.0	50.0	1.00	0.0054	0.5554	0.08415					7471A
0809286-29				11:08:45	SOIL	0.30	50.0	50.0	50.0	1.00	0.0141	1.5192	0.25320					7471A
CCV		ISA080069	4.0000	11:09:59	H2O	50.00	50.0	50.0	50.0	1.00	0.0381	4.1920		104.80	85.0	115.0		7471A
CCB		DI H2O		11:11:11	H2O	50.00	50.0	50.0	50.0	1.00	0.0007	0.0308						7471A
0809286-29[MS]		ISA080195	0.3226	11:12:26	SOIL	0.31	50.0	50.0	50.0	1.00	0.0310	3.3949	0.54756	93.92	80.0	120.0	7.2	7471A
0809286-29[MS]		ISA080195	0.3226	11:13:41	SOIL	0.31	50.0	50.0	50.0	1.00	0.0333	3.6527	0.58914	107.20	80.0	120.0		7471A
0809286-30				11:14:56	SOIL	0.30	50.0	50.0	50.0	1.00	0.0011	0.0734	0.01223					7471A
0809286-31				11:16:10	SOIL	0.29	50.0	50.0	50.0	1.00	0.0021	0.1922	0.03313					7471A

APPENDIX E

HUMAN HEALTH RISK ASSESSMENT SUPPORTING DATA

- E.1 RAGS Part D Tables**
- E.2 Sample Calculations**
- E.3 Vapor Intrusion Modeling Results**

APPENDIX E.1

RAGS – PART D TABLES

RAGS Part D Table 1

Selection of Exposure Pathways

TABLE 1
SELECTION OF EXPOSURE PATHWAYS
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 1 OF 3

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future or Future	Surface Soil	Surface Soil	Site 1	Construction Workers	Adult	Ingestion Dermal	Quant Quant	Construction workers may have contact with surface soil during excavation activities.
				Maintenance Worker	Adult	Ingestion Dermal	Quant Quant	Maintenance workers may contact surface soil during normal work activities.
				Industrial Worker	Adult	Ingestion Dermal	Quant Quant	Industrial workers may contact surface soil during normal work activities.
				Trespassers	Adolescents	Ingestion Dermal	Quant Quant	Trespassers may contact surface soil while at the site.
					Adult	Ingestion Dermal	Quant Quant	Trespassers may contact surface soil while at the site.
		Air	Site 1	Construction Workers	Adult	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
				Maintenance Worker	Adult	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
				Industrial Worker	Adult	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
				Trespassers	Adolescents	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
					Adult	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
	Subsurface Soil	Subsurface Soil	Site 1	Construction Workers	Adult	Ingestion Dermal	Quant Quant	Construction workers may have contact with subsurface soil during excavation activities.
				Maintenance Worker	Adult	Ingestion Dermal	Quant Quant	Although exposures to subsurface soil by maintenance workers is considered unlikely at the site this scenario is included to aid in future risk management decisions.
				Industrial Worker	Adult	Ingestion Dermal	Quant Quant	Although exposures to subsurface soil by industrial workers is considered unlikely at the site this scenario is included to aid in future risk management decisions.
				Trespassers	Adolescents	Ingestion Dermal	Quant Quant	Although exposures to subsurface soil by adolescent trespassers is considered unlikely at the site this scenario is included to aid in future risk management decisions.
					Adult	Ingestion Dermal	Quant Quant	Although exposures to subsurface soil by adult trespassers is considered unlikely at the site this scenario is included to aid in future risk management decisions.
		Air	Site 1	Construction Workers	Adult	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
				Maintenance Worker	Adult	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
				Industrial Worker	Adult	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
				Trespassers	Adolescents	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
					Adult	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
Groundwater	Groundwater	Site 1	Construction Workers	Adult	Ingestion Dermal	None Quant	Construction workers are not expected to ingest groundwater. Construction workers may have dermal contact with groundwater during excavation activities.	
			Maintenance Workers	Adult	Ingestion Dermal	None None	Maintenance workers are not expected to have contact with groundwater.	

TABLE 1
SELECTION OF EXPOSURE PATHWAYS
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 2 OF 3

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway		
Current/Future or Future	Groundwater	Groundwater	Site 1	Industrial Worker	Adult	Ingestion Dermal	None None	Industrial workers are not expected to have contact with groundwater.		
				Trespassers	Adolescents	Ingestion Dermal	None None	Adolescent trespassers are not expected to be exposed to groundwater.		
					Adult	Ingestion Dermal	None None	Adult trespassers are not expected to be exposed to groundwater.		
	Air	Air	Site 1	Construction Workers	Adult	Inhalation	Quant	Construction workers may be exposed to COPCs that have volatilized from groundwater during excavation activities.		
				Maintenance Workers	Adult	Inhalation	None	Maintenance workers are not expected to be exposed to COPCs that have volatilized from groundwater.		
				Industrial Worker	Adult	Inhalation	None	Industrial workers are not expected to be exposed to COPCs that have volatilized from groundwater.		
				Trespassers	Adolescents	Inhalation	None	Adolescent trespassers are not expected to be exposed to COPCs that have volatilized from groundwater.		
					Adult	Inhalation	None	Adolescent trespassers are not expected to be exposed to COPCs that have volatilized from groundwater.		
			Vapor Intrusion	Industrial Worker	Adult	Inhalation	None	Industrial workers are not expected to be exposed to COPCs that have volatilized from groundwater and migrated through building foundations into indoor air.		
			Surface Water	Surface Water	Site 1	Construction Workers	Adult	Ingestion Dermal	Quant Quant	Construction workers may have contact with surface water during excavation activities.
	Maintenance Worker	Adult				Ingestion Dermal	Quant Quant	Maintenance workers may contact surface water during normal work activities.		
	Industrial Worker	Adult				Ingestion Dermal	Quant Quant	Industrial workers may contact surface water during normal work activities.		
	Trespassers	Adolescents				Ingestion Dermal	Quant Quant	Adolescent trespassers may contact surface water while at the site.		
		Adult				Ingestion Dermal	Quant Quant	Adult trespassers may contact surface water while at the site.		
	Sediment	Sediment				Site 1	Construction Workers	Adult	Ingestion Dermal	Quant Quant	Construction workers may have contact with sediment during excavation activities.
Maintenance Worker							Adult	Ingestion Dermal	Quant Quant	Maintenance workers may contact sediment during normal work activities.
Industrial Worker							Adult	Ingestion Dermal	Quant Quant	Industrial workers may contact sediment during normal work activities.
Trespassers			Adolescents	Ingestion Dermal	Quant Quant		Adolescent trespassers may contact sediment while at the site.			
			Adult	Ingestion Dermal	Quant Quant		Adult trespassers may contact sediment while at the site.			
Future	Surface Soil	Surface Soil	Site 1	Residents	Child	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.		
					Adult	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.		

TABLE 1
SELECTION OF EXPOSURE PATHWAYS
NCBC GULFPORT
GULFPORT, MISSISSIPPI
PAGE 3 OF 3

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future	Surface Soil	Air	Site 1	Residents	Child	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
					Adult	Inhalation	None	No COPCs were identified in surface soil for the inhalation exposure pathway.
	Subsurface Soil	Subsurface Soil	Site 1	Residents	Child	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.
					Adult	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.
		Air	Site 1	Residents	Child	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
					Adult	Inhalation	None	No COPCs were identified in subsurface soil for the inhalation exposure pathway.
	Groundwater	Groundwater	Site 1	Residents	Child	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions.
					Adult	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions.
		Air	Site 1	Residents	Child	Inhalation	Quant	Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions.
					Adult	Inhalation	Quant	Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions.
		Vapor Intrusion	Residents	Child	Inhalation	Quant	Child residents may be exposed to COPCs that have volatilized from groundwater and migrated through building foundations into indoor air.	
				Adult	Inhalation	Quant	Adult residents may be exposed to COPCs that have volatilized from groundwater and migrated through building foundations into indoor air.	
	Surface Water	Surface Water	Site 1	Residents	Child	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.
					Adult	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.
	Sediment	Sediment	Site 1	Residents	Child	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.
					Adult	Ingestion Dermal	Quant Quant	Although a future residential scenario is considered unlikely at the site this scenario is included to aid in future risk management decisions.

Notes:
Quant - Quantitative.

RAGS Part D Table 2

**Occurrence, Distribution, and Selection
of Chemicals of Potential Concern**

LIST OF TABLES
RAGS PART D TABLE 2
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Table No.

2.1	Direct Contact With Surface Soil
2.2	Migration From Surface Soil
2.3	Direct Contact With Subsurface Soil
2.4	Migration From Subsurface Soil
2.5	Direct Contact With DPT Groundwater
2.6	Vapor Intrusion - DPT Groundwater
2.7	Direct Contact With Monitoring Well Groundwater
2.8	Vapor Intrusion - Monitoring Well Groundwater
2.9	Direct Contact With Surface Water
2.10	Direct Contact With Sediment

TABLE 2.1
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Medium: Surface Soil
 Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁶⁾	ORNL Residential Soil Criteria ⁽⁷⁾	USEPA SSLs Soil to Air ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatiles Organic Compounds																
	78-93-3	2-BUTANONE	1.8 J	4 J	ug/kg	01SS1201	2/21	1.3 - 11	4	NA	8450 N	8450 N	2800000 NS	24000000 sat	No	BSL	
	108-10-1	4-METHYL-2-PENTANONE	0.71 J	1.2 J	ug/kg	01SS01501	4/21	0.54 - 11	1.2	NA	16200000 N	626000 N	530000 NS	2700000 sat	No	BSL	
	127-18-4	TETRACHLOROETHENE	0.22 J	0.26 J	ug/kg	01SS13701	2/21	0.9 - 11	0.28	NA	18200 C	11900 C	570 C	10000 C	No	BSL	
	Semivolatiles Organic Compounds																
	208-99-2	BENZO(B)FLUORANTHENE	78 J	78 J	ug/kg	01SS040T	1/21	34 - 420	78	NA	7840 C	875 C	150 C	NA	No	BSL	
	105-60-2	CAPROLACTAM	140 J	300 J	ug/kg	01SS0901	3/21	72 - 420	300	NA	10200000 N	3910000 N	3100000 N	NA	No	BSL	
	84-74-2	DI-N-BUTYL PHTHALATE	53 J	53 J	ug/kg	01SS050T	1/21	33 - 410	53	NA	2280000 Csat	2280000 Csat	610000 N	NA	No	BSL	
	84-66-2	DIETHYL PHTHALATE	40 J	60 J	ug/kg	01SS01501	3/21	36 - 420	60	NA	1970000 Csat	1970000 Csat	4900000 N	NA	No	BSL	
	Pesticides/PCBs																
	72-55-9	4,4'-DDE	0.58 J	1.5 J	ug/kg	01SS11001	4/21	0.18 - 0.84	1.5	NA	16800 C	1890 C	1400 C	NA	No	BSL	
	50-29-3	4,4'-DDT	0.23 J	2 J	ug/kg	01SS11001	7/20	0.18 - 0.84	2	NA	16800 C	1890 C	1700 C	750000 C	No	BSL	
	309-00-2	ALDRIN	0.16 J	6.3 J	ug/kg	01SS01701	3/21	0.12 - 0.42	6.3	NA	337 C	37.6 C	29 C	3400 C	No	BSL	
	319-94-6	ALPHA-BHC	0.26 J	0.26 J	ug/kg	01SS050T	1/21	0.12 - 0.41	0.26	NA	908 C	101 C	77 C	750 C	No	BSL	
	5103-71-9	ALPHA-CHLORDANE	0.23 J	4.9 J	ug/kg	01SS02401	5/21	0.12 - 0.42	4.9	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL	
	11098-82-5	AROCLOR-1260	17 J	17 J	ug/kg	01SS1001	1/21	4.5 - 21	17	NA	10000 C	1000 C	220 C	NA	No	BSL	
	319-85-7	BETA-BHC	0.16 J	0.36 J	ug/kg	01SS0801	4/20	0.12 - 0.41	0.36	NA	3180 C	355 C	270 C	6000 C	No	BSL	
	319-86-8	DELTA-BHC	0.26 J	0.26 J	ug/kg	01SS01401	1/21	0.12 - 0.42	0.26	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	750 C ⁽¹⁰⁾	No	BSL	
	60-57-1	DELDRIN	0.36 J	460 J	ug/kg	01SS02501	8/20	0.18 - 0.84	460	NA	358 C	39.9 C	30 C	1100 C	Yes	ASL	
	33213-65-9	ENDOSULFAN II	0.24 J	1.6	ug/kg	01SS42001	6/21	0.18 - 0.84	1.6	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL	
1031-07-8	ENDOSULFAN SULFATE	0.29 J	0.29 J	ug/kg	01SS01401-D	1/21	0.18 - 0.84	0.29	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL		
7421-93-4	ENDRIN ALDEHYDE	0.31 J	2 J	ug/kg	01SS1001	2/21	0.18 - 0.84	2	NA	6130 N ⁽¹²⁾	2350 N ⁽¹²⁾	1800 N ⁽¹²⁾	NA	No	BSL		
58-89-9	GAMMA-BHC (LINDANE)	0.23 J	0.23 J	ug/kg	01SS13901-D	1/21	0.12 - 0.42	0.23	NA	4400 C	491 C	520 C	NA	No	BSL		
5103-74-2	GAMMA-CHLORDANE	0.22 J	3.4 J	ug/kg	01SS02401	4/21	0.12 - 0.42	3.4	NA	1230 N ⁽⁹⁾	1820 C ⁽⁹⁾	1600 C ⁽⁹⁾	72000 C ⁽⁹⁾	No	BSL		
76-44-8	HEPTACHLOR	0.19 J	0.19 J	ug/kg	01SS0801	1/21	0.12 - 0.42	0.19	NA	195 C	112 C	110 C	4100 C	No	BSL		
1024-57-3	HEPTACHLOR EPOXIDE	0.25 J	1.7 J	ug/kg	01SS1001	5/20	0.12 - 0.42	1.7	NA	829 C	70.2 C	53 C	4700 C	No	BSL		
72-43-5	METHOXYCHLOR	0.29 J	140 J	ug/kg	01SS01701	4/21	0.12 - 0.42	140	NA	102000 N	39100 N	31000 N	NA	No	BSL		
Herbicides																	
93-76-5	2,4,5-T	1.2 J	6 J	ug/kg	01SS0801	3/21	0.92 - 2.1	6	NA	204000 N	78200 N	61000 N	NA	No	BSL		
88-85-7	DINOSEB	8.8 J	8.8 J	ug/kg	01SS030T	1/6	9.3 - 10	8.8	NA	20400 N	7820 N	6100 N	NA	No	BSL		
Metals																	
7429-90-5	ALUMINUM	1.770	12300	mg/kg	01SS13801	21/21	-	12,300	NA	204000 N	7820 N	7700 N	709000 N	Yes	ASL		
7440-36-0	ANTIMONY	1.1 J	3.6 J	mg/kg	01SS42001	2/21	1 - 1.3	3.6	NA	8.17 N	3.13 N	3.1 N	NA	Yes	ASL		
7440-38-2	ARSENIC	0.78	4.8	mg/kg	01SS040T	19/21	0.61 - 0.78	4.8	NA	3.62 C	0.426 C	0.39 C	760 C	Yes	ASL		
7440-39-3	BARIIUM	2	70	mg/kg	01SS01701	21/21	-	70	NA	1430 N	548 N	1500 N	70900 N	No	BSL		
7440-43-9	CADMIUM	0.3	0.32	mg/kg	01SS01401	1/21	0.2 - 0.26	0.32	NA	102 N	3.91 N	7 N	1840 C	No	BSL		
7440-70-2	CALCIUM	233	42400	mg/kg	01SS13701	15/21	205 - 261	42,400	NA	NA	NA	NA	NA	No	NUT		
7440-47-3	CHROMIUM	2.2	11	mg/kg	01SS42001	21/21	-	11	NA	381 C ⁽¹³⁾	227 C ⁽¹³⁾	23 N ⁽¹³⁾⁽¹⁴⁾	276 C ⁽¹³⁾	No	BSL		
7440-49-4	COPPER	6.8	6.8	mg/kg	01SS01701	1/21	1 - 1.3	6.8	NA	1230 N	469 N	23 N	1180 C	Yes	ASL		
7440-50-8	COPPER	1.4	210	mg/kg	01SS01501	19/21	1 - 1.3	210	NA	817 N	313 N	310 N	NA	No	BSL		
7439-89-6	IRON	548	9050	mg/kg	01SS01701	21/21	-	9,050	NA	61300 N	2350 N	5500 N	NA	Yes	ASL		
7439-82-1	LEAD	3.2	70.6 J	mg/kg	01SS42001	21/21	-	70.6	NA	1700 C	400	400 N	NA	No	BSL		
7439-95-4	MAGNESIUM	233	3390	mg/kg	01SS040T	11/21	205 - 261	3,390	NA	NA	NA	NA	NA	No	NUT		
7439-96-5	MANGANESE	1	358	mg/kg	01SS01701	21/21	-	358	NA	408 N	156 N	180 N	7090 N	Yes	ASL		
7439-97-6	MERCURY	0.016	0.059	mg/kg	01SS0101-D	16/21	0.013 - 0.016	0.059	NA	6.13 N	1 N	2.3 N ⁽¹⁵⁾	NA	No	BSL		
7440-02-0	NICKEL	1.3	5.7	mg/kg	01SS13801	19/21	1 - 1.3	5.7	NA	408 N	156 N	150 N	NA	No	BSL		
7782-49-2	SELENIUM	0.69	1.3	mg/kg	01SS060T	4/21	0.61 - 0.78	1.3	NA	102 N	39.1 N	39 N	NA	No	BSL		
7440-23-5	SODIUM	266	329	mg/kg	01SS13701	3/21	205 - 261	329	NA	NA	NA	NA	NA	No	NUT		
7440-62-2	VANADIUM	2.7	16	mg/kg	01SS01701	21/21	-	16	NA	143 N	54.8 N	39 N	NA	No	BSL		
7440-66-6	ZINC	1.7	89	mg/kg	01SS13701	21/21	-	89	NA	6130 N	2350 N	2300 N	NA	No	BSL		

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - USEPA Soil Screening Levels (SSLs), EPA Internet Site at http://risk.lsd.org/govcalc_start.htm.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 9 - Values are for chlordane.
- 10 - Values are for alpha-BHC.
- 11 - Values are for endosulfan.
- 12 - Values are for endrin.
- 13 - Values are for hexavalent chromium.
- 14 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- 15 - Values are for mercury, inorganic salts.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Rationale Codes:

- For selection as a COPC:
- ASL = Above Screening Level
- For elimination as a COPC:
- BSL = Below COPC Screening Level
- NUT = Essential nutrient
- NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the

TABLE 2.1
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE SOIL
 NCBC GULFPFORT
 GULFPFORT, MISSISSIPPI
 PAGE 2 OF 2

Scenario Timeframe: Current/Future
 Medium: Surface Soil
 Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽²⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽³⁾	Mississippi Unrestricted Soil Criteria ⁽⁵⁾	ORNL Residential Soil Criteria ⁽⁶⁾	USEPA SSLs Soil to Air ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾
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chemical was retained as a COPC.

Associated Samples:

01SS01QT	01SS05QT	01SS1101	01SS01701	01SS13901-AVG
01SS01QT-AVG	01SS06QT	01SS1201	01SS02401	01SS13901-D
01SS01QT-D	01SS0701	01SS01401	01SS02501	01SS42001
01SS02QT	01SS0801	01SS01401-AVG	01SS13701	
01SS03QT	01SS0901	01SS01401-D	01SS13801	
01SS04QT	01SS1001	01SS01501	01SS13901	

TABLE 2.2
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Surface Soil
 Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾	
Site 1	Volatile Organic Compounds													
	78-93-3	2-BUTANONE	1.8 J	4 J	ug/kg	01SS1201	2/21	1.3 - 11	4	NA	1500	No	BSL	
	108-10-1	4-METHYL-2-PENTANONE	0.71 J	1.2 J	ug/kg	01SS01501	4/21	0.54 - 11	1.2	NA	440	No	BSL	
	127-18-4	TETRACHLOROETHENE	0.22 J	0.28 J	ug/kg	01SS13701	2/21	0.9 - 11	0.28	NA	0.052	Yes	ASL	
	Semivolatile Organic Compounds													
	205-99-2	BENZO(B)FLUORANTHENE	78 J	78 J	ug/kg	01SS04QT	1/21	34 - 420	78	NA	47	Yes	ASL	
	105-60-2	CAPROLACTAM	140 J	300 J	ug/kg	01SS0901	3/21	72 - 420	300	NA	5700	No	BSL	
	84-74-2	DI-N-BUTYL PHTHALATE	53 J	53 J	ug/kg	01SS05QT	1/21	33 - 410	53	NA	11000	No	BSL	
	84-66-2	DIETHYL PHTHALATE	40 J	60 J	ug/kg	01SS01501	3/21	36 - 420	60	NA	13000	No	BSL	
	Pesticides/PCBs													
	72-55-9	4,4'-DDE	0.58 J	1.5 J	ug/kg	01SS1001	4/21	0.18 - 0.84	1.5	NA	60	No	BSL	
	50-29-3	4,4'-DDT	0.23 J	2 J	ug/kg	01SS1001	7/20	0.18 - 0.84	2	NA	87	No	BSL	
	309-00-2	ALDRIN	0.16 J	6.3 J	ug/kg	01SS01701	3/21	0.12 - 0.42	6.3	NA	0.84	Yes	ASL	
	319-84-6	ALPHA-BHC	0.26 J	0.26 J	ug/kg	01SS05QT	1/21	0.12 - 0.41	0.26	NA	0.074	Yes	ASL	
	5103-71-9	ALPHA-CHLORDANE	0.23 J	4.9 J	ug/kg	01SS02401	5/21	0.12 - 0.42	4.9	NA	33 ⁽⁷⁾	No	BSL	
	11096-82-5	AROCLOR-1260	17 J	17 J	ug/kg	01SS1001	1/21	4.5 - 21	17	NA	14	Yes	ASL	
	319-85-7	BETA-BHC	0.16 J	0.36 J	ug/kg	01SS0801	4/20	0.12 - 0.41	0.36	NA	0.26	Yes	ASL	
	319-86-8	DELTA-BHC	0.26 J	0.26 J	ug/kg	01SS01401	1/21	0.12 - 0.42	0.26	NA	0.074 ⁽⁸⁾	Yes	ASL	
	60-57-1	DIELDRIN	0.36 J	460 J	ug/kg	01SS02501	8/20	0.18 - 0.84	460	NA	0.09	Yes	ASL	
	33213-65-9	ENDOSULFAN II	0.24 J	1.6	ug/kg	01SS42001	6/21	0.18 - 0.84	1.6	NA	9700 ⁽⁹⁾	No	BSL	
	1031-07-8	ENDOSULFAN SULFATE	0.29 J	0.29 J	ug/kg	01SS01401-D	1/21	0.18 - 0.84	0.29	NA	9700 ⁽⁹⁾	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	0.31 J	2 J	ug/kg	01SS1001	2/21	0.18 - 0.84	2	NA	230 ⁽¹⁰⁾	No	BSL	
	58-89-9	GAMMA-BHC (LINDANE)	0.23 J	0.23 J	ug/kg	01SS13901-D	1/21	0.12 - 0.42	0.23	NA	0.43	No	BSL	
	5103-74-2	GAMMA-CHLORDANE	0.22 J	3.4 J	ug/kg	01SS02401	4/21	0.12 - 0.42	3.4	NA	33 ⁽⁷⁾	No	BSL	
	76-44-8	HEPTACHLOR	0.19 J	0.19 J	ug/kg	01SS0801	1/21	0.12 - 0.42	0.19	NA	1.6	No	BSL	
	1024-57-3	HEPTACHLOR EPOXIDE	0.25 J	1.7 J	ug/kg	01SS1001	5/20	0.12 - 0.42	1.7	NA	0.079	Yes	ASL	
	72-43-5	METHOXYCHLOR	0.29 J	140 J	ug/kg	01SS01701	4/21	0.12 - 0.42	140	NA	16000	No	BSL	
	Herbicides													
	93-76-5	2,4,5-T	1.2 J	6 J	ug/kg	01SS0801	3/21	0.92 - 2.1	6	NA	110	No	BSL	
	88-85-7	DINOSEB	8.8 J	8.8 J	ug/kg	01SS03QT	1/6	9.3 - 10	8.8	NA	270	No	BSL	
	Metals													
	7429-90-5	ALUMINUM	1,770	12300	mg/kg	01SS13801	21/21	-	12,300	NA	55000	No	BSL	
	7440-36-0	ANTIMONY	1.1 J	3.6 J	mg/kg	01SS42001	2/21	1 - 1.3	3.6	NA	0.66	Yes	ASL	
	7440-38-2	ARSENIC	0.78	4.8	mg/kg	01SS04QT	19/21	0.61 - 0.78	4.8	NA	0.0013	Yes	ASL	
	7440-39-3	BARIUM	2	70	mg/kg	01SS01701	21/21	-	70	NA	300	No	BSL	
	7440-43-9	CADMIUM	0.3	0.32	mg/kg	01SS01401	1/21	0.2 - 0.26	0.32	NA	1.4	No	BSL	
	7440-70-2	CALCIUM	233	42400	mg/kg	01SS13701	15/21	205 - 261	42,400	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	2.2	11	mg/kg	01SS42001	21/21	-	11	NA	2.1 ⁽¹¹⁾	Yes	ASL	
	7440-48-4	COBALT	6.8	6.8	mg/kg	01SS01701	1/21	1 - 1.3	6.8	NA	0.49	Yes	ASL	
	7440-50-8	COPPER	1.4	210	mg/kg	01SS01501	19/21	1 - 1.3	210	NA	51	Yes	ASL	
	7439-89-6	IRON	546	9050	mg/kg	01SS01701	21/21	-	9,050	NA	640	Yes	ASL	
	7439-92-1	LEAD	3.2	70.6 J	mg/kg	01SS42001	21/21	-	70.6	NA	14	Yes	ASL	
	7439-95-4	MAGNESIUM	233	3390	mg/kg	01SS04QT	11/21	205 - 261	3,390	NA	NA	No	NUT	
	7439-96-5	MANGANESE	1	358	mg/kg	01SS01701	21/21	-	358	NA	57	Yes	ASL	
	7439-97-6	MERCURY	0.016	0.059	mg/kg	01SS01QT-D	16/21	0.013 - 0.016	0.059	NA	0.57 ⁽¹²⁾	No	BSL	
	7440-02-0	NICKEL	1.3	5.7	mg/kg	01SS13801	19/21	1 - 1.3	5.7	NA	48	No	BSL	
	7782-49-2	SELENIUM	0.69	1.3	mg/kg	01SS06QT	4/21	0.61 - 0.78	1.3	NA	0.95	Yes	ASL	
	Site 1	7440-23-5	SODIUM	266	329	mg/kg	01SS13701	3/21	205 - 261	329	NA	NA	No	NUT
		7440-62-2	VANADIUM	2.7	16	mg/kg	01SS01701	21/21	-	16	NA	180	No	BSL
		7440-66-6	ZINC	1.7	89	mg/kg	01SS13701	21/21	-	89	NA	680	No	BSL

Footnotes:

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.

Definitions:

C = Carcinogen
 COPC = Chemical Of Potential Concern

TABLE 2.2
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Surface Soil
 Exposure Medium: Surface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
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2 - Values presented are sample-specific quantitation limits.

3 - The maximum detected concentration is used for screening purposes.

4 - No site-specific background soil data were available for NCBC Gulfport.

5 - Oak Ridge National Laboratory Regional Screening Levels for Chemical Contaminants at Superfund Sites, Risk-based soil screening level for migration to groundwater, April, 2009.

6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

7 - Values are for chlordane.

8 - Values are for alpha-BHC.

9 - Values are for endosulfan.

10 - Values are for endrin.

11 - Values are for hexavalent chromium.

12 - Values are for mercury, inorganic salts.

J = Estimated value

N = Noncarcinogen

NA = Not Applicable/Not Available

S = Concentration may exceed Csat

sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:

ASL = Above Screening Level

For elimination as a COPC:

BSL = Below COPC Screening Level

NUT = Essential nutrient

NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01SS01QT	01SS05QT	01SS1101	01SS01701	01SS13901-AVG
01SS01QT-AVG	01SS06QT	01SS1201	01SS02401	01SS13901-D
01SS01QT-D	01SS0701	01SS01401	01SS02501	01SS42001
01SS02QT	01SS0801	01SS01401-AVG	01SS13701	
01SS03QT	01SS0901	01SS01401-D	01SS13801	
01SS04QT	01SS1001	01SS01501	01SS13901	

TABLE 2.3
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SUBSURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Medium: Subsurface Soil
 Exposure Medium: Subsurface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁶⁾	ORNL Residential Soil Criteria ⁽⁹⁾	USEPA SSLs Soil to Air ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	78-93-3	2-BUTANONE	3 J	3.6 J	ug/kg	01SBDT02-07	2/13	10 - 15	3.6	NA	8450 N	8450 N	2800000 NS	24000000 sat	No	BSL	
	108-10-1	4-METHYL-2-PENTANONE	1.7 J	1.7 J	ug/kg	01SBDIT02	1/13	10 - 15	1.7	NA	16300000 N	626000 N	530000 NS	2700000 sat	No	BSL	
	75-15-0	CARBON DISULFIDE	2.8 J	2.8 J	ug/kg	01SBDT02-07	1/13	10 - 15	2.8	NA	797 N	797 N	67000 NS	720000 sat	No	BSL	
	74-87-3	CHLOROMETHANE	0.62 J	0.62 J	ug/kg	01SBI002-07	1/13	10 - 15	0.62	NA	440000 C	49100 C	12000 N	2100 C	No	BSL	
	Pesticides/PCBs																
	72-55-9	4,4'-DDE	0.35 J	0.35 J	ug/kg	01SBDIT01	1/3	0.83 - 0.95	0.35	NA	16800 C	1880 C	1400 C	NA	No	BSL	
	50-29-3	4,4'-DDT	0.73 J	1.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	1.4	NA	16800 C	1880 C	1700 C	75000 C	No	BSL	
	319-84-6	ALPHA-BHC	4.2 J	4.2 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	4.2	NA	908 C	101 C	77 C	750 C	No	BSL	
	5103-71-9	ALPHA-CHLORDANE	1.6	1.6	ug/kg	01SBDIT01	1/2	0.42 - 0.42	1.6	NA	1230 N ⁽⁸⁾	1820 C ⁽⁹⁾	1600 C ⁽⁶⁾	72000 C ⁽⁵⁾	No	BSL	
	53469-21-9	AROCLOPH242	2400 J	2400 J	ug/kg	01SBDIT02	1/7	18 - 24	2,400	NA	10000 C	1000 C	220 C	NA	Yes	ASL	
	319-85-7	BETA-BHC	0.32 J	83 J	ug/kg	01SBDIT02	2/2	-	83	NA	3180 C	355 C	270 C	6000 C	No	BSL	
	319-86-0	DELTA-BHC	34.0 J	34 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	34	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	750 C ⁽¹⁰⁾	No	BSL	
	60-67-1	DIELDRIN	0.43 J	0.43 J	ug/kg	01SBDIT01	1/2	0.95 - 0.95	0.43	NA	358 C	30 C	1100 C	NA	No	BSL	
	33213-65-9	ENDOSULFAN II	0.51 J	4.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	4.4	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL	
	1031-07-8	ENDOSULFAN SULFATE	0.46 J	1.5 J	ug/kg	01SBDIT02	2/3	0.73 - 0.73	1.5	NA	123000 N ⁽¹¹⁾	46900 N ⁽¹¹⁾	37000 N ⁽¹¹⁾	NA	No	BSL	
	78-20-8	ENDRIN	7.6 J	7.6 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	7.6	NA	6130 N	2350 N	1800 N	NA	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	12.0 J	12 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	12	NA	6130 N ⁽¹²⁾	2350 N ⁽¹²⁾	1800 N ⁽¹²⁾	NA	No	BSL	
	5103-74-2	GAMMA-CHLORDANE	0.65 J	0.65 J	ug/kg	01SBDIT01	1/1	-	0.65	NA	1230 N ⁽⁸⁾	1820 C ⁽⁹⁾	1600 C ⁽⁶⁾	72000 C ⁽⁵⁾	No	BSL	
	1094-57-3	HEPTACHLOR EPOXIDE	0.33 J	6.2 J	ug/kg	01SBDIT02	2/3	0.47 - 0.47	6.2	NA	629 C	70.2 C	53 C	4700 C	No	BSL	
	Metals																
	7429-90-5	ALUMINIUM	2910	9700	mg/kg	01SBDIT03	3/3	-	9,700	NA	204000 N	7620 N	7700 N	709000 N	Yes	ASL	
	7440-38-2	ARSENIC	1.3	2	mg/kg	01SBDIT01	2/3	0.75 - 0.75	2	NA	3.82 C	0.426 C	0.39 C	769 C	Yes	ASL	
	7440-39-3	BARIUM	7.8	15.6	mg/kg	01SBDIT03	3/3	-	15.6	NA	1430 N	548 N	1500 N	70900 N	No	BSL	
	7440-70-2	CALCIUM	511	582	mg/kg	01SBDIT01	2/3	283 - 283	582	NA	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	3	9.8	mg/kg	01SBDIT03	3/3	-	9.8	NA	381 C ⁽¹³⁾	227 C ⁽¹³⁾	23 N ⁽¹³⁾⁽¹⁴⁾	276 C ⁽¹³⁾	No	BSL	
	7440-50-8	COPPER	2.2	2.2	mg/kg	01SBDIT01_01SBDIT03	2/3	1.2 - 1.2	2.2	NA	817 N	313 N	310 N	NA	No	BSL	
	7439-89-6	IRON	908	2060	mg/kg	01SBDIT01	3/3	-	2,060	NA	61300 N	2350 N	5500 N	NA	No	BSL	
	7439-92-1	LEAD	2.5 J	7.5 J	mg/kg	01SBDIT01	3/3	-	7.5	NA	1700 C	400	400 N	NA	No	BSL	
	7439-96-5	MANGANESE	3.7	8	mg/kg	01SBDIT01	3/3	-	8	NA	408 N	156 N	180 N	7090 N	No	BSL	
	7439-97-6	MERCURY	0.019	0.073	mg/kg	01SBDIT03	2/3	0.017 - 0.017	0.073	NA	6.13 N	1 N	2.3 N ⁽¹⁵⁾	NA	No	BSL	
	7440-02-0	NICKEL	3.9	3.9	mg/kg	01SBDIT03	1/3	1.1 - 1.2	3.9	NA	408 N	156 N	150 N	NA	No	BSL	
	7440-62-2	VANADIUM	2.9	5.4	mg/kg	01SBDIT01	3/3	-	5.4	NA	143 N	54.8 N	39 N	NA	No	BSL	
	7440-66-6	ZINC	4.2	22.6	mg/kg	01SBDIT01	3/3	-	22.6	NA	6130 N	2350 N	2300 N	NA	No	BSL	

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEC), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - USEPA Soil Screening Levels (SSLs), EPA Internet Site at http://risk.lsd.ornl.gov/calc_start.htm.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
- 9 - Values are for chlordane.
- 10 - Values are for alpha-BHC.
- 11 - Values are for endosulfan.
- 12 - Values are for endrin.
- 13 - Values are for hexavalent chromium.
- 14 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- 15 - Values are for mercury, inorganic salts.

Definitions:

C = Carcinogen
 COPC = Chemical Of Potential Concern
 J = Estimated value
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

TABLE 2.4
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SUBSURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Subsurface Soil
 Exposure Medium: Subsurface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	78-93-3	2-BUTANONE	3 J	3.6 J	ug/kg	01SB0702-07	2/13	10 - 15	3.6	NA	1500	No	BSL
	108-10-1	4-METHYL-2-PENTANONE	1.7 J	1.7 J	ug/kg	01SBDIT02	1/13	10 - 15	1.7	NA	440	No	BSL
	75-15-0	CARBON DISULFIDE	2.8 J	2.8 J	ug/kg	01SB0702-07	1/13	10 - 15	2.8	NA	270	No	BSL
	74-87-3	CHLOROMETHANE	0.62 J	0.62 J	ug/kg	01SB1002-07	1/13	10 - 15	0.62	NA	49	No	BSL
	Pesticides/PCBs												
	72-55-9	4,4'-DDE	0.35 J	0.35 J	ug/kg	01SBDIT01	1/3	0.83 - 0.95	0.35	NA	60	No	BSL
	50-29-3	4,4'-DDT	0.73 J	1.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	1.4	NA	87	No	BSL
	319-84-6	ALPHA-BHC	4.2 J	4.2 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	4.2	NA	0.074	Yes	ASL
	5103-71-9	ALPHA-CHLORDANE	1.6	1.6	ug/kg	01SBDIT01	1/2	0.42 - 0.42	1.6	NA	33 ⁽⁷⁾	No	BSL
	53469-21-9	AROCFLOR-1242	2400 J	2400 J	ug/kg	01SBDIT02	1/7	18 - 24	2,400	NA	3	Yes	ASL
	319-85-7	BETA-BHC	0.32 J	63 J	ug/kg	01SBDIT02	2/2	-	63	NA	0.26	Yes	ASL
	319-86-8	DELTA-BHC	34.0 J	34 J	ug/kg	01SBDIT02	1/3	0.36 - 0.47	34	NA	0.074 ⁽⁹⁾	Yes	ASL
	60-57-1	DIELDRIN	0.43 J	0.43 J	ug/kg	01SBDIT01	1/2	0.95 - 0.95	0.43	NA	0.09	Yes	ASL
	33213-65-9	ENDOSULFAN II	0.51 J	4.4 J	ug/kg	01SBDIT02	2/3	0.95 - 0.95	4.4	NA	9700 ⁽⁹⁾	No	BSL
	1031-07-8	ENDOSULFAN SULFATE	0.46 J	1.5 J	ug/kg	01SBDIT02	2/3	0.73 - 0.73	1.5	NA	9700 ⁽⁹⁾	No	BSL
	72-20-8	ENDRIN	7.6 J	7.6 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	7.6	NA	230	No	BSL
	7421-93-4	ENDRIN ALDEHYDE	12.0 J	12 J	ug/kg	01SBDIT02	1/3	0.73 - 0.95	12	NA	230 ⁽¹⁰⁾	No	BSL
	5103-74-2	GAMMA-CHLORDANE	0.65 J	0.65 J	ug/kg	01SBDIT01	1/1	-	0.65	NA	33 ⁽⁷⁾	No	BSL
	1024-57-3	HEPTACHLOR EPOXIDE	0.33 J	6.2 J	ug/kg	01SBDIT02	2/3	0.47 - 0.47	6.2	NA	0.079	Yes	ASL
	Metals												
	7429-90-5	ALUMINUM	2910	9700	mg/kg	01SBDIT03	3/3	-	9,700	NA	55000	No	BSL
	7440-38-2	ARSENIC	1.3	2	mg/kg	01SBDIT01	2/3	0.75 - 0.75	2	NA	0.0013	Yes	ASL
	7440-39-3	BARIIUM	7.8	15.6	mg/kg	01SBDIT03	3/3	-	15.6	NA	300	No	BSL
	7440-70-2	CALCIUM	511	582	mg/kg	01SBDIT01	2/3	283 - 283	582	NA	NA	No	NUT
	7440-47-3	CHROMIUM	3	9.8	mg/kg	01SBDIT03	3/3	-	9.8	NA	2.1 ⁽¹¹⁾	Yes	ASL
	7440-50-8	COPPER	2.2	2.2	mg/kg	01SBDIT01, 01SBDIT03	2/3	1.2 - 1.2	2.2	NA	51	No	BSL
	7439-89-6	IRON	908	2060	mg/kg	01SBDIT01	3/3	-	2,060	NA	640	Yes	ASL
	7439-92-1	LEAD	2.5 J	7.5 J	mg/kg	01SBDIT01	3/3	-	7.5	NA	14	No	BSL
	7439-96-5	MANGANESE	3.7	8	mg/kg	01SBDIT01	3/3	-	8	NA	57	No	BSL
	7439-97-6	MERCURY	0.019	0.073	mg/kg	01SBDIT03	2/3	0.017 - 0.017	0.073	NA	0.57 ⁽¹²⁾	No	BSL
	7440-02-0	NICKEL	3.9	3.9	mg/kg	01SBDIT03	1/3	1.1 - 1.2	3.9	NA	48	No	BSL
	7440-62-2	VANADIUM	2.9	5.4	mg/kg	01SBDIT01	3/3	-	5.4	NA	180	No	BSL
	7440-66-6	ZINC	4.2	22.6	mg/kg	01SBDIT01	3/3	-	22.6	NA	680	No	BSL

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background soil data were available for NCBC Gulfport.
- 5 - Oak Ridge National Laboratory Regional Screening Levels for Chemical Contaminants at Superfund Sites, Risk-based soil screening level for migration to groundwater, April 2009.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

TABLE 2.4
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - MIGRATION TO GROUNDWATER - SUBSURFACE SOIL
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	ORNL SSLs for Migration to Groundwater ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
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7 - Values are for chlordane.
 8 - Values are for alpha-BHC.
 9 - Values are for endosulfan.
 10 - Values are for endrin.
 11 - Values are for hexavalent chromium.
 12 - Values are for mercury, inorganic salts.

Rationale Codes:
 For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01SBDIT01	01SB0120-22.5	01SB1002-07
01SBDIT02	01SB0203-08	01SB1002-07-AVG
01SBDIT03	01SB0321-26	01SB1002-07-D
01SBDIT0402	01SB0402-07	
01SBDIT0445	01SB0502-07	
01SBDIT0502	01SB0602-07	
01SBDIT0502-AVG	01SB0702-07	
01SBDIT0502-D	01SB0802-07	
01SBDIT0602	01SB0902-07	

TABLE 2.5
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - DPT GROUNDWATER SAMPLES
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 1

Scenario Timeframe: Current/Future
 Medium: Groundwater - DPT Samples
 Exposure Medium: Groundwater - DPT Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	Potential ARAR/TBC ⁽⁷⁾	Potential ARAR/TBC Source ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾
Site 1	Volatile Organic Compounds															
	78-93-3	2-BUTANONE	1.6 J	2.4 J	ug/L	01QT1501	3/25	5 - 5	2.4	NA	191 N	710 N	NA	NA	No	BSL
	67-64-1	ACETONE	3.2 J	4.8 J	ug/L	01TW1001-D	8/25	5 - 5	4.8	NA	60.8 N	2200 N	NA	NA	No	BSL
	75-15-0	CARBON DISULFIDE	0.16 J	0.25 J	ug/L	01QT1601	3/25	1 - 1	0.25	0.66	104 N	100 N	NA	NA	No	BSL
	74-87-3	CHLOROMETHANE	0.36 J	0.36 J	ug/L	01TW1001-D	1/25	1 - 1	0.36	NA	1.43 C	19 N	NA	NA	No	BSL
	156-59-2	CIS-1,2-DICHLOROETHENE	0.22 J	0.22 J	ug/L	01TW0301	1/25	1 - 1	0.22	0.2	70 MCL	70	MCL	MCL	No	BSL
	127-18-4	TETRACHLOROETHENE	0.26 J	0.54 J	ug/L	01QT0401	3/25	1 - 1	0.54	0.35	5 MCL	0.11 C	5	MCL	Yes	ASL
	79-01-6	TRICHLOROETHENE	0.32 J	0.32 J	ug/L	01TW0301	1/25	1 - 1	0.32	0.51	5 MCL	1.7 C	5	MCL	No	BSL

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Samples 01TW0101, 01QT1101, 01QT1101-AVG, 01QT1101-D, 01QT1201, and 01QT1301 were used as the background dataset.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
- 7 - 2006 Edition of the Drinking Water Standards and Health Advisories (USEPA, August 2006). SMCLs are presented for reference purposes only.
- 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Definitions:

- ARAR/TBC = Applicable or Relevant and Appropriate Requirements To Be Considered
 C = Carcinogen
 COPC = Chemical Of Potential Concern
 DPT = Direct Push Technology
 J = Estimated value
 MCL = Maximum Contaminant Level
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration
 SMCL = Secondary Maximum Contaminant Level

Rationale Codes:

- For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01TW0201	01QT0301
01TW0301	01QT0401
01TW0401	01QT0501
01TW0501	01QT0601
01TW0601	01QT0701
01TW0701	01QT0801
01TW0801	01QT0901
01TW0901	01QT1001
01TW1001	01QT1501
01TW1001-AVG	01QT1601
01TW1001-D	01QT1701
01QT1401	01QT1801
01QT0101	01QT1901

TABLE 2.6
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - GROUNDWATER - MONITORING WELL SAMPLES
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI
 PAGE 1 OF 1

Scenario Timeframe: Current/Future
 Medium: Groundwater - Monitoring Well Samples
 Exposure Medium: Groundwater - Monitoring Well Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	Potential ARAR/TBC ⁽⁷⁾	Potential ARAR/TBC Source ⁽⁷⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁸⁾	
Site 1	Volatile Organic Compounds																
	67-64-1	ACETONE	1.6 J	2.8 J	ug/L	01GW1901	2/21	1.7 - 5	2.8	NA	60.8 N	2200 N	NA	NA	No	BSL	
	75-15-0	CARBON DISULFIDE	1.8	1.8	ug/L	01GW0901	1/21	0.15 - 1	1.8	NA	104 N	100 N	NA	NA	No	BSL	
	79-01-6	TRICHLOROETHENE	0.3 J	0.3 J	ug/L	01GW2001	1/21	0.23 - 1	0.3	1.3	5 MCL	1.7 C	5	MCL	No	BSL	
	Semivolatile Organics																
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1.7 J	2 J	ug/L	01GW2501, 01GW2601	5/21	1.4 - 3.3	2	NA	6 MCL	4.8 C	6	MCL	No	BSL	
	91-20-3	NAPHTHALENE	6.7 J	6.7 J	ug/L	01GW2601	1/21	0.42 - 10	6.7	NA	0.62 N	0.14 C	NA	NA	Yes	ASL	
	Pesticides/PCBs																
	50-29-3	4,4'-DDT	0.0068 J	0.0068 J	ug/L	01GW2401	1/21	0.0046 - 0.02	0.0068	NA	0.197 C	0.2 C	NA	NA	No	BSL	
	7421-93-4	ENDRIN ALDEHYDE	0.0088 J	0.0088 J	ug/L	01GW1301	1/21	0.0046 - 0.02	0.0088	NA	2 MCL ⁽⁹⁾	1.1 N ⁽¹⁰⁾	2	MCL	No	BSL	
	Herbicides (ug/L)																
	93-72-1	2,4,5-TP (SILVEX)	0.049 J	0.17 J	ug/L	01GW1601-D, 01GW2001	3/18	0.023 - 0.05	0.17	NA	50 MCL	29 N	50	MCL	No	BSL	
	Inorganics																
	7429-90-5	ALUMINUM	73.5	6320	ug/L	01GW1101	21/21	-	6320	81.9	3650 N	3700 N	50 - 200	SMCL	Yes	ASL	
	7440-38-2	ARSENIC	14.2	19.1	ug/L	01GW1401	2/21	3 - 3	19.1	NA	50 MCL	0.045 C	10	MCL	Yes	ASL	
	7440-39-3	BARIUM	15.1	418	ug/L	01GW0601	21/21	-	418	38.8	2000 MCL	730 N	2000	MCL	No	BSL	
	7440-70-2	CALCIUM	3940	86800	ug/L	01GW2701	21/21	-	86800	14100	NA	NA	NA	NA	No	NUT	
	7440-47-3	CHROMIUM	2.1	8.1	ug/L	01GW1101	3/21	2 - 2	8.1	2.3	100 MCL ⁽¹⁰⁾	1.1 N ⁽¹⁰⁾	100	MCL	No	BSL	
	7439-89-6	IRON	147	44000	ug/L	01GW1501	21/21	-	44000	1170	1100 N	2600 N	300	SMCL	Yes	ASL	
	7439-92-1	LEAD	1.5	1.9	ug/L	01GW2001	3/21	1.5 - 1.7	1.9	NA	15 MCL	15	15	MCL ⁽¹¹⁾	No	BSL	
	7439-95-4	MAGNESIUM	1000	9990	ug/L	01GW0601	17/21	1000 - 1000	9990	2190	NA	NA	NA	NA	No	NUT	
	7439-96-5	MANGANESE	4.4	548	ug/L	01GW1501	21/21	-	548	40.9	73 N	88 N	50	SMCL	Yes	ASL	
	7440-09-7	POTASSIUM	1470	4600	ug/L	01GW0601	5/21	1000 - 1000	4600	NA	NA	NA	NA	NA	No	NUT	
	7440-23-5	SODIUM	2770	19500	ug/L	01GW0601, 01GW0901	21/21	-	19500	7200	NA	NA	NA	NA	No	NUT	
	7440-28-0	THALLIUM	4.1	4.1	ug/L	01GW1601	1/21	3 - 3	4.1	NA	2 MCL	0.24 N	2	MCL	Yes	ASL	
	7440-62-2	VANADIUM	10.2	10.2	ug/L	01GW1101	1/21	5 - 5	10.2	NA	25.8 N	18 N	NA	NA	No	BSL	
	7440-66-6	ZINC	5.7	24.3	ug/L	01GW0701	3/21	5 - 5	24.3	NA	1100 N	1100 N	5000	SMCL	No	BSL	
	Miscellaneous Parameters																
	57-12-5	CYANIDE	2.1 J	22.2 J	ug/L	01GW1901	13/21	5 - 5	22.2	NA	200 MCL	73 N	200	MCL	No	BSL	

Footnotes:
 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
 2 - Values presented are sample-specific quantitation limits.
 3 - The maximum detected concentration is used for screening purposes.
 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Sample 01GW2301 was used as the background dataset.
 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April 2009).
 7 - 2006 Edition of the Drinking Water Standards and Health Advisories (USEPA, August 2006).
 SMCLs are presented for reference purposes only.
 8 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
 9 - Values are for atrazine.
 10 - Values are for hexavalent chromium.
 11 - The MCL for this parameter is actually a treatment technique. The SDWA action level (at the tap) has been presented.

Definitions:
 ARAR/TBC = Applicable or Relevant and Appropriate Requirements To Be Considered
 C = Carcinogen
 COPC = Chemical Of Potential Concern
 J = Estimated value
 MCL = Maximum Contaminant Level
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration
 SMCL = Secondary Maximum Contaminant Level

Rationale Codes:
 For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

Associated Samples:

01GW0601	01GW1201	01GW1801	01GW2701
01GW0701	01GW1301	01GW1901	
01GW0701-AVG	01GW1401	01GW2001	
01GW0701-D	01GW1501	01GW2101	
01GW0801	01GW1601	01GW2201	
01GW0901	01GW1601-AVG	01GW2401	
01GW1001	01GW1601-D	01GW2501	
01GW1101	01GW1701	01GW2601	

TABLE 2.7
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - VAPOR INTRUSION - DPT GROUNDWATER SAMPLES
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

PAGE 1 OF 1

Scenario Timeframe: Current/Future
 Medium: Groundwater - DPT Samples
 Exposure Medium: Groundwater - DPT Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	USEPA Groundwater Volatilization Criteria ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	78-93-3	2-BUTANONE	1.6 J	2.4 J	ug/L	01QT1501	3/25	5 - 5	2.4	NA	440000 N	No	BSL
	67-64-1	ACETONE	3.2 J	4.8 J	ug/L	01TW1001-D	8/25	5 - 5	4.8	NA	220000 N	No	BSL
	75-15-0	CARBON DISULFIDE	0.16 J	0.25 J	ug/L	01QT1601	3/25	1 - 1	0.25	0.66	560 N	No	BSL
	74-87-3	CHLOROMETHANE	0.36 J	0.36 J	ug/L	01TW1001-D	1/25	1 - 1	0.36	NA	6.7 C	No	BSL
	156-59-2	CIS-1,2-DICHLOROETHENE	0.22 J	0.22 J	ug/L	01TW0301	1/25	1 - 1	0.22	0.2	210 N	No	BSL
	127-18-4	TETRACHLOROETHENE	0.26 J	0.54 J	ug/L	01QT0401	3/25	1 - 1	0.54	0.35	1.1 C	No	BSL
	79-01-6	TRICHLOROETHENE	0.32 J	0.32 J	ug/L	01TW0301	1/25	1 - 1	0.32	0.51	0.053 C	Yes	ASL

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Samples 01TW0101, 01QT1101, 01QT1101-AVG, 01QT1101-D, 01QT1201, and 01QT1301 were used as the background dataset.
- 5 - Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. November 2002. EPA530-F-02-052. Values are from Table 2c (values for tetrachloroethene and trichloroethene are from Table 2a) and correspond to a target cancer risk level of 1E-6 or HI = 1 and an attenuation factor of 0.001.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- DPT = Direct Push Technology
- J = Estimated value
- MCL = Maximum Contaminant Level
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01TW0201 01QT0301
 01TW0301 01QT0401
 01TW0401 01QT0501
 01TW0501 01QT0601
 01TW0601 01QT0701
 01TW0701 01QT0801
 01TW0801 01QT0901
 01TW0901 01QT1001
 01TW1001 01QT1501
 01TW1001-AVG 01QT1601
 01TW1001-D 01QT1701
 01QT1401 01QT1801
 01QT0101 01QT1901
 01QT0201

Rationale Codes:

- For selection as a COPC:
 ASL = Above Screening Level
- For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

TABLE 2.8
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - VAPOR INTRUSION - MONITORING WELL SAMPLES
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Groundwater - Monitoring Well Samples
 Exposure Medium: Groundwater - Monitoring Well Samples

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	USEPA Groundwater Volatilization Criteria ⁽⁵⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁶⁾
Site 1	Volatile Organic Compounds												
	67-64-1	ACETONE	1.6 J	2.8 J	ug/L	01GW1901	2/21	1.7 - 5	2.8	NA	220000 N	No	BSL
	75-15-0	CARBON DISULFIDE	1.8	1.8	ug/L	01GW0901	1/21	0.15 - 1	1.8	NA	560 N	No	BSL
	79-01-6	TRICHLOROETHENE	0.3 J	0.3 J	ug/L	01GW2001	1/21	0.23 - 1	0.3	1.3	0.053 C	Yes	ASL
	Semivolatile Organics												
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1.7 J	2 J	ug/L	01GW2501, 01GW2601	5/21	1.4 - 3.3	2	NA	NA	No	NTX
	91-20-3	NAPHTHALENE	6.7 J	6.7 J	ug/L	01GW2601	1/21	0.42 - 10	6.7	NA	150 N	No	BSL
	Pesticides/PCBs												
	50-29-3	4,4'-DDT	0.0068 J	0.0068 J	ug/L	01GW2401	1/21	0.0046 - 0.02	0.0068	NA	NA	No	NTX
	7421-93-4	ENDRIN ALDEHYDE	0.0088 J	0.0088 J	ug/L	01GW1301	1/21	0.0046 - 0.02	0.0088	NA	NA	No	NTX
	Herbicides (ug/L)												
	93-72-1	2,4,5-TP (SILVEX)	0.049 J	0.17 J	ug/L	01GW1601-D, 01GW2001	3/18	0.023 - 0.05	0.17	NA	NA	No	NTX
	Inorganics												
	7429-90-5	ALUMINUM	73.5	6320	ug/L	01GW1101	21/21	-	6320	81.9	NA	No	NTX
	7440-38-2	ARSENIC	14.2	19.1	ug/L	01GW1401	2/21	3 - 3	19.1	NA	NA	No	NTX
	7440-39-3	BARIIUM	15.1	418	ug/L	01GW0601	21/21	-	418	38.8	NA	No	NTX
	7440-70-2	CALCIUM	3940	86800	ug/L	01GW2701	21/21	-	86800	14100	NA	No	NTX
	7440-47-3	CHROMIUM	2.1	8.1	ug/L	01GW1101	3/21	2 - 2	8.1	2.3	NA	No	NTX
	7439-89-6	IRON	147	44000	ug/L	01GW1501	21/21	-	44000	1170	NA	No	NTX
	7439-92-1	LEAD	1.5	1.9	ug/L	01GW2001	3/21	1.5 - 1.7	1.9	NA	NA	No	NTX
	7439-95-4	MAGNESIUM	1000	9990	ug/L	01GW0601	17/21	1000 - 1000	9990	2190	NA	No	NTX
	7439-96-5	MANGANESE	4.4	548	ug/L	01GW1501	21/21	-	548	40.9	NA	No	NTX
	7440-09-7	POTASSIUM	1470	4600	ug/L	01GW0601	5/21	1000 - 1000	4600	NA	NA	No	NTX
	7440-23-5	SODIUM	2770	19500	ug/L	01GW0601, 01GW0901	21/21	-	19500	7200	NA	No	NTX
	7440-28-0	THALLIUM	4.1	4.1	ug/L	01GW1601	1/21	3 - 3	4.1	NA	NA	No	NTX
	7440-62-2	VANADIUM	10.2	10.2	ug/L	01GW1101	1/21	5 - 5	10.2	NA	NA	No	NTX
	7440-66-6	ZINC	5.7	24.3	ug/L	01GW0701	3/21	5 - 5	24.3	NA	NA	No	NTX
	Miscellaneous Parameters												
	57-12-5	CYANIDE	2.1 J	22.2 J	ug/L	01GW1901	13/21	5 - 5	22.2	NA	NA	No	NTX

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - A comparison of maximum concentrations was conducted between the site and background datasets. The maximum background concentration is shaded if the maximum site concentration exceeds the maximum background concentration. Sample 01GW2301 was used as the background dataset.
- 5 - Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils. November 2002. EPA530-F-02-052. Values are from Table 2c (the value for trichloroethene is from Table 2a) and correspond to a target cancer risk level of 1E-6 or HI = 1 and an attenuation factor of 0.001.
- 6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Associated Samples:

01GW0601	01GW1301	01GW2001
01GW0701	01GW1401	01GW2101
01GW0701-AVG	01GW1501	01GW2201
01GW0701-D	01GW1601	01GW2401
01GW0801	01GW1601-AVG	01GW2501
01GW0901	01GW1601-D	01GW2601
01GW1001	01GW1701	01GW2701
01GW1101	01GW1801	
01GW1201	01GW1901	

Definitions:

C = Carcinogen
 COPC = Chemical Of Potential Concern
 J = Estimated value
 MCL = Maximum Contaminant Level
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration

Rationale Codes:

For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

TABLE 2.9
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SURFACE WATER
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Surface Water
 Exposure Medium: Surface Water

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Groundwater Criteria ⁽⁵⁾	ORNL Regional Tapwater Screening Level ⁽⁶⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁷⁾	
Site 1	Volatile Organic Compounds														
	76-13-1	1,1,2-TRICHLOROTRIFLUOROETHANE	6.6	6.6	ug/L	01SW0401	1/5	1 - 1	6.6	NA	5940 N	5900 N	No	BSL	
	67-64-1	ACETONE	3.4 J	5.1	ug/L	01SW0201	5/5	-	5.1	NA	60.8 N	2200 N	No	BSL	
	75-15-0	CARBON DISULFIDE	0.18 J	0.2 J	ug/L	01SW0301-D	2/5	1 - 1	0.2	NA	104 N	100 N	No	BSL	
	108-88-3	TOLUENE	0.22 J	0.22 J	ug/L	01SW0401	1/5	1 - 1	0.22	NA	1000 MCL	230 N	No	BSL	
	Semivolatile Organic Compounds														
	105-60-2	CAPROLACTAM	0.91 J	2.1 J	ug/L	01SW0401	5/5	-	2.1	NA	1830 N	1800 N	No	BSL	
	Pesticides/PCBs														
	5103-71-9	ALPHA-CHLORDANE	0.004 J	0.004 J	ug/L	01SW0401	1/5	0.0092 - 0.0098	0.004	NA	2 MCL	0.19 C ⁽⁷⁾	No	BSL	
	Herbicides														
	93-72-1	2,4,5-TP (SILVEX)	0.044 J	0.067 J	ug/L	01SW0101	4/5	0.069 - 0.069	0.067	NA	50 MCL	29 N	No	BSL	
	Metals														
	7429-90-5	ALUMINUM	430	1690	ug/L	01SW0401	5/5	-	1690	NA	3650 N	3700 N	No	BSL	
	7440-38-2	ARSENIC	3.4	3.4	ug/L	01SW0101	1/5	3 - 3	3.4	NA	50 MCL	0.045 C	Yes	ASL	
	7440-39-3	BARIUM	27.4	30.1	ug/L	01SW0501	5/5	27.8 - 27.8	30.1	NA	2000 MCL	730 N	No	BSL	
	7440-70-2	CALCIUM	13200	24800	ug/L	01SW0401	5/5	-	24800	NA	NA	NA	No	NUT	
	7439-89-6	IRON	1720	2410	ug/L	01SW0101	5/5	-	2410	NA	1100 N	2600 N	Yes	ASL	
	7439-92-1	LEAD	1.6	2	ug/L	01SW0301-D	2/5	1.5 - 1.5	2	NA	15 MCL	NA	No	BSL	
	7439-95-4	MAGNESIUM	1160	1560	ug/L	01SW0401	5/5	-	1560	NA	NA	NA	No	NUT	
	7439-96-5	MANGANESE	26.3	53.1	ug/L	01SW0101	5/5	-	53.1	NA	73 N	88 N	No	BSL	
	7440-09-7	POTASSIUM	1080	1080	ug/L	01SW0401	1/5	1000 - 1000	1080	NA	NA	NA	No	NUT	
7440-23-5	SODIUM	5220	5940	ug/L	01SW0101	5/5	-	5940	NA	NA	NA	No	NUT		
7440-66-6	ZINC	5.4	10.4	ug/L	01SW0501	5/5	-	10.4	NA	1100 N	1100 N	No	BSL		

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
- 2 - Values presented are sample-specific quantitation limits.
- 3 - The maximum detected concentration is used for screening purposes.
- 4 - No site-specific background sediment data were available for NCBC Gulfport.
- 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Groundwater, February 2002. Noncarcinogenic values are divided by 10.
- 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Tapwater. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April, 2009).
- 7 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Definitions:

- C = Carcinogen
- COPC = Chemical Of Potential Concern
- J = Estimated value
- MCL = Maximum Contaminant Level
- N = Noncarcinogen
- NA = Not Applicable/Not Available
- S = Concentration may exceed Csat
- sat = soil saturation concentration

Associated Samples:

- 01SW0101
- 01SW0201
- 01SW0301
- 01SW0301-AVG
- 01SW0301-D
- 01SW0401
- 01SW0501

Rationale Codes:

- For selection as a COPC:
 - ASL = Above Screening Level
- For elimination as a COPC:
 - BSL = Below COPC Screening Level
 - NUT = Essential nutrient
 - NTX = No toxicity criteria

TABLE 2.10
 OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT - SEDIMENT
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
 Medium: Sediment
 Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration ⁽¹⁾	Maximum Concentration ⁽¹⁾	Units	Sample of Maximum Concentration	Frequency of Detection ⁽¹⁾	Range of Nondetects ⁽²⁾	Concentration Used for Screening ⁽³⁾	Maximum Background Concentration ⁽⁴⁾	Mississippi Restricted Soil Criteria ⁽⁵⁾	Mississippi Unrestricted Soil Criteria ⁽⁵⁾	ORNL Residential Soil Criteria ⁽⁶⁾	COPC Flag	Rationale for Contaminant Deletion or Selection ⁽⁷⁾
Site 1	Volatiles Organic Compounds														
	78-93-3	2-BUTANONE	6 J	80 J	ug/kg	01SD0101	4/5	12 - 12	80	NA	8450 N	84500 N	2800000 NS	No	BSL
	67-64-1	ACETONE	28 J	220 J	ug/kg	01SD0101	2/5	12 - 12	220	NA	10400000 N	782000 N	6100000 N	No	BSL
	108-88-3	TOLUENE	33 J	33 J	ug/kg	01SD0101	1/5	12 - 12	33	NA	3800 N	3800 N	500000 NS	No	BSL
	Semivolatiles Organic Compounds														
	106-44-5	4-METHYLPHENOL	420 J	420 J	ug/kg	01SD0101	1/5	400 - 470	420	NA	1020000 N	39100 N	31000 N	No	BSL
	50-32-8	BENZO(A)PYRENE	190 J	190 J	ug/kg	01SD0101	1/5	400 - 470	190	NA	784 C	87.5 C	15 C	Yes	ASL
	205-99-2	BENZO(B)FLUORANTHENE	330 J	330 J	ug/kg	01SD0101	1/5	400 - 470	330	NA	7840 C	875 C	150 C	Yes	ASL
	207-08-9	BENZO(K)FLUORANTHENE	220 J	220 J	ug/kg	01SD0101	1/5	400 - 470	220	NA	78400 C	8750 C	1500 C	No	BSL
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	74 J	450 J	ug/kg	01SD0101	5/5	-	450	NA	409000 C	45600 C	35000 C	No	BSL
218-01-9	CHRYSENE	400 J	400 J	ug/kg	01SD0101	1/5	400 - 470	400	NA	784000 C	87500 C	15000 C	No	BSL	
206-44-0	FLUORANTHENE	1,300 J	1300 J	ug/kg	01SD0101	1/5	400 - 470	1,300	NA	8170000 N	313000 N	230000 N	No	BSL	
85-01-8	PHENANTHRENE	360 J	360 J	ug/kg	01SD0101	1/5	400 - 470	360	NA	6130000 N	235000 N	170000 N ⁽⁸⁾	No	BSL	
129-00-0	PYRENE	930 J	930 J	ug/kg	01SD0101	1/5	400 - 470	930	NA	6130000 N	235000 N	170000 N	No	BSL	
-	BENZO(A)PYRENE EQUIVALENTS	200	240	ug/kg	01SD0201	5/5	-	240	NA	784 C	87.5 C	15 C	Yes	ASL	
Pesticides/PCBs															
72-55-9	4,4'-DDE	0 J	0.91	ug/kg	01SD0301-D	3/5	0.81 - 3.5	0.91	NA	16800 C	1880 C	1400 C	No	BSL	
309-00-2	ALDRIN	0 J	0.45 J	ug/kg	01SD0301-D	1/5	0.4 - 1.7	0.45	NA	337 C	37.6 C	29 C	No	BSL	
319-84-6	ALPHA-BHC	0 J	0.17 J	ug/kg	01SD0501	1/5	0.4 - 1.7	0.17	NA	908 C	101 C	77 C	No	BSL	
5103-71-9	ALPHA-CHLORDANE	1	6 J	ug/kg	01SD0101	4/5	0.4 - 0.41	6	NA	1230 N ⁽⁹⁾	1820 C ⁽⁶⁾	1600 C ⁽⁹⁾	No	BSL	
319-86-8	DELTA-BHC	2 J	2.1 J	ug/kg	01SD0101	1/5	0.4 - 0.48	2.1	NA	908 C ⁽¹⁰⁾	101 C ⁽¹⁰⁾	77 C ⁽¹⁰⁾	No	BSL	
60-57-1	DIELDRIN	1 J	1.8	ug/kg	01SD0301	3/5	0.43 - 3.5	1.8	NA	358 C	39.9 C	30 C	No	BSL	
5103-74-2	GAMMA-CHLORDANE	1 J	3.5 J	ug/kg	01SD0101	4/5	0.4 - 0.41	3.5	NA	1230 N ⁽⁹⁾	1820 C ⁽⁶⁾	1600 C ⁽⁹⁾	No	BSL	
1024-57-3	HEPTACHLOR EPOXIDE	0 J	0.46 J	ug/kg	01SD0501	1/5	0.3 - 1.7	0.46	NA	629 C	70.2 C	53 C	No	BSL	
Metals															
7429-90-5	ALUMINIUM	1,000	17200 J	mg/kg	01SD0101	5/5	-	17,200	NA	204000 N	7820 N	7700 N	Yes	ASL	
7440-38-2	ARSENIC	1	19.8 J	mg/kg	01SD0101	4/5	0.74 - 0.74	19.8	NA	3.82 C	0.426 C	0.39 C	Yes	ASL	
7440-39-3	BARIUM	5	61.2 J	mg/kg	01SD0101	5/5	-	61.2	NA	1430 N	548 N	1500 N	No	BSL	
7440-41-7	BERYLLIUM	1 J	1.1 J	mg/kg	01SD0101	1/5	0.24 - 0.29	1.1	NA	102 N	15.6 N	16 N	No	BSL	
7440-70-2	CALCIUM	336	5050 J	mg/kg	01SD0101	3/5	245 - 259	5,050	NA	NA	NA	NA	No	NUT	
7440-47-3	CHROMIUM	1	17.6 J	mg/kg	01SD0101	5/5	-	17.6	NA	381 C ⁽¹¹⁾	227 C ⁽¹¹⁾	23 N ⁽¹¹⁾⁽¹²⁾	No	BSL	
7440-50-8	COPPER	12 J	11.7 J	mg/kg	01SD0101	1/5	1.2 - 1.5	11.7	NA	817 N	313 N	310 N	No	BSL	
7439-89-6	IRON	650	28100 J	mg/kg	01SD0101	5/5	-	28,100	NA	61300 N	2350 N	5500 N	Yes	ASL	
7439-92-1	LEAD	2	32.1 J	mg/kg	01SD0101	5/5	-	32.1	NA	1700 C	400 C	400 N	No	BSL	
7439-96-5	MANGANESE	2	295 J	mg/kg	01SD0101	5/5	-	295	NA	408 N	156 N	180 N	Yes	ASL	
7440-02-0	NICKEL	6 J	6.4 J	mg/kg	01SD0101	1/5	1.2 - 1.5	6.4	NA	408 N	156 N	150 N	No	BSL	
7440-82-2	VANADIUM	1	32.2 J	mg/kg	01SD0101	5/5	-	32.2	NA	143 N	54.8 N	39 N	No	BSL	
7440-66-6	ZINC	4	132 J	mg/kg	01SD0101	5/5	-	132	NA	6130 N	2350 N	2300 N	No	BSL	
Miscellaneous Parameters															
-	TOTAL ORGANIC CARBON	1,480	66300 J	mg/kg	01SD0101	5/5	-	66,300	NA	NA	NA	NA	NA	No	NTX

Footnotes:

- 1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations and as one sample when determining the frequency of detection and average results.
 - 2 - Values presented are sample-specific quantitation limits.
 - 3 - The maximum detected concentration is used for screening purposes.
 - 4 - No site-specific background sediment data were available for NCBC Gulfport.
 - 5 - Mississippi Department of Environmental Quality (MDEQ), Risk Evaluation Procedures for Voluntary Cleanup and Redevelopment of Brownfield Sites for Unrestricted and Restricted Land Use, February 2002. Noncarcinogenic values are divided by 10.
 - 6 - Oak Ridge National Laboratory (ORNL) Regional Screening Level for Residential Soil. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag) (ORNL, April, 2009).
 - 7 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
 - 8 - Values are for pyrene.
 - 9 - Values are for chlordane.
 - 10 - Values are for alpha-BHC.
 - 11 - Values are for hexavalent chromium.
 - 12 - Ten percent of the noncarcinogenic value is less than the carcinogenic value, therefore the noncarcinogenic is presented.
- Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

Definitions:
 C = Carcinogen
 COPC = Chemical Of Potential Concern
 J = Estimated value
 N = Noncarcinogen
 NA = Not Applicable/Not Available
 S = Concentration may exceed Csat
 sat = soil saturation concentration

Rationale Codes:
 For selection as a COPC:
 ASL = Above Screening Level
 For elimination as a COPC:
 BSL = Below COPC Screening Level
 NUT = Essential nutrient
 NTX = No toxicity criteria

Associated Samples:
 01SD0101
 01SD0201
 01SD0301
 01SD0301-AVG
 01SD0301-D
 01SD0401
 01SD0501

RAGS Part D Table 3

Medium-Specific Exposure Point Concentration Summary

LIST OF TABLES
RAGS PART D TABLE 3
MEDIUM-SPECIFIC EXPOSURE POINT CONCENTRATION SUMMARY

Table No.

Reasonable Maximum/Central Tendency Exposures

- 3.1.RME Surface Soil
- 3.2.RME Subsurface Soil
- 3.3.RME Monitoring Well Groundwater
- 3.4.RME DPT Groundwater
- 3.5.RME Surface Water
- 3.6.RME Sediment

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale ⁽¹⁾
Site 1	Dieldrin	mg/kg	0.02	0.3 (NP)	0.46 J	0.3	mg/kg	99% Chebyshev(Mean, Std) UCL	ProUCL
	Aluminum	mg/kg	6720	7780 (N)	12300	7780	mg/kg	Student-t	ProUCL
	Antimony	mg/kg	0.73	1 (NP)	3.6 J	1	mg/kg	Student-t or Modified-t UCL	ProUCL
	Arsenic	mg/kg	1.7	2.2 (G)	4.8	2.2	mg/kg	Approximate Gamma 95% UCL	ProUCL
	Cobalt	mg/kg	0.86	2.2 (NP)	6.8	2.2	mg/kg	95% Chebyshev(Mean, Std) UCL	ProUCL
	Iron	mg/kg	3620	4330 (N)	9050	4330	mg/kg	Student-t	ProUCL
	Manganese (Soil)	mg/kg	31.8	55.4 (L)	358	55.4	mg/kg	95% Chebyshev(MVUE) UCL	ProUCL

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.

G = Gamma
L = Lognormal
N = Normal
NP = Non-parametric

1. Exposure point concentration is the value recommended by USEPA's ProUCL. The maximum detected concentration is used if the recommended UCL is greater than the maximum or if the dataset contains less than 10 samples.

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

TABLE 3.2.RME
 EXPOSURE POINT CONCENTRATION SUMMARY
 REASONABLE MAXIMUM EXPOSURE
 NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale ⁽¹⁾
Site 1	Aroclor-1242	mg/kg	0.35	NA	2.4 J	2.4	mg/kg	Maximum Concentration	< 10 Samples
	Aluminum	mg/kg	5610	NA	9700	9700	mg/kg	Maximum Concentration	< 10 Samples
	Arsenic	mg/kg	1.2	NA	2	2	mg/kg	Maximum Concentration	< 10 Samples

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.

1. The maximum concentration was used as the EPC because the dataset contained less than 10 samples for each of the COPCs.

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

TABLE 3.3.RME
 EXPOSURE POINT CONCENTRATION SUMMARY
 REASONABLE MAXIMUM EXPOSURE
 NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater - DPT ⁽¹⁾
Exposure Medium: Groundwater - DPT ⁽¹⁾

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Site 1	Tetrachloroethene	ug/L	0.4	0.5 (NP)	0.54 J	0.54	ug/L	Maximum Concentration	(2)
	Trichloroethene	ug/L	0.5	0.5 (NP)	0.32 J	0.32	ug/L	Maximum Concentration	(2)

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.

NP = Nonparametric

1. Groundwater samples collected by direct push technology (DPT).
2. For groundwater, the maximum concentration was used as the EPC (see text).

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

TABLE 3.4.RME
 EXPOSURE POINT CONCENTRATION SUMMARY
 REASONABLE MAXIMUM EXPOSURE
 NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater - Monitoring Well
Exposure Medium: Groundwater - Monitoring Well

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale
Site 1	Trichloroethene	ug/L	0.4	0.6 (NP)	0.3 J	0.3	ug/L	Maximum Concentration	(1)
	Naphthalene	ug/L	4	8 (NP)	6.7 J	6.7	ug/L	Maximum Concentration	(1)
	Aluminum	ug/L	562	1840 (NP)	6320	6320	ug/L	Maximum Concentration	(1)
	Arsenic	ug/L	2.9	7.3 (NP)	19.1	19.1	ug/L	Maximum Concentration	(1)
	Iron	ug/L	9060	15400 (G)	44000	44000	ug/L	Maximum Concentration	(1)
	Manganese (Water)	ug/L	131	219 (G)	548	548	ug/L	Maximum Concentration	(1)
	Thallium	ug/L	1.6	1.7 (NP)	4.1	4.1	ug/L	Maximum Concentration	(1)

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.
 max - maximum detected concentration

NP = Non-parametric
 G = Gamma

1. For groundwater, the maximum concentration was used as the EPC (see text).

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

TABLE 3.5.RME
 EXPOSURE POINT CONCENTRATION SUMMARY
 REASONABLE MAXIMUM EXPOSURE
 NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale ⁽¹⁾
Site 1	Arsenic	ug/L	1.9	2.8 (NP)	3.4	3.4	ug/L	Maximum Concentration	< 10 Samples
	Iron	ug/L	2080	2390 (N)	2410	2410	ug/L	Maximum Concentration	< 10 Samples

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.

N = Normal
 NP = Non-parametric

1. The maximum concentration was used as the EPC because the dataset contained less than 10 samples for each of the COPCs.

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

TABLE 3.6.RME
 EXPOSURE POINT CONCENTRATION SUMMARY
 REASONABLE MAXIMUM EXPOSURE
 NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic	Rationale ⁽¹⁾
Site 1	Benzo(a)pyrene Equivalents	mg/kg	0.2	0.2 (N)	0.2	0.2	mg/kg	Maximum Concentration	< 10 Samples
	Aluminum	mg/kg	4930	12800 (L)	17200 J	17200	mg/kg	Maximum Concentration	< 10 Samples
	Arsenic	mg/kg	4.7	24.7 (L)	19.8 J	19.8	mg/kg	Maximum Concentration	< 10 Samples
	Iron	mg/kg	6630	42300 (G)	28100 J	28100	mg/kg	Maximum Concentration	< 10 Samples
	Manganese (Soil)	mg/kg	62.3	297 (L)	295 J	295	mg/kg	Maximum Concentration	< 10 Samples

For non-detects, 1/2 sample quantitation limit was used as a proxy concentration; for duplicate sample results, the average value was used in the calculation.

G = Gamma
 L = Lognormal
 N = Normal

1. The maximum concentration was used as the EPC because the dataset contained less than 10 samples for each of the COPCs.

Exposure point concentrations for the RME scenarios are also the exposure point concentrations for the CTE scenarios.

RAGS Part D Table 4

Values Used for Daily Intake Calculations

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VALUES USED FOR DAILY INTAKE CALCULATIONS

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4.2.RME	Construction Workers Exposed to Groundwater
4.3.RME	Construction Workers Exposed to Volatile Emissions from Groundwater
4.4.RME	Construction Workers Exposed to Surface Water
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4.6.RME	Maintenance Workers Exposed to Surface/Subsurface Soil
4.7.RME	Maintenance Workers Exposed to Surface Water
4.8.RME	Maintenance Workers Exposed to Sediment
4.9.RME	Industrial Workers Exposed to Surface/Subsurface Soil
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Central Tendency Exposures

4.1.CTE	Construction Workers Exposed to Surface/Subsurface Soil
4.2.CTE	Construction Workers Exposed to Groundwater
4.3.CTE	Construction Workers Exposed to Volatile Emissions from Groundwater
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4.28 Dermal Worksheet

TABLE 4.1.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CONSTRUCTION WORKERS- SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Construction Workers	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	330	mg/day	USEPA, 2002b	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	250	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
Dermal	Construction Workers	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermal Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.3	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	

Notes:

1 - Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Exposure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.

Sources:

- USEPA, 1989; Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1997; Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a; Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b; Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004; Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 4.61E-08 Cancer Dermal Intake = 1.38E-07

Noncancer Ingestion Intake = 3.23E-06 Noncancer Dermal Intake = 9.69E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.1.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CONSTRUCTION WORKERS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Construction Workers	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	165	mg/day	(1)	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	125	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
				Dermal	Construction Workers	Adult	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
CF3	Conversion Factor 3	0.000001	kg/mg					--	
SA	Skin Surface Available for Contact	3300	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.1	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	125	days/year					(1)	
ED	Exposure Duration	1	years					(1)	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	365	days					USEPA, 1989	

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = $(IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$

Dermal Intake = $(CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$

Cancer Ingestion Intake = 1.15E-08

Cancer Dermal Intake = 2.31E-08

Noncancer Ingestion Intake = 8.07E-07

Noncancer Dermal Intake = 1.61E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.2.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CONSTRUCTION WORKERS - GROUNDWATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal	Construction Worker	Adult	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DA_{event} \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics $DA_{event} = Kp \times CW \times CF \times I_{event}$ For organics if $I_{event} \leq I^*$ $DA_{event} = 2 \times FA \times Kp \times Cw \times CF \times \sqrt{[(6 \times \tau \times I_{event})/\pi]}$ For organics if $I_{event} > I^*$ $DA_{event} = FA \times Kp \times Cw \times CF \times [I_{event}/(1+B) + 2 \times \tau \times (1 + 3B + 3B^2)/(1+B^2)]$
				Cw	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				I^*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				Ievent	Duration of event	4	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989					

Notes:

- Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Exposure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.
- USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA Region I, 1999. Risk Updates, Number 5.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Dermal Intake} = 5.54E-02$$

$$\text{Noncancer Dermal Intake} = 3.87E+00$$

$$\text{Cancer risk from dermal contact} = \text{Groundwater concentration} \times \text{Cancer Dermal Intake} \times DA_{event} \times \text{Dermal Cancer Slope Factor}$$

$$\text{Hazard Index from dermal contact} = \text{Groundwater concentration} \times \text{Noncancer Dermal Intake} \times DA_{event} / \text{Dermal Reference Dose}$$

TABLE 4.2.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CONSTRUCTION WORKERS - GROUNDWATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal	Construction Worker	Adult	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= t* DAevent = 2 x FA x Kp x Cw x CF x sqrt((6 x τ x tevent)/π) For organics if tevent > t* DAevent = FA x Kp x Cw x CF x [tevent/(1+B) + 2 x τ + (1 + 3B + 3B ²)/(1+B ²)]
				Cw	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	2	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989					

Notes:

- 1 - Professional judgment. Typically assumes 1/2 RME exposure.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA Region I, 1999. Risk Updates, Number 5.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Dermal Intake = 2.77E-02

Noncancer Dermal Intake = 1.94E+00

Cancer risk from dermal contact = Groundwater concentration x Cancer Dermal Intake x DAevent x Dermal Cancer Slope Factor

Hazard Index from dermal contact = Groundwater concentration x Noncancer Dermal Intake x DAevent / Dermal Reference Dose

TABLE 4.3.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CONSTRUCTION WORKERS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Construction Workers	Adult	Site 1	CA	Chemical concentration in air	Calculated	mg/m3	VDEQ, 2004	$\text{Exposure Concentration (mg/m}^3\text{)} =$ $\frac{CA \times ET \times EF \times ED}{AT \times CF2}$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	4	hours/day	USEPA, 2004	
				CF2	Convresion Factor	24	hours/day	--	
				EF	Exposure Frequency	30	days/year	--	
				ED	Exposure Duration	1	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
				VF	Volatilization Factor	Chemical Specific	(mg/m3)/(mg/L)	VDEQ, 2004	

Notes:

- 1 - Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Expcsure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

Inhalation Intake = (CF1 x ET x EF x ED)/(AT x CF2)

Cancer Inhalation Intake = 1.96E-07

Noncancer Inhalation Intake = 1.37E-05

Cancer risk from ingestion = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from ingestion = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.3.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CONSTRUCTION WORKERS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Inhalation	Construction Workers	Adult	Site 1	CA	Chemical concentration in air	Calculated	mg/m3	VDEQ, 2004	$\text{Exposure Concentration (mg/m}^3\text{)} =$ $\frac{CA \times ET \times EF \times ED}{AT \times CF2}$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	2	hours/day	(1)	
				CF2	Conversion Factor	24	hours/day	--	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
VF	Volatilization Factor	Chemical Specific	(mg/m3)/(mg/L)	VDEQ, 2004					

Notes:

- 1 - Professional judgment. Typically assumes 1/2 RME exposure.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

$$\text{Inhalation Intake} = (CF1 \times ET \times EF \times ED) / (AT \times CF2)$$

$$\text{Cancer Inhalation Intake} = 4.89E-08$$

$$\text{Noncancer Inhalation Intake} = 3.42E-06$$

$$\text{Cancer risk from ingestion} = \text{Air concentration} \times \text{Cancer Inhalation Intake} \times \text{Inhalation Cancer Slope Factor}$$

$$\text{Hazard Index from ingestion} = \text{Air concentration} \times \text{Noncancer Inhalation Intake} / \text{Inhalation Reference Dose}$$

TABLE 4.4.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Construction Workers	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
Dermal	Construction Workers	Adult	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	

Notes:

1 - Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Exposure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.

2 - USEPA Region 4; Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-89/060.

USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 1.66E-10

Cancer Dermal Intake = 5.54E-02

Noncancer Ingestion Intake = 1.17E-08

Noncancer Dermal Intake = 3.87E+00

TABLE 4.4.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Construction Workers	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	U.S. EPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR \text{-GW} \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	U.S. EPA, 1988	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	15	events/year	(1)	
				ED	Exposure Duration	1	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
Dermal	Construction Workers	Adult	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= 1' DAevent = 2 x FA x Kp x Cw x CF x sqrt[(6 x t x tevent)/pi] For organics if tevent > 1' DAevent = FA x Kp x Cw x CF x [tevent/(1+B) + 2 x t + (1 + 3B + 3B ²)/(1+B ²)]
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hours/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

U.S. EPA, 1988: Superfund Exposure Assessment Manual. EPA/540/1-99/001.

U.S. EPA, 1989: Risk Assessment Guidance for Superfund. Vol 1; Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

U.S. EPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 8.39E-11

Cancer Dermal Intake = 2.77E-02

Noncancer Ingestion Intake = 5.87E-09

Noncancer Dermal Intake = 1.94E+00

TABLE 4.5.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Construction Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = <u>CS x IRS x CF3 x FI x EF x ED</u> BW x AT
				IR-S	Ingestion Rate	330	mg/day	(2)	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
Dermal	Construction Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = <u>CS x CF3 x SA x SSAF x DABS x EF x ED</u> BW x AT
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.3	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	1	years	(6)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	

Notes:

- 1 - Professional judgment. Assumes a one year construction project. Construction workers are assumed to be exposed to soil during the entire project. Exposure to groundwater, surface water, and sediment are assumed to occur for only 30 days a year.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (\text{IR-S} \times \text{CF3} \times \text{FI} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Dermal Intake} = (\text{CF3} \times \text{SA} \times \text{SSAF} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Cancer Ingestion Intake} = 5.54\text{E-}09$$

$$\text{Cancer Dermal Intake} = 1.66\text{E-}08$$

$$\text{Noncancer Ingestion Intake} = 3.87\text{E-}07$$

$$\text{Noncancer Dermal Intake} = 1.16\text{E-}06$$

TABLE 4.5.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Construction Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	165	mg/day	(1)	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1.0	unitless	USEPA, 1989	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	
Dermal	Construction Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.1	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	1	years	(1)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	365	days	USEPA, 1989	

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 1.38E-09

Cancer Dermal Intake = 2.77E-09

Noncancer Ingestion Intake = 9.69E-08

Noncancer Dermal Intake = 1.94E-07

TABLE 4.6.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SITE MAINTENANCE WORKERS - SOIL
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Maintenance Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	24	days/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
Dermal	Maintenance Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	24	days/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989					

Notes:

1 - Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1; Human Health Evaluation Manual, Part A.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = $(IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$

Dermal Intake = $(CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$

Cancer Ingestion Intake = 3.35E-08

Cancer Dermal Intake = 2.21E-07

Noncancer Ingestion Intake = 9.39E-08

Noncancer Dermal Intake = 6.20E-07

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.6.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - SITE MAINTENANCE WORKERS - SOIL
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Maintenance Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	12	days/year	(1)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3285	days	USEPA, 1989	
Dermal	Maintenance Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.02	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	12	days/year	(1)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3285	days	USEPA, 1989	

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 1993: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 3.02E-09$$

$$\text{Cancer Dermal Intake} = 3.99E-09$$

$$\text{Noncancer Ingestion Intake} = 2.35E-08$$

$$\text{Noncancer Dermal Intake} = 3.10E-08$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.7.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - SITE MAINTENANCE WORKERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Maintenance Worker	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	(1)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	24	events/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	
				Dermal	Maintenance Worker	Adult	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm^{2}-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= t* DAevent= 2 x FA x Kp x Cw x CF x sqrt[(6 x τ x tevent)/π] For organics if tevent > t* DAevent =FA x Kp x Cw x CF x {tevent/(1+B) +
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002a	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ³					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
τ	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t*	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hr/event					(1)	
B	Bunge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	3,300	cm ²					USEPA, 2004	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	24	days/year					(1)	
ED	Exposure Duration	25	years					USEPA, 2002a	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	9,125	days					USEPA, 1989	

Notes:

1 - Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 3.35E-09$$

$$\text{Cancer Dermal Intake} = 1.11E+00$$

$$\text{Noncancer Ingestion Intake} = 9.39E-09$$

$$\text{Noncancer Dermal Intake} = 3.10E+00$$

TABLE 4.7.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	U.S. EPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR \cdot GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	mi/hr	U.S. EPA, 1988	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	12	events/year	(2)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	U.S. EPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3,285	days	U.S. EPA, 1989	
Dermal	Trespasser	Adolescent	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= t* DAevent= 2 x FA x Kp x Cw x CF x sqrt((6 x t x tevent)/pi) For organics if tevent > t* DAevent =FA x Kp x Cw x CF x [(tevent/(1+B) + 2 x t + (1 + 3B + 3B ²)/(1+B ²))]
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hours/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(2)	
				EF	Exposure Frequency	12	days/year	(2)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEAP, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	3,285	days	USEPA, 1989					

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

2 - Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

U.S. EPA, 1988: Superfund Exposure Assessment Manual. EPA/540/1-99/001.

U.S. EPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

U.S. EPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 6.04E-10

Cancer Dermal Intake = 1.99E-01

Noncancer Ingestion Intake = 4.70E-09

Noncancer Dermal Intake = 1.55E+00

TABLE 4.8.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1.0	unitless	USEPA, 1989	
				EF	Exposure Frequency	24	days/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989					
Dermal	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	24	days/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	

Notes:

1 - Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 3.35E-08$$

$$\text{Cancer Dermal Intake} = 2.21E-07$$

$$\text{Noncancer Ingestion Intake} = 9.39E-08$$

$$\text{Noncancer Dermal Intake} = 6.20E-07$$

TABLE 4.8.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	12	days/year	(1)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	3,285	days	USEPA, 1989					
Dermal	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.02	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	12	days/year	(1)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	3,285	days	USEPA, 1989					

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 3.02E-09$$

$$\text{Cancer Dermal Intake} = 3.99E-09$$

$$\text{Noncancer Ingestion Intake} = 2.35E-08$$

$$\text{Noncancer Dermal Intake} = 3.10E-08$$

TABLE 4.9.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = <u>CS x IRS x CF3 x FI x EF x ED</u> BW x AT
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	250	days/year	USEPA, 2002a	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	
Dermal	Industrial Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = <u>CS x CF3 x SA x SSAF x DABS x EV x EF x ED</u> BW x AT
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3300	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	250	days/year	(2)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9125	days	USEPA, 1989	

Notes:

1 - Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (\text{IR-S} \times \text{CF3} \times \text{FI} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Dermal Intake} = (\text{CF3} \times \text{SA} \times \text{SSAF} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\begin{aligned} \text{Cancer Ingestion Intake} &= 1.75\text{E-}07 & \text{Cancer Dermal Intake} &= 2.31\text{E-}06 \\ \text{Noncancer Ingestion Intake} &= 4.89\text{E-}07 & \text{Noncancer Dermal Intake} &= 6.46\text{E-}06 \end{aligned}$$

- Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
- Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor
- Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose
- Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.9.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - INDUSTRIAL WORKERS - SOIL
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = <u>CS x IRS x CF3 x FI x EF x ED</u> BW x AT
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	219	days/year	USEPA, 2002a	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3285	days	USEPA, 1989	
				Dermal	Industrial Worker	Adult	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = CS x CF3 x SA x SSAF x DABS x EV x EF x ED BW x AT
CF3	Conversion Factor 3	0.000001	kg/mg					--	
SA	Skin Surface Available for Contact	3300	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.02	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	219	days/year					USEPA, 2002a	
ED	Exposure Duration	9	years					USEPA, 2002a	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	3285	days					USEPA, 1989	

Notes:

1 - Professional judgment. Typically assumes 1/2 RME exposure.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1993: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (\text{IR-S} \times \text{CF3} \times \text{FI} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Dermal Intake} = (\text{CF3} \times \text{SA} \times \text{SSAF} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Cancer Ingestion Intake} = 5.51\text{E-}08$$

$$\text{Cancer Dermal Intake} = 7.27\text{E-}08$$

$$\text{Noncancer Ingestion Intake} = 4.29\text{E-}07$$

$$\text{Noncancer Dermal Intake} = 5.66\text{E-}07$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.10.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR \times GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	
Dermal	Industrial Worker	Adult	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= 1* DAevent = 2 x FA x Kp x Cw x CF x sqrt[(6 x τ x tevent)/π] For organics if tevent > 1* DAevent = FA x Kp x Cw x CF x [tevent/(1+B) +
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	

Notes:

1. - Professional judgement.

2 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins. Human Health Risk Assessment Bulletins, May 2000.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 4.19E-09

Cancer Dermal Intake = 1.38E+00

Noncancer Ingestion Intake = 1.17E-08

Noncancer Dermal Intake = 3.87E+00

TABLE 4.10.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - INDUSTRIAL WORKERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	U.S. EPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR \times GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	U.S. EPA, 1988	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	12	events/year	(1)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	U.S. EPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3,285	days	U.S. EPA, 1989	
				Dermal	Industrial Worker	Adult	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm^{2}-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002a	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ³					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
τ	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t*	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hours/event					USEPA, 2004	
B	Bunge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	3,300	cm ²					USEPA, 2004	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	12	days/year					(1)	
ED	Exposure Duration	9	years					USEPA, 2002a	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	3,285	days					USEPA, 1989	

Notes:

1. - Professional judgement. Typically assumes 1/2 RME exposure.

Sources:

U.S. EPA, 1988: Superfund Exposure Assessment Manual. EPA/540/1-99/001.

U.S. EPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual. Part A. EPA/540/1-88/060.

U.S. EPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 6.04E-10

Cancer Dermal Intake = 1.99E-01

Noncancer Ingestion Intake = 4.70E-09

Noncancer Dermal Intake = 1.55E+00

TABLE 4.11.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = <u>CS x IRS x CF3 x FI x EF x ED</u> BW x AT
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	24	days/year	(2)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	
Dermal	Industrial Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = <u>CS x CF3 x SA x SSAF x DABS x EF x ED</u> BW x AT
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	24	days/year	(2)	
				ED	Exposure Duration	25	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	9,125	days	USEPA, 1989	

Notes:

- Professional judgement.
- Assumes receptor is exposed to soil, surface water, and sediment 2 days per month.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (\text{IR-S} \times \text{CF3} \times \text{FI} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

$$\text{Dermal Intake} = (\text{CF3} \times \text{SA} \times \text{SSAF} \times \text{EF} \times \text{ED}) / (\text{BW} \times \text{AT})$$

Cancer Ingestion Intake = 1.68E-08
Noncancer Ingestion Intake = 4.70E-08

Cancer Dermal Intake = 2.21E-07
Noncancer Dermal Intake = 6.20E-07

TABLE 4.11.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - INDUSTRIAL WORKER - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Industrial Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1.0	unitless	USEPA, 1989	
				EF	Exposure Frequency	12	days/year	(2)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3,285	days	USEPA, 1989	
Dermal	Industrial Worker	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,300	cm ²	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.02	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	12	days/year	(2)	
				ED	Exposure Duration	9	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	3,285	days	USEPA, 1989	

Notes:

- Professional judgement.
- Assumes receptor is exposed to soil, surface water, and sediment 1 day per month.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 3.02E-09$$

$$\text{Cancer Dermal Intake} = 3.99E-09$$

$$\text{Noncancer Ingestion Intake} = 2.35E-08$$

$$\text{Noncancer Dermal Intake} = 3.10E-08$$

TABLE 4.12.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADOLESCENT TRESPASSERS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 2002	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4015	days	USEPA, 1989	
Dermal	Trespasser	Adolescent	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	3250	cm ²	(3)	
				SSAF	Soil to Skin Adherence Factor	0.4	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4015	days	USEPA, 1989	

Notes:

- 1 - Professional Judgement.
- 2 - Assumes rs for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - Assumes 25% of total body surface area is exposed.
- 4 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-89/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 2.87E-08$$

$$\text{Cancer Dermal Intake} = 3.73E-07$$

$$\text{Noncancer Ingestion Intake} = 1.83E-07$$

$$\text{Noncancer Dermal Intake} = 2.37E-06$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.12.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADOLESCENT TRESPASSERS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $CSs \times IRS \times CF3 \times FI \times EF \times ED$ BW x AT
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1997	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4015	days	USEPA, 1989	
				Dermal	Trespasser	Adolescent	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED$ BW x AT
CF3	Conversion Factor 3	0.000001	kg/mg					--	
SA	Skin Surface Available for Contact	3250	cm ²					(3)	
SSAF	Soil to Skin Adherence Factor	0.04	mg/cm ² /event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	15	days/year					(1)	
ED	Exposure Duration	11	years					(2)	
BW	Body Weight	45	kg					(4)	
AT-C	Averaging Time (Cancer)	25550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	4015	days					USEPA, 1989	

Notes:

- 1 - Professional Judgement. Typically 1/2 the RME exposure.
- 2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - Assumes 25% of total body surface area is exposed.
- 4 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 7.18E-09$$

$$\text{Cancer Dermal Intake} = 1.87E-08$$

$$\text{Noncancer Ingestion Intake} = 4.57E-08$$

$$\text{Noncancer Dermal Intake} = 1.19E-07$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.13.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADOLESCENT TRESPASSERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002	Chronic Daily Intake (CDI) (mg/kg/day) = $CW \times CF \times IR-GW \times EF \times ED$ BW x AT
				CR	Contact Rate	0.01	ml/hr	USEPA, 1988	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989	
Dermal	Trespasser	Adolescent	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $DAevent \times EV \times EF \times ED \times SA$ BW x AT
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				τ^*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	3.250	cm ²	(3)	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(2)	
				ED	Exposure Duration	11	years	(3)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989	

Notes:

- 1 - Professional Judgement.
- 2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - Assumes 25% of total body surface area is exposed.
- 4 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 2.87E-09
Cancer Dermal Intake = 9.33E-01
Noncancer Ingestion Intake = 1.83E-08
Noncancer Dermal Intake = 5.94E+00

TABLE 4.13.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADOLESCENT TRESPASSER - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adolescent	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR \times GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	USEPA, 1988	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	15	events/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989	
				Dermal	Trespasser	Adolescent	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm^{2}-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ²					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
τ	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t*	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hours/event					(1)	
B	Bunge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	3,250	cm ²					(3)	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	15	days/year					(2)	
ED	Exposure Duration	11	years					(3)	
BW	Body Weight	45	kg					(4)	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	4,015	days					USEPA, 1989	

Notes:

- Professional Judgement.
- Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- Assumes 25% of total body surface area is exposed.
- USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

- U.S. EPA, 1988: Superfund Exposure Assessment Manual. EPA/540/1-99/001.
U.S. EPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
U.S. EPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.44E-09 Cancer Dermal Intake = 4.66E-01
Noncancer Ingestion Intake = 9.13E-09 Noncancer Dermal Intake = 2.97E+00

TABLE 4.14.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADOLESCENT TRESPASSERS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	(1)	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989					
Dermal	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,250	cm2	(3)	
				SSAF	Soil to Skin Adherence Factor	0.4	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989					

Notes:

- 1 - Professional Judgement.
- 2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - Assumes 25% of total body surface area is exposed.
- 4 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-88/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED)/(BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED)/(BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 2.87E-08$$

$$\text{Cancer Dermal Intake} = 3.73E-07$$

$$\text{Noncancer Ingestion Intake} = 1.83E-07$$

$$\text{Noncancer Dermal Intake} = 2.37E-06$$

TABLE 4.14.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADOLESCENT TRESPASSERS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	(1)	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989	
Dermal	Trespasser	Adolescent	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	3,250	cm ²	(3)	
				SSAF	Soil to Skin Adherence Factor	0.4	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	11	years	(2)	
				BW	Body Weight	45	kg	(4)	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	4,015	days	USEPA, 1989	

Notes:

- 1 - Professional Judgement. Typically 1/2 RME exposure.
- 2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - Assumes 25% of total body surface area is exposed.
- 4 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = $(IR-S \times CF3 \times FI \times EF \times ED)/(BW \times AT)$

Dermal Intake = $(CF3 \times SA \times SSAF \times EF \times ED)/(BW \times AT)$

Cancer Ingestion Intake = 1.44E-08 Cancer Dermal Intake = 1.87E-07
Noncancer Ingestion Intake = 9.13E-08 Noncancer Dermal Intake = 1.19E-06

TABLE 4.15.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT TRESPASSERS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $CS \times IRS \times CF3 \times FI \times EF \times ED$ BW x AT
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6935	days	USEPA, 1989	
				Dermal	Trespasser	Adult	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED$ BW x AT
CF3	Conversion Factor 3	0.000001	kg/mg					--	
SA	Skin Surface Available for Contact	5700	cm ²					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.07	mg/cm ² /event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	30	days/year					(1)	
ED	Exposure Duration	19	years					(2)	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	6935	days					USEPA, 1989	

Notes:

1 - Professional Judgement.

2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.59E-08

Cancer Dermal Intake = 1.27E-07

Noncancer Ingestion Intake = 5.87E-08

Noncancer Dermal Intake = 4.68E-07

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.15.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT TRESPASSERS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $CSs \times IRS \times CF3 \times FI \times EF \times ED$ BW x AT
				IR-S	Ingestion Rate	50	mg/day	(1)	
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1997	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6935	days	USEPA, 1989	
Dermal	Trespasser	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dormally Absorbed Dose (mg/kg/day) = $CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED$ BW x AT
				CF3	Conversion Factor 3	0.000001	kg/mg	--	
				SA	Skin Surface Available for Contact	5700	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.01	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6935	days	USEPA, 1989	

Notes:

1 - Professional Judgement. Typically 1/2 RME exposure.

2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E. Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 7.97E-09$$

$$\text{Cancer Dermal Intake} = 9.08E-09$$

$$\text{Noncancer Ingestion Intake} = 2.94E-08$$

$$\text{Noncancer Dermal Intake} = 3.35E-08$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.16.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT TRESPASSERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Trespasser	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	(3)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989					
Dermal	Trespasser	Adult	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= t* DAevent = 2 x FA x Kp x Cw x CF x sqrt((6 x t x tevent)/pi) For organics if tevent > t* DAevent = FA x Kp x Cw x CF x (tevent/(1+B) +
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	5.700	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989					

Notes:

- Professional Judgement.
- Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E. Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 3.19E-09 Cancer Dermal Intake = 1.82E+00
Noncancer Ingestion Intake = 1.17E-08 Noncancer Dermal Intake = 6.69E+00

TABLE 4.16.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT TRESPASSERS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	ml/hr	(3)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	15	events/year	(1)	
				ED	Exposure Duration	19	years	(2)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989	
				Dermal	Trespasser	Adult	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm^{2}-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002a	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ³					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
τ	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t*	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hours/event					(1)	
B	Bunge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	5,700	cm ²					USEPA, 2004	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	15	days/year					(1)	
ED	Exposure Duration	19	years					(2)	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	6,935	days					USEPA, 1989	

Notes:

- 1 - Professional Judgement. Typically 1/2 RME exposure.
- 2 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.
- 3 - USEPA Region 4: Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.

Sources:

- U.S. EPA, 1988: Superfund Exposure Assessment Manual. EPA/540/1-89/001.
U.S. EPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
U.S. EPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (CR \times CF \times ET \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED) / (BW \times AT)$$

Cancer Ingestion Intake = 1.59E-09 Cancer Dermal Intake = 9.08E-01
Noncancer Ingestion Intake = 5.87E-09 Noncancer Dermal Intake = 3.35E+00

TABLE 4.17.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT TRESPASSERS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	(1)	
				EF	Exposure Frequency	30	days/year	(2)	
				ED	Exposure Duration	19	years	(3)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989	
				Dermal	Trespasser	Adult	Site 1	CS		Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
CF3	Conversion Factor 3	1.0E-06	kg/mg					--	
SA	Skin Surface Available for Contact	5,700	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.07	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					(1)	
EF	Exposure Frequency	30	days/year					(2)	
ED	Exposure Duration	19	years					(3)	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	6,935	days					USEPA, 1989	

Notes:

- 1 - Professional judgement.
- 2 - Assumes wading 2-3 days per week during warm summer months.
- 3 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.59E-08
Noncancer Ingestion Intake = 5.87E-08

Cancer Dermal Intake = 1.27E-07
Noncancer Dermal Intake = 4.68E-07

TABLE 4.17.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT TRESPASSERS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Trespasser	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	(1)	
				EF	Exposure Frequency	15	days/year	(2)	
				ED	Exposure Duration	19	years	(3)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989	
Dermal	Trespasser	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	5,700	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.01	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	(1)	
				EF	Exposure Frequency	15	days/year	(2)	
				ED	Exposure Duration	19	years	(3)	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	6,935	days	USEPA, 1989	

Notes:

- 1 - Professional judgement.
- 2 - Assumes 1/2 RME exposure.
- 3 - Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 7.97E-09 Cancer Dermal Intake = 9.08E-09
Noncancer Ingestion Intake = 2.94E-08 Noncancer Dermal Intake = 3.35E-08

TABLE 4.18.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Child	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	200	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	350	days/year	USEPA, 2002	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	2,800	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	350	days/year	USEPA, 2004	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989					

Notes:

1 - Children were evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, Residential children were evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-88/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 1.10E-06 Cancer Dermal Intake (Age 0 - 6) = 3.07E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 3.65E-07 Cancer Dermal Intake (Age 0 - 2) = 1.02E-06

Cancer Ingestion Intake (Age 2 - 6) = 7.31E-07 Cancer Dermal Intake (Age 2 - 6) = 2.05E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.28E-05 Noncancer Dermal Intake = 3.58E-05

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.18.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CHILD RESIDENTS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Child	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	234	days/year	USEPA, 2002	
				ED	Exposure Duration	2	years	USEPA, 1997	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	2,800	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.04	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	234	days/year	USEPA, 2002	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.22E-07

Cancer Dermal Intake = 1.37E-07

Noncancer Ingestion Intake = 4.27E-06

Noncancer Dermal Intake = 4.79E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.19.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - GROUNDWATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Child	Site 1	CGW	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CGW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CF	Conversion Factor	0.001	mg/kg	--	
				IR-GW	Ingestion Rate of Groundwater	1.5	L/day	USEPA, 2002	
				EF	Exposure Frequency	350	days/year	USEPA, 2002	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= 1* DAevent = 2 x FA x Kp x Cw x CF x sqrt[(6 x t x tevent)/pi] For organics if tevent > 1* DAevent = FA x Kp x Cw x CF x [tevent/(1+B) + 2 x t + (1 + 3B + 3B ²)/(1+B ²)]
				Cw	Chemical Concentration in Groundwater	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				1*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	0.33	hr/event	USEPA, 2004	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	6,600	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	350	days/year	USEPA, 2002	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	

Notes:

1 - Children were evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, Residential children were evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. EPA/600/P-95/002Fa

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (IR-GW x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 8.22E-06 Cancer Dermal Intake (Age 0 - 6) = 3.62E+01

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 2.74E-06 Cancer Dermal Intake (Age 0 - 2) = 1.21E+01

Cancer Ingestion Intake (Age 2 - 6) = 5.48E-06 Cancer Dermal Intake (Age 2 - 6) = 2.41E+01

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.59E-05 Noncancer Dermal Intake = 4.22E+02

Cancer risk from ingestion = Groundwater concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Groundwater concentration x Cancer Dermal Intake x DAevent x Dermal Cancer Slope Factor

Hazard Index from ingestion = Groundwater concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Groundwater concentration x Noncancer Dermal Intake x DAevent / Dermal Reference Dose

TABLE 4.19.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CHILD RESIDENTS - GROUNDWATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Child	Site 1	CGW	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	Chronic Daily Intake (CDI) (mg/kg/day) = $CGW \times CF \times IR-GW \times EF \times ED$ $BW \times AT$
				CF	Conversion Factor	0.001	mg/ug	--	
				IR-GW	Ingestion Rate of Groundwater	0.66	L/day	USEPA, 1997	
				EF	Exposure Frequency	234	days/year	USEPA, 2002	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $DAevent \times EV \times EF \times ED \times SA$ $BW \times AT$ For inorganics $DAevent = Kp \times CW \times CF \times tevent$ For organics if $tevent \leq t^*$ $DAevent = 2 \times FA \times Kp \times Cw \times CF \times \sqrt{(6 \times t \times tevent)/\pi}$ For organics if $tevent > t^*$ $DAevent = FA \times Kp \times Cw \times CF \times [tevent/(1+B) + 2 \times t + (1 + 3B + 3B^2)/(1+B^2)]$
				Cw	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				τ	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t^*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	0.25	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	6,600	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	234	days/year	USEPA, 2002	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	

Notes:

1 - Professional judgement. Typically assumed 1/2 RME exposure.

2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. EPA/600/P-95/002Fa

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (IR-GW \times EF \times ED)/(BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED)/(BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 8.06E-07$$

$$\text{Cancer Dermal Intake} = 8.06E+00$$

$$\text{Noncancer Ingestion Intake} = 2.82E-05$$

$$\text{Noncancer Dermal Intake} = 2.82E+02$$

Cancer risk from ingestion = Groundwater concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Groundwater concentration x Cancer Dermal Intake x DAevent x Dermal Cancer Slope Factor

Hazard Index from ingestion = Groundwater concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Groundwater concentration x Noncancer Dermal Intake x DAevent / Dermal Reference Dose

TABLE 4.20.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Residents	Child	Site 1	CA	Chemical concentration in air	Calculated	mg/m3	VDEQ, 2004	$Exposure\ Concentration\ (mg/m^3) =$ $\frac{CA \times ET \times EF \times ED}{AT \times CF2}$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	0.33	hours/day	USEPA, 2004	
				CF2	Conversion Factor	24	hours/day	--	
				EF	Exposure Frequency	350	days/year	--	
				ED	Exposure Duration	6	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2190	days	USEPA, 1989	
				VF	Volatilization Factor	NA	(mg/m3)/(mg/L)	VDEQ, 2004	

Notes:

- 1 - Professional judgment.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

$$Inhalation\ Intake = (CF1 \times ET \times EF \times ED) / (AT \times CF2)$$

$$Cancer\ Inhalation\ Intake = 1.13E-06$$

$$Noncancer\ Inhalation\ Intake = 1.32E-05$$

$$Cancer\ risk\ from\ ingestion = Air\ concentration \times Cancer\ Inhalation\ Intake \times Inhalation\ Cancer\ Slope\ Factor$$

$$Hazard\ Index\ from\ ingestion = Air\ concentration \times Noncancer\ Inhalation\ Intake / Inhalation\ Reference\ Dose$$

TABLE 4.20.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Inhalation	Residents	Adult	Site 1	CA	Chemical concentration in air	Calculated	mg/m ³	VDEQ, 2004	$\text{Exposure Concentration (mg/m}^3\text{)} =$ $\frac{CA \times ET \times EF \times ED}{AT \times CF2}$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	0.25	hours/day	(1)	
				CF2	Conversion Factor	24	hours/day	--	
				EF	Exposure Frequency	234	days/year	(1)	
				ED	Exposure Duration	2	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	
VF	Volatilization Factor	NA	(mg/m ³)/(mg/L)	VDEQ, 2004					

Notes:

- 1 - Professional judgment.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

Inhalation Intake = (CF1 x ET x EF x ED)/(AT x CF2)

Cancer Inhalation Intake = 1.91E-07

Noncancer Inhalation Intake = 6.68E-06

Cancer risk from ingestion = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from ingestion = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.21.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Water/Seeps
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Child	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times CR \times ET \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.05	L/hour	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(2)	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(4), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(4), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm2-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics $DAevent = Kp \times CW \times CF \times t_{event}$ For organics if $t_{event} \leq t^*$ $DAevent = 2 \times FA \times Kp \times Cw \times CF \times \sqrt{t^* / (6 \times t + t_{event})}$ For organics if $t_{event} > t^*$ $DAevent = FA \times Kp \times Cw \times CF \times t_{event} / (1 + B) + 2 \times t \times (1 + 3B + 3B^2) / (1 + B^2)$
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				t	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				t _{event}	Duration of event	1	hr/event	USEPA, 2002	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	2,800	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(3)	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(4), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(4), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989					

Notes:

- Professional Judgement.
- USEPA Region 4; Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000.
- Assumes swimming 2-3 days per week during summer months.
- Children were evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential adults were evaluated as two age groups, 0 - 2 years and 2 - 4 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989; Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-88/060.
USEPA, 1997; Exposure Factors Handbook, USEPA/600/8-95/002FA.
USEPA, 2002; Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites, OSWER 9285.6-10, December.
USEPA, 2004; Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 2.35E-08 Cancer Dermal Intake (Age 6 - 30) = 1.32E+00

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 7.83E-09 Cancer Dermal Intake (Age 6 - 16) = 4.38E-01

Cancer Ingestion Intake (Age 16 - 30) = 1.57E-08 Cancer Dermal Intake (Age 16 - 30) = 8.77E-01

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 2.74E-07 Noncancer Dermal Intake = 1.53E+01

Cancer risk from ingestion = Surface Water concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
Cancer risk from dermal contact = Surface Water concentration x Cancer Dermal Intake x Dermal Cancer Slope Factor
Hazard Index from ingestion = Surface Water concentration x Noncancer Ingestion Intake / Oral Reference Dose
Hazard Index from dermal contact = Surface Water concentration x Noncancer Dermal Intake x Dermal Reference Dose

TABLE 4.21.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CHILD RESIDENTS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Water/Seeps
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Child	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times CR \times ET \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.05	L/hour	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	15	events/year	(1)	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	
				Dermal	Residents	Child	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm^{2}-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent DAevent = 2 x FA x Kp x Cw x CF x sqrt[(6 x tau x tevent)/pi] For organics if tevent <= 1' For organics if tevent > 1' DAevent = FA x Kp x Cw x CF x [tevent/(1+B) + 2 x tau + (1 + 3B + 3B^{2})/(1+B^{2})]
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ²					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
tau	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t*	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hr/event					USEPA, 2002	
B	Bunge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	2,800	cm ²					USEPA, 2004	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	15	days/year					(1)	
ED	Exposure Duration	2	years					USEPA, 2002	
BW	Body Weight	15	kg					USEPA, 2002	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989					

Notes:

- 1 - Professional judgement. Typically assumes 1/2 RME exposure.
 - 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins. May 2000.
- Sources:
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
 - USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
 - USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 3.91E-09 Cancer Dermal Intake = 2.19E-01
Noncancer Ingestion Intake = 1.37E-07 Noncancer Dermal Intake = 7.67E+00

Cancer risk from ingestion = Surface Water concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
Cancer risk from dermal contact = Surface Water concentration x Cancer Dermal Intake x Dermal Cancer Slope Factor
Hazard Index from ingestion = Surface Water concentration x Noncancer Ingestion Intake / Oral Reference Dose
Hazard Index from dermal contact = Surface Water concentration x Noncancer Dermal Intake x Dermal Reference Dose

TABLE 4.22.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Child	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $CS \times IRS \times CF3 \times FI \times EF \times ED$ BW x AT
				IR-S	Ingestion Rate	200	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	30	days/year	(1)	
				ED1	Exposure Duration (Age 0 - 2)	2	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 2 - 6)	4	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989	
				Dermal	Residents	Child	Site 1	CS		Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED$ BW x AT
CF3	Conversion Factor 3	1.0E-06	kg/mg					--	
SA	Skin Surface Available for Contact	2,800	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.2	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	30	days/year					(1)	
ED1	Exposure Duration (Age 0 - 2)	2	years					(2), USEPA, 1989, 2005	
ED2	Exposure Duration (Age 2 - 6)	4	years					(2), USEPA, 1989, 2005	
BW	Body Weight	15	kg					USEPA, 2002	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	2,190	days	USEPA, 1989					

Notes:

- 1 - Professional judgement.
- 2 - Children were evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential adults were evaluated as two age groups, 0 - 2 years and 2 - 4 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
- USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 9.39E-08 Cancer Dermal Intake (Age 6 - 30) = 2.63E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 3.13E-08 Cancer Dermal Intake (Age 6 - 16) = 8.77E-08

Cancer Ingestion Intake Age 16 - 30) = 6.26E-08 Cancer Dermal Intake Age 16 - 30) = 1.75E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.10E-06 Noncancer Dermal Intake = 3.07E-06

- Cancer risk from ingestion = Sediment concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
- Cancer risk from dermal contact = Sediment concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor
- Hazard Index from ingestion = Sediment concentration x Noncancer Ingestion Intake / Oral Reference Dose
- Hazard Index from dermal contact = Sediment concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.22.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - CHILD RESIDENTS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Child	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	
Dermal	Residents	Child	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	2,800	cm2	USEPA, 2004	
				SSAF	Soil to Skin Adherence Factor	0.04	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	2	years	USEPA, 2002	
				BW	Body Weight	15	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	730	days	USEPA, 1989	

Notes:

1 - Professional judgement.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 7.83E-09$$

$$\text{Cancer Dermal Intake} = 8.77E-09$$

$$\text{Noncancer Ingestion Intake} = 2.74E-07$$

$$\text{Noncancer Dermal Intake} = 3.07E-07$$

Cancer risk from ingestion = Sediment concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Sediment concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Sediment concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Sediment concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.23.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	USEPA, 1989	
				EF	Exposure Frequency	350	days/year	USEPA, 2002a	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989	
				Dermal	Residents	Adult	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
CF3	Conversion Factor 3	1.0E-06	kg/mg					--	
SA	Skin Surface Available for Contact	5,700	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.07	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	350	days/year					USEPA, 2002a	
ED1	Exposure Duration (Age 6 - 16)	10	years					(1), USEPA, 1989, 2005	
ED2	Exposure Duration (Age 16 - 30)	14	years					(1), USEPA, 1989, 2005	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	8,760	days					USEPA, 1989	

Notes:

1 - Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, Residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = $(IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$

Dermal Intake = $(CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 4.70E-07 Cancer Dermal Intake (Age 6 - 30) = 1.87E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 1.96E-07 Cancer Dermal Intake (Age 6 - 16) = 7.81E-07
Cancer Ingestion Intake (Age 16 - 30) = 2.74E-07 Cancer Dermal Intake (Age 16 - 30) = 1.09E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.37E-06 Noncancer Dermal Intake = 5.47E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from Ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.23.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - SOILS
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Adult	Site 1	CS	Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 2002a	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	234	days/year	USEPA, 2002a	
				ED	Exposure Duration	7	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989	
				Dermal	Residents	Adult	Site 1	CS		Chemical concentration in soil	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
CF3	Conversion Factor 3	1.0E-06	kg/mg					--	
SA	Skin Surface Available for Contact	5,700	cm2					USEPA, 2004	
SSAF	Soil to Skin Adherence Factor	0.01	mg/cm2/event					USEPA, 2004	
DABS	Absorption Factor	Chemical Specific	unitless					USEPA, 2004	
EV	Events Frequency	1	events/day					USEPA, 2004	
EF	Exposure Frequency	234	days/year					USEPA, 2002a	
ED	Exposure Duration	7	years					USEPA, 2002a	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	2,555	days					USEPA, 1989	

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
- USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 4.58E-08$$

$$\text{Cancer Dermal Intake} = 5.22E-08$$

$$\text{Noncancer Ingestion Intake} = 4.58E-07$$

$$\text{Noncancer Dermal Intake} = 5.22E-07$$

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.24.RME
 VALUES USED FOR DAILY INTAKE CALCULATIONS
 REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - GROUNDWATER
 NOBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
 Medium: Groundwater
 Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CGW	Chemical Concentration in Groundwater	Maximum	ug/L	(2)	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CGW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CF	Conversion Factor	0.001	mg/ug	--	
				IR-GW	Ingestion Rate of Groundwater	2	L/day	USEPA, 2002a	
				EF	Exposure Frequency	350	days/year	USEPA, 2002a	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989	
Dermal	Residents	Adult	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics $DAevent = Kp \times CW \times CF \times t_{event}$ For organics if $t_{event} \leq t^*$ $DAevent = 2 \times FA \times Kp \times Cw \times CF \times \sqrt{(6 \times t \times t_{event})/\pi}$ For organics if $t_{event} > t^*$ $DAevent = FA \times Kp \times Cw \times CF \times [(t_{event}/(1+B)) + 2 \times t + (1 + 3B + 3B^2)/(1+B^2)]$
				Cw	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ²	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				t	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				t _{event}	Duration of event	0.33	hr/event	(3)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	18,000	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	350	days/year	USEPA, 2004	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989					

Notes:

- Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, Residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).
- USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- Professional judgement.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A, EPA/540/1-86/060.
- USEPA, 1997: Exposure Factors Handbook, USEPA/600/8-95/002FA.
- USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
- USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (IR-GW x EF x ED)/(BW x AT)

Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 9.39E-06 Cancer Dermal Intake (Age 6 - 30) = 8.45E+01

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 3.91E-06 Cancer Dermal Intake (Age 6 - 16) = 3.52E+01

Cancer Ingestion Intake (Age 16 - 30) = 5.48E-06 Cancer Dermal Intake (Age 16 - 30) = 4.93E+01

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 2.74E-05 Noncancer Dermal Intake = 2.47E+02

Cancer risk from ingestion = Groundwater concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Groundwater concentration x Cancer Dermal Intake x DAevent x Dermal Cancer Slope Factor

Hazard Index from ingestion = Groundwater concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Groundwater concentration x Noncancer Dermal Intake x DAevent / Dermal Reference Dose

TABLE 4.24.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - GROUNDWATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Ingestion	Residents	Adult	Site 1	CGW	Chemical Concentration in Groundwater	Maximum	ug/L	(2)	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CGW \times CF \times IR-GW \times EF \times ED}{BW \times AT}$
				CF	Conversion Factor	0.001	mg/ug	--	
				IR-GW	Ingestion Rate of Groundwater	1.4	L/day	USEPA, 2002a	
				EF	Exposure Frequency	234	days/year	USEPA, 2004	
				ED	Exposure Duration	7	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989	
Dermal	Residents	Adult	Site 1	DAevent	Dermally Absorbed Dose per Event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= t* DAevent = 2 x FA x Kp x Cw x CF x sqrt((6 x t x tevent)/pi) For organics if tevent > t* DAevent = FA x Kp x Cw x CF x (tevent/(1+B) + 2 x t + (1 + 3B + 3B ²)/(1+B ³))
				Cw	Chemical Concentration in Groundwater	Maximum	mg/kg	(2)	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ³	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				t	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	0.25	hr/event	(3)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	18,000	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	234	days/year	USEPA, 2004	
				ED	Exposure Duration	7	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989					

Notes:

- Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, Residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).
- USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- Professional judgement.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund, Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Ingestion Intake} = (IR-GW \times EF \times ED)/(BW \times AT)$$

$$\text{Dermal Intake} = (SA \times EV \times EF \times ED)/(BW \times AT)$$

Cancer Ingestion Intake = 1.28E-06 Cancer Dermal Intake = 1.65E-01
Noncancer Ingestion Intake = 1.28E-05 Noncancer Dermal Intake = 1.65E-02

- Cancer risk from ingestion = Groundwater concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
Cancer risk from dermal contact = Groundwater concentration x Cancer Dermal Intake x DAevent x Dermal Cancer Slope Factor
Hazard Index from ingestion = Groundwater concentration x Noncancer Ingestion Intake / Oral Reference Dose
Hazard Index from dermal contact = Groundwater concentration x Noncancer Dermal Intake x DAevent / Dermal Reference Dose

TABLE 4.25.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation	Residents	Adult	Site 1	CA	Chemical concentration in air	Calculated	mg/m3	VDEQ, 2004	Exposure Concentration (mg/m ³) = $\frac{CA \times ET \times EF \times ED}{AT \times CF2}$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	0.33	hours/day	USEPA, 2004	
				CF2	Conversion Factor	24	hours/day	--	
				EF	Exposure Frequency	350	days/year	--	
				ED	Exposure Duration	24	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8760	days	USEPA, 1989	
				VF	Volatilization Factor	NA	(mg/m3)/(mg/L)	VDEQ, 2004	

Notes:

- 1 - Professional judgment.
- 2 - USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

$$\text{Inhalation Intake} = (CF1 \times ET \times EF \times ED) / (AT \times CF2)$$

$$\text{Cancer Inhalation Intake} = 4.52E-06$$

$$\text{Noncancer Inhalation Intake} = 1.32E-05$$

$$\text{Cancer risk from ingestion} = \text{Air concentration} \times \text{Cancer Inhalation Intake} \times \text{Inhalation Cancer Slope Factor}$$

$$\text{Hazard Index from ingestion} = \text{Air concentration} \times \text{Noncancer Inhalation Intake} / \text{Inhalation Reference Dose}$$

TABLE 4.25.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - GROUNDWATER TO AIR
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Inhalation	Residents	Adult	Site 1	CA	Chemical concentration in air	Calculated	mg/m ³	VDEQ, 2004	Exposure Concentration (mg/m ³) = $CA \times ET \times EF \times ED$ $AT \times CF2$ $CA = CW \times CF1 \times VF$
				CW	Chemical concentration in water.	Maximum	ug/L	(2)	
				CF1	Conversion Factor	0.001	mg/ug	--	
				ET	Exposure Time	0.25	hours/day	(1)	
				CF2	Conversion Factor	24	hours/day	--	
				EF	Exposure Frequency	234	days/year	(1)	
				ED	Exposure Duration	7	years	(1)	
				AT-C	Averaging Time (Cancer)	25550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2555	days	USEPA, 1989	
VF	Volatilization Factor	NA	(mg/m ³)/(mg/L)	VDEQ, 2004					

Notes:

- 1 - Professional judgment.
- 2 - USEPA Region 4; Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
- USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
- VDEQ, 2004: Virginia Department of Environmental Quality (VDEQ, online- <http://www.deq.state.va.us/vrprisk/homepage.html>).

Unit Intake Calculations

Inhalation Intake = $(CF1 \times ET \times EF \times ED) / (AT \times CF2)$

Cancer Inhalation Intake = 6.68E-07

Noncancer Inhalation Intake = 6.68E-06

Cancer risk from ingestion = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from ingestion = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.26.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - SURFACE WATER
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Water/Seeps
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $CW \times CF \times CR \times ET \times EF \times ED$ BW x AT
				CR	Contact Rate	0.01	L/hour	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	30	events/year	(4)	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989	
Dermal	Residents	Adult	Site 1	DAevent	Absorbed dose per event	Calculated	mg/cm ² -event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $DAevent \times EV \times EF \times ED \times SA$ BW x AT For inorganics DAevent = Kp x CW x CF x tevent For organics if tevent <= 1' DAevent = 2 x FA x Kp x Cw x CF x sqrt((6 x t x tevent)(pi)) For organics if tevent > 1' DAevent = FA x Kp x Cw x CF x (tevent/(1+B) + 2 x t - (1 + 3B + 3B ²)/(1+B ²))
				Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg	USEPA, 2002a	
				FA	Fraction Absorbed	Chemical Specific	unitless	USEPA, 2004	
				CF	Conversion factor	0.001	L/cm ²	--	
				Kp	Permeability coefficient	Chemical Specific	cm/hr	USEPA, 2004	
				t	Lag time	Chemical Specific	hr/event	USEPA, 2004	
				t*	Time it takes to reach steady state	Chemical Specific	hr/event	USEPA, 2004	
				tevent	Duration of event	1	hr/event	(1)	
				B	Bunge model constant	Chemical Specific	unitless	USEPA, 2004	
				SA	Skin Surface Available for Contact	5,700	cm ²	USEPA, 2004	
				EV	Event Frequency	1	events/day	(1)	
				EF	Exposure Frequency	30	days/year	(4)	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(1), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(1), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989	

Notes:

- Professional judgement.
- USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).
- Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)(BW x AT)

Dermal Intake = (SA x EV x EF x ED)(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 4.03E-09 Cancer Dermal Intake (Age 6 - 30) = 2.29E+00

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 1.88E-09 Cancer Dermal Intake (Age 6 - 16) = 9.58E-01

Cancer Ingestion Intake (Age 16 - 30) = 2.35E-09 Cancer Dermal Intake (Age 16 - 30) = 1.34E-00

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.17E-08 Noncancer Dermal Intake = 6.69E+00

Cancer risk from ingestion = Surface Water concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
Cancer risk from dermal contact = Surface Water concentration x Cancer Dermal Intake x D_Aevent x Dermal Cancer Slope Factor
Hazard Index from ingestion = Surface Water concentration x Noncancer Ingestion Intake / Oral Reference Dose
Hazard Index from dermal contact = Surface Water concentration x Noncancer Dermal Intake x D_Aevent / Dermal Reference Dose

TABLE 4.26.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - SURFACE WATER
NOBG GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Surface Water/Seeps
Exposure Medium: Surface Water

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CW	Chemical Concentration in Water	Max or 95% UCL	ug/L	USEPA, 2002a	Chronic Daily Intake (CDI) (mg/kg/day) = $\frac{CW \times CF \times CR \times ET \times EF \times ED}{BW \times AT}$
				CR	Contact Rate	0.01	L/hour	(2)	
				CF	Conversion factor	0.001	ug/mg	--	
				ET	Exposure Time	1	hours/event	(1)	
				EF	Exposure Frequency	15	events/year	(1)	
				ED	Exposure Duration	7	years	USEPA, 2002a	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989	
				Dermal	Residents	Adult	Site 1	DAevent		Absorbed dose per event	Calculated	mg/cm2-event	USEPA, 2004	Dermally Absorbed Dose (mg/kg/day) = $\frac{DAevent \times EV \times EF \times ED \times SA}{BW \times AT}$ For inorganics DAevent = kP x CW x CF x tevent DAevent = 2 x FA x Kp x Cw x CF x sqrt((6 x t x tevent)/pi) For organics if tevent <= t' For organics if tevent > t' DAevent = FA x Kp x Cw x CF x (tevent/(1+B) + 2 x t + (1 + 3B + 3B^2)/(1+B^2))
Cw	Chemical Concentration in Water	Max or 95% UCL	mg/kg					USEPA, 2002a	
FA	Fraction Absorbed	Chemical Specific	unitless					USEPA, 2004	
CF	Conversion factor	0.001	L/cm ³					--	
Kp	Permeability coefficient	Chemical Specific	cm/hr					USEPA, 2004	
τ	Lag time	Chemical Specific	hr/event					USEPA, 2004	
t'	Time it takes to reach steady state	Chemical Specific	hr/event					USEPA, 2004	
tevent	Duration of event	1	hr/event					(1)	
B	Burge model constant	Chemical Specific	unitless					USEPA, 2004	
SA	Skin Surface Available for Contact	5,700	cm ²					USEPA, 2004	
EV	Event Frequency	1	events/day					(1)	
EF	Exposure Frequency	15	days/year					(1)	
ED	Exposure Duration	7	years					USEPA, 2002a	
BW	Body Weight	70	kg					USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days					USEPA, 1989	
AT-N	Averaging Time (Non-Cancer)	2,555	days					USEPA, 1989	

Notes:

- Professional judgement.
- USEPA Region 4: Supplemental Guidance To RAGS: Region 4 Bulletins, Human Health Risk Assessment Bulletins, May 2000; see text.
- Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).
- Assumes a total 30 year exposure, 11 years for an adolescent (6 to 16 years old) and the remaining 19 years for an adult.

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Ingestion Intake = (CR x CF x ET x EF x ED)/(BW x AT)
Dermal Intake = (SA x EV x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 5.87E-10 Cancer Dermal Intake = 3.35E-01
Noncancer Ingestion Intake = 5.87E-09 Noncancer Dermal Intake = 3.35E+00

Cancer risk from ingestion = Surface Water concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor
Cancer risk from dermal contact = Surface Water concentration x Cancer Dermal Intake x Dermal Cancer Slope Factor
Hazard Index from ingestion = Surface Water concentration x Noncancer Ingestion Intake / Oral Reference Dose
Hazard Index from dermal contact = Surface Water concentration x Noncancer Dermal Intake x Dermal Reference Dose

TABLE 4.27.RME
VALUES USED FOR DAILY INTAKE CALCULATIONS
REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	100	mg/day	USEPA, 1997	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	30	days/year	(1)	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989	
Dermal	Residents	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002a	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAFE \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	5,700	cm ²	USEPA, 2002a	
				SSAF	Soil to Skin Adherence Factor	0.07	mg/cm ² /event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	30	days/year	(1)	
				ED1	Exposure Duration (Age 6 - 16)	10	years	(2), USEPA, 1989, 2005	
				ED2	Exposure Duration (Age 16 - 30)	14	years	(2), USEPA, 1989, 2005	
				BW	Body Weight	70	kg	USEPA, 2002b	
AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989					
AT-N	Averaging Time (Non-Cancer)	8,760	days	USEPA, 1989					

Notes:

- Assumes wading 2-3 days per week during warm summer months.
- Adults were evaluated as one age group (7 - 30 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential adults were evaluated as two age groups, 7 - 16 years and 16 - 30 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

- USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.
USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.
USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.
USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAFE x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 30) = 4.03E-08 Cancer Dermal Intake (Age 6 - 30) = 1.61E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 1.68E-08 Cancer Dermal Intake (Age 6 - 16) = 6.69E-08

Cancer Ingestion Intake Age 16 - 30) = 2.35E-08 Cancer Dermal Intake Age 16 - 30) = 9.37E-08

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.17E-07 Noncancer Dermal Intake = 4.68E-07

Cancer risk from ingestion = Sediment concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Sediment concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Sediment concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Sediment concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.27.CTE
VALUES USED FOR DAILY INTAKE CALCULATIONS
CENTRAL TENDENCY EXPOSURES - ADULT RESIDENTS - SEDIMENT
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Scenario Timeframe: Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Residents	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Intake (mg/kg/day) = $\frac{CS \times IRS \times CF3 \times FI \times EF \times ED}{BW \times AT}$
				IR-S	Ingestion Rate	50	mg/day	USEPA, 1993	
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				FI	Fraction Ingested	1	unitless	--	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	7	years	USEPA, 2002	
				BW	Body Weight	70	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989	
Dermal	Residents	Adult	Site 1	CS	Chemical concentration in sediment	Max or 95% UCL	mg/kg	USEPA, 2002	Dermally Absorbed Dose (mg/kg/day) = $\frac{CS \times CF3 \times SA \times SSAF \times DABS \times EV \times EF \times ED}{BW \times AT}$
				CF3	Conversion Factor 3	1.0E-06	kg/mg	--	
				SA	Skin Surface Available for Contact	5,700	cm2	USEPA, 2002	
				SSAF	Soil to Skin Adherence Factor	0.01	mg/cm2/event	USEPA, 2004	
				DABS	Absorption Factor	Chemical Specific	unitless	USEPA, 2004	
				EV	Events Frequency	1	events/day	USEPA, 2004	
				EF	Exposure Frequency	15	days/year	(1)	
				ED	Exposure Duration	7	years	USEPA, 2002	
				BW	Body Weight	70	kg	USEPA, 2002	
				AT-C	Averaging Time (Cancer)	25,550	days	USEPA, 1989	
				AT-N	Averaging Time (Non-Cancer)	2,555	days	USEPA, 1989	

Notes:

1 - Professional judgement. Typically 1/2 RME exposure.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1997: Exposure Factors Handbook. USEPA/600/8-95/002FA.

USEPA, 2002a: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

Unit Intake Calculations

$$\text{Incidental Ingestion Intake} = (IR-S \times CF3 \times FI \times EF \times ED) / (BW \times AT)$$

$$\text{Dermal Intake} = (CF3 \times SA \times SSAF \times EF \times ED) / (BW \times AT)$$

$$\text{Cancer Ingestion Intake} = 2.94E-09$$

$$\text{Cancer Dermal Intake} = 3.35E-09$$

$$\text{Noncancer Ingestion Intake} = 2.94E-08$$

$$\text{Noncancer Dermal Intake} = 3.35E-08$$

Cancer risk from ingestion = Sediment concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Sediment concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Sediment concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Sediment concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.28
INTERMEDIATE VARIABLES FOR CALCULATING DA(EVENT)
SITE 1, DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT, GULFPORT, MISSISSIPPI

Chemical of Potential Concern	Media	Dermal Absorption Fraction (soil)	FA	Kp		T(event)		Tau		T*		B
			Value	Value	Units	Value	Units	Value	Units	Value	Units	Value
Volatile Organic Compounds												
Tetrachloroethene	Groundwater	NA	1	3.3E-02	cm/hr	(1)	hr	9.1E-01	hr	2.2E+00	hr	1.7E-01
Semivolatile Organic Compounds												
Benzo(a)pyrene Equivalents	Sediment	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	Sediment	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	Sediment	0.13	NA ⁽²⁾									
Naphthalene	Groundwater	NA	1	4.7E-02	cm/hr	(1)	hr	5.6E-01	hr	1.3E+00	hr	2.0E-01
Pesticides/PCBs												
Aroclor-1242	Soil	0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	Soil	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics												
Aluminum	Soil, Groundwater, Sediment	NA	NA	1.0E-03	cm/hr	NA	NA	NA	NA	NA	NA	NA
Antimony	Soil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	Soil, Groundwater, Surface Water, Sediment	0.03	NA	1.0E-03	cm/hr	NA	NA	NA	NA	NA	NA	NA
Cobalt	Soil	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	Soil, Groundwater, Surface Water, Sediment	NA	NA	1.0E-03	cm/hr	NA	NA	NA	NA	NA	NA	NA
Manganese	Soil, Groundwater, Sediment	NA	NA	1.0E-03	cm/hr	NA	NA	NA	NA	NA	NA	NA
Thallium	Groundwater	NA	NA	1.0E-03	cm/hr	NA	NA	NA	NA	NA	NA	NA

Notes:

All values from EPA's Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final, July 2004.

1 - T(event) for exposures to groundwater by construction worker is 4 hours for RME and 2 hours for CTE and residents is 0.33 hour for RME and 0.25 hour for CTE.

All receptors are assumed to be exposed to surface water 1 hour a day for RME and CTE.

2 - RAGS Part E recommends not attempting to quantify risk because contaminants are outside the effective predictive domain of the model.

FA = Fraction Absorbed Water

T* = Time to Reach Steady-State

Kp = Dermal Permeability Coefficient of Compound in Water

B = Dimensionless Ratio of the Permeability Coefficient of a Compound Through the Stratum Corneum Relative to its Permeability Coefficient Across the Viable Epidermis

T(event) = Event Duration

NA = Not applicable.

Tau = Lag Time

RAGS Part D Table 5

Non-Cancer Toxicity Data

LIST OF TABLES
RAGS PART D TABLE 5
NON-CANCER TOXICITY DATA

Table No.

- 5.1 Non-Cancer Toxicity Data - Oral/Dermal
- 5.2 Non-Cancer Toxicity Data - Inhalation

**TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal ⁽¹⁾	Absorbed RfD for Dermal ⁽²⁾		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD: Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds										
TETRACHLOROETHENE	Chronic	1.0E-02	mg/kg/day	1	1.0E-02	mg/kg/day	Liver	1000/1	IRIS	4/30/2009
TRICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds										
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	Chronic	2.0E-02	mg/kg/day	1	2.0E-02	mg/kg/day	Body Weight	3000/1	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs										
AROCLOLOR-1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	Chronic	5.0E-05	mg/kg/day	1	5.0E-05	mg/kg/day	Liver	100/1	IRIS	4/30/2009
Inorganics										
ALUMINUM	Chronic	1.0E+00	mg/kg/day	1	1.0E+00	mg/kg/day	CNS	100	PPRTV	10/23/2006
ANTIMONY	Chronic	4.0E-04	mg/kg/day	0.15	6.0E-05	mg/kg/day	Blood	1000/1	IRIS	4/30/2009
ARSENIC	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	Skin, CVS	3/1	IRIS	4/30/2009
COBALT	Chronic	3.0E-04	mg/kg/day	1	3.0E-04	mg/kg/day	NA	NA	ORNL	04/2009
IRON	Chronic	7.0E-01	mg/kg/day	1	7.0E-01	mg/kg/day	GS	1.5	PPRTV	9/11/2006
MANGANESE (soil) ⁽³⁾	Chronic	7.0E-02	mg/kg/day	0.04	2.8E-03	mg/kg/day	CNS	1/1	IRIS	4/30/2009
MANGANESE (water) ⁽³⁾	Chronic	2.4E-02	mg/kg/day	0.04	9.6E-04	mg/kg/day	CNS	1/3	IRIS	4/30/2009
THALLIUM	Chronic	6.5E-05	mg/kg/day	1	6.5E-05	mg/kg/day	Hair Loss, Liver	3000/1	ORNL	04/2009

Notes:

- 1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
- 2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
- 3 - Adjusted IRIS value in accordance with USEPA Region I Risk Update Number 4, November 1996.

Definitions:

CNS = Central Nervous System
 CVS = Cardiovascular system
 GS = Gastrointestinal

IRIS = Integrated Risk Information System

NA = Not Available.

ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.

PPRTV = Provisional Peer Reviewed Toxicity Values

**TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD ⁽¹⁾		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC : Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds									
TETRACHLOROETHENE	Chronic	2.7E-01	mg/m ³	7.7E-02	(mg/kg/day)	Liver	NA	ORNL	04/2009
TRICHLOROETHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organic Compounds									
BENZO(A)PYRENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	NA	NA	NA	NA	NA	NA	NA	NA	NA
NAPHTHALENE	Chronic	3.0E-03	mg/m ³	8.6E-04	(mg/kg/day)	Respiratory	3000/1	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pesticides/PCBs									
AROCLOR-1242	NA	NA	NA	NA	NA	NA	NA	NA	NA
DIELDRIN	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics									
ALUMINUM	Chronic	5.0E-03	mg/m ³	1.4E-03	(mg/kg/day)	CNS	300	PPRTV	10/23/2006
ANTIMONY	NA	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	Chronic	3.00E-05	mg/m ³	8.6E-06	(mg/kg/day)	NA	NA	ORNL	04/2009
COBALT	Chronic	6.0E-06	mg/m ³	1.7E-06	(mg/kg/day)	Respiratory	NA	ORNL	04/2009
IRON	NA	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	Chronic	5.0E-05	mg/m ³	1.4E-05	(mg/kg/day)	CNS	1000/1	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1 - Extrapolated RfD = RfC *20m³/day / 70 kg

Definitions:

CNS = Central Nervous System

IRIS = Integrated Risk Information System

NA = Not Applicable

ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.

PPRTV = Provisional Peer Reviewed Toxicity Values

RAGS Part D Table 6

Cancer Toxicity Data

LIST OF TABLES
RAGS PART D TABLE 6
CANCER TOXICITY DATA

Table No.

- 6.1 Cancer Toxicity Data - Oral/Dermal
- 6.2 Cancer Toxicity Data - Inhalation

**TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal ⁽¹⁾	Absorbed Cancer Slope Factor for Dermal ⁽²⁾		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units		Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds								
TETRACHLOROETHENE	5.4E-01	(mg/kg/day) ⁻¹	1	5.4E-01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
TRICHLOROETHENE	1.3E-02	(mg/kg/day) ⁻¹	1	1.3E-02	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Semivolatile Organic Compounds								
BENZO(A)PYRENE ⁽³⁾	7.3E+00	(mg/kg/day) ⁻¹	1	7.3E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
BENZO(B)FLUORANTHENE ⁽³⁾	7.3E-01	(mg/kg/day) ⁻¹	1	7.3E-01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(1)	7/1993
NAPHTHALENE	NA	NA	NA	NA	NA	C / Possible human carcinogen	IRIS	4/30/2009
BENZO(A)PYRENE EQUIVALENTS ⁽³⁾	7.3E+00	(mg/kg/day) ⁻¹	1	7.3E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Pesticides/PCBs								
AROCLOL-1242	2.0E+00	(mg/kg/day) ⁻¹	1	2.0E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(2)	9/1996
DIELDRIN	1.6E+01	(mg/kg/day) ⁻¹	1	1.6E+01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Inorganics								
ALUMINUM	NA	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	NA	NA
ARSENIC	1.5E+00	(mg/kg/day) ⁻¹	1	1.5E+00	(mg/kg/day) ⁻¹	A / Known/likely human carcinogen	IRIS	4/30/2009
COBALT	NA	NA	NA	NA	NA	NA	NA	NA
IRON	NA	NA	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009

Notes:

- 1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
- 2 - Adjusted cancer slope factor for dermal =
Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
- 3 - The carcinogenic PAHs are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

- IRIS = Integrated Risk Information System.
 NA = Not Available.
 ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April, 2009.
 PPRTV = Provisional Peer Reviewed Toxicity Values
 USEPA(1) = USEPA, Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons, July 1993, EPA/600/R-93/089.
 USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor ⁽¹⁾		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds							
TETRACHLOROETHENE	5.9E-06	(ug/m ³) ⁻¹	2.1E-02	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
TRICHLOROETHENE	2.0E-06	(ug/m ³) ⁻¹	7.0E-03	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Semivolatile Organic Compounds							
BENZO(A)PYRENE ⁽²⁾	1.1E-03	(ug/m ³) ⁻¹	3.9E+00	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
BENZO(B)FLUORANTHENE ⁽²⁾	1.1E-04	(ug/m ³) ⁻¹	3.9E-01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
NAPHTHALENE	3.4E-05	(ug/m ³) ⁻¹	1.2E-01	(mg/kg/day) ⁻¹	C/ Possible Human Carcinogen	ORNL	04/2009
BENZO(A)PYRENE EQUIVALENTS ⁽²⁾	1.1E-03	(ug/m ³) ⁻¹	3.9E+00	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
Pesticides/PCBs							
AROCLOR-1242	5.7E-04	(ug/m ³) ⁻¹	2.0E+00	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	USEPA(2)	9/1996
DIELDRIN	4.6E-03	(ug/m ³) ⁻¹	1.6E+01	(mg/kg/day) ⁻¹	B2 / Probable human carcinogen	IRIS	4/30/2009
Inorganics							
ALUMINUM	NA	NA	NA	NA	NA	NA	NA
ANTIMONY	NA	NA	NA	NA	NA	NA	NA
ARSENIC	4.3E-03	(ug/m ³) ⁻¹	1.5E+01	(mg/kg/day) ⁻¹	A / Known human carcinogen	IRIS	4/30/2009
COBALT	9.0E-03	(ug/m ³) ⁻¹	3.2E+01	(mg/kg/day) ⁻¹	NA	ORNL	04/2009
IRON	NA	NA	NA	NA	NA	NA	NA
MANGANESE	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009
THALLIUM	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	4/30/2009

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / 20m³/day.

2 - The carcinogenic PAHs are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

3 - Values are for chlordane.

4 - Values are for alpha-BHC.

Definitions:

IRIS = Integrated Risk Information System.

NA = Not Available.

ORNL = Oak Ridge National Laboratory, Regional Screening Levels for Chemical Contaminants at Superfund Sites, April 2009.

USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

RAGS Part D Table 7

Calculation of Cancer Risks and Non-Cancer Hazards

LIST OF TABLES
RAGS PART D TABLE 7
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

Table No.

REASONABLE MAXIMUM EXPOSURES

7.1.RME	Construction Workers
7.2.RME	Maintenance Workers
7.3.RME	Industrial Workers
7.4.RME	Adolescent Trespassers
7.5.RME	Adult Trespassers
7.6.RME	Child Residents
7.7.RME	Adult Residents

CENTRAL TENDENCY EXPOSURES

7.1.CTE	Construction Workers
7.2.CTE	Maintenance Workers
7.3.CTE	Industrial Workers
7.4.CTE	Adolescent Trespassers
7.5.CTE	Adult Trespassers
7.6.CTE	Child Residents
7.7.CTE	Adult Residents

TABLE 7.1.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 3

Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	1.4E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	2.2E-07	9.7E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.02	
				Aluminum	7780	mg/kg	3.6E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.5E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.03	
				Antimony	1.00	mg/kg	4.6E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.2E-06	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.008	
				Arsenic	2.20	mg/kg	1.0E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.5E-07	7.1E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.02	
				Cobalt	2.20	mg/kg	1.0E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.1E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.02	
				Iron	4330	mg/kg	2.0E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.02	
			Manganese (Soil)	55.4	mg/kg	2.6E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-04	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.002		
			Exp. Route Total								3.7E-07						0.1
			Dermal	Dieldrin	0.300	mg/kg	4.2E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	6.6E-08	2.9E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.006	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	9.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-08	6.4E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
			Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--		
			Exp. Route Total								8.0E-08						0.008
			Exposure Point Total									4.5E-07					
Exposure Medium Total									4.5E-07						0.1		
Medium Total										4.5E-07					0.1		
Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.1E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.2E-07	7.7E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	4.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.1E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.03	
				Arsenic	2.00	mg/kg	9.2E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-07	6.5E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.02	
			Exp. Route Total								3.6E-07					0.05	
			Dermal	Aroclor-1242	2.40	mg/kg	4.6E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	9.3E-08	3.3E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	2.00	mg/kg	8.3E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.2E-08	5.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
			Exp. Route Total								1.1E-07					0.002	
			Exposure Point Total									4.7E-07					0.05
			Exposure Medium Total									4.7E-07					0.05
Medium Total										4.7E-07					0.05		

TABLE 7.1.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Groundwater - MW	Groundwater	Site 1	Dermal	Naphthalene	6.70	ug/L	8.1E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.6E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.0003	
				Aluminum	6320	ug/L	1.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.8E-05	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.00010	
				Arsenic	19.1	ug/L	4.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	6.3E-09	3.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0010	
				Iron	44000	ug/L	9.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.8E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0010	
				Manganese (Water)	548	ug/L	1.2E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.5E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.009	
				Thallium	4.10	ug/L	9.1E-10	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.4E-08	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.0010	
				Exp. Route Total							6.3E-09				0.01		
				Exposure Point Total							6.3E-09				0.01		
				Exposure Medium Total							6.3E-09				0.01		
		Air	Site 1	Inhalation	Naphthalene	2.0E-04	mg/m3	3.8E-08	(mg/kg/day)	3.4E-05	(ug/m ³) ⁻¹	1.3E-09	2.7E-06	(mg/kg/day)	3.0E-03	(mg/m ³)	0.0009
	Aluminum				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	5.0E-03	(mg/m ³)	--	
	Arsenic				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	4.3E-03	(mg/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-05	(mg/m ³)	--	
	Iron				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m ³)	--	
	Manganese (Water)				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m ³)	--	
	Thallium				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m ³)	--	
			Exp. Route Total							1.3E-09				0.0009			
			Exposure Point Total							1.3E-09				0.0009			
			Exposure Medium Total							1.3E-09				0.0009			
			Medium Total							7.7E-09				0.01			
Groundwater - DPT	Groundwater	Site 1	Dermal	Tetrachloroethene	0.540	ug/L	5.5E-09	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	3.0E-09	3.9E-07	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.00004	
												3.0E-09				0.00004	
							Exp. Route Total						3.0E-09				0.00004
				Exposure Point Total							3.0E-09				0.00004		
				Exposure Medium Total							3.0E-09				0.00004		
		Air	Site 1	Inhalation	Tetrachloroethene	1.6E-05	mg/m3	3.0E-09	(mg/kg/day)	5.9E-06	(ug/m ³) ⁻¹	1.8E-11	2.1E-07	(mg/kg/day)	2.7E-01	(mg/m ³)	0.0000008
											1.8E-11				0.0000008		
						Exp. Route Total						1.8E-11				0.0000008	
			Exposure Point Total							1.8E-11				0.0000008			
			Exposure Medium Total							3.0E-09				0.00004			
			Medium Total							3.0E-09				0.00004			
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	5.7E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.6E-10	4.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Iron	2410	ug/L	4.0E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00004	
							Exp. Route Total						8.6E-10				0.0002
				Dermal	Arsenic	3.40	ug/L	1.9E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.8E-10	1.3E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00004
			Iron		2410	ug/L	1.3E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.3E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001	
							Exp. Route Total						2.8E-10				0.00006
			Exposure Point Total							1.1E-09				0.0002			
			Exposure Medium Total							1.1E-09				0.0002			
			Medium Total							1.1E-09				0.0002			

TABLE 7.1.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units				
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.1E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	8.1E-09	7.7E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	9.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.7E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.007	
				Arsenic	19.8	mg/kg	1.1E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.6E-07	7.7E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.03	
				Iron	28100	mg/kg	1.6E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.02	
				Manganese (Soil)	295	mg/kg	1.6E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-04	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.002	
			Exp. Route Total									1.7E-07					0.05
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	4.3E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	3.2E-09	3.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	9.9E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.5E-08	6.9E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total									1.8E-08					0.002
			Exposure Point Total									1.9E-07					0.05
			Exposure Medium Total									1.9E-07					0.05
Medium Total									1.9E-07					0.05			
Total of Receptor Risks Across All Media										1.1E-06	Total of Receptor Hazards Across All Media				0.3		

TABLE 7.1.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	3.5E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	5.5E-08	2.4E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.005
				Aluminum	7780	mg/kg	9.0E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.3E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.006
				Antimony	1.00	mg/kg	1.2E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.002
				Arsenic	2.20	mg/kg	2.5E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.8E-08	1.8E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006
				Cobalt	2.20	mg/kg	2.5E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006
				Iron	4330	mg/kg	5.0E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.5E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.005
				Manganese (Soil)	55.4	mg/kg	6.4E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.5E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0006
			Exp. Route Total								9.3E-08					0.03
			Dermal	Dieldrin	0.300	mg/kg	6.9E-10	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.1E-08	4.8E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0010
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--
		Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
		Arsenic	2.20	mg/kg	1.5E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.3E-09	1.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0004		
		Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--		
		Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--		
		Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--		
		Exp. Route Total								1.3E-08					0.001	
		Exposure Point Total								1.1E-07						0.03
		Exposure Medium Total								1.1E-07						0.03
		Medium Total								1.1E-07						0.03
		Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	2.8E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	5.5E-08	1.9E-06	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700					mg/kg	1.1E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.8E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.008
Arsenic	2.00					mg/kg	2.3E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.5E-08	1.6E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.005
Exp. Route Total										9.0E-08					0.01	
Dermal	Aroclor-1242				2.40	mg/kg	7.7E-09	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.5E-08	5.4E-07	(mg/kg/day)	NA	(mg/kg/day)	--
	Aluminum			9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
Arsenic	2.00			mg/kg	1.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.1E-09	9.7E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0003		
Exp. Route Total									1.8E-08					0.0003		
Exposure Point Total										1.1E-07					0.01	
Exposure Medium Total										1.1E-07					0.01	
Medium Total								1.1E-07					0.01			

TABLE 7.1.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient			
							Value	Units	Value	Units		Value	Units	Value	Units				
Groundwater - MW	Groundwater	Site 1	Dermal	Naphthalene	6.70	ug/L	2.6E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-06	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.00009			
				Aluminum	6320	ug/L	3.5E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.4E-05	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.00002			
				Arsenic	19.1	ug/L	1.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.6E-09	7.4E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002			
				Iron	44000	ug/L	2.4E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.7E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0002			
				Manganese (Water)	548	ug/L	3.0E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.1E-06	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.002			
				Thallium	4.10	ug/L	2.3E-10	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-08	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.0002			
				Exp. Route Total												1.6E-09	0.003		
				Exposure Point Total													1.6E-09	0.003	
				Exposure Medium Total													1.6E-09	0.003	
		Air	Site 1	Inhalation	Naphthalene	0.000	mg/m3	9.6E-09	(mg/kg/day)	3.4E-05	(ug/m3) ⁻¹	3.3E-10	6.7E-07	(mg/kg/day)	3.0E-03	(mg/m3)	0.0002		
	Aluminum				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m3) ⁻¹	--	0.0E+00	(mg/kg/day)	5.0E-05	(mg/m3)	--			
	Arsenic				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	4.3E-03	(mg/m3) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-03	(mg/m3)	--			
	Iron				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m3) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m3)	--			
	Manganese (Water)				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m3) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m3)	--			
	Thallium				0.0E+0	mg/m3	0.0E+00	(mg/kg/day)	NA	(ug/m3) ⁻¹	--	0.0E+00	(mg/kg/day)	NA	(mg/m3)	--			
			Exp. Route Total													3.3E-10	0.0002		
			Exposure Point Total													3.3E-10	0.0002		
			Exposure Medium Total													3.3E-10	0.003		
Medium Total																1.9E-09	0.006		
Groundwater - DPT	Groundwater	Site 1	Dermal	Tetrachloroethene	0.540	ug/L	1.9E-09	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	1.0E-09	1.3E-07	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.00001			
																		1.0E-09	0.00001
							Exp. Route Total												1.0E-09	0.00001
				Exposure Point Total													1.0E-09	0.00001	
				Exposure Medium Total													1.0E-09	0.00001	
		Air	Site 1	Inhalation	Tetrachloroethene	0.000	mg/m3	7.6E-10	(mg/kg/day)	5.9E-06	(ug/m3) ⁻¹	4.5E-12	5.3E-08	(mg/kg/day)	2.7E-01	(mg/m3)	0.0000002		
																	4.5E-12	0.0000002	
						Exp. Route Total													4.5E-12	0.0000002
			Exposure Point Total														4.5E-12	0.0000002	
			Exposure Medium Total														1.0E-09	0.00001	
Medium Total																	1.0E-09	0.00001	
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	2.9E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.3E-10	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007			
				Iron	2410	ug/L	2.0E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002			
							Exp. Route Total												4.3E-10	0.00009
				Dermal	Arsenic	3.40	ug/L	9.4E-11	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-10	6.6E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00002		
			Iron			2410	ug/L	6.7E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.7E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00007		
								Exp. Route Total											
			Exposure Point Total													5.7E-10	0.0001		
			Exposure Medium Total													5.7E-10	0.0001		
Medium Total																	5.7E-10	0.0001	

TABLE 7.1.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 3 OF 3

Scenario Timeframe: Future
 Receptor Population: Construction Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RHC		Hazard Quotient
							Value	Units	Value	Units		Value	Units			
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	2.8E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	2.0E-09	1.9E-08	(mg/kg/day)	NA	(mg/kg/day)	--
				Aluminum	17200	mg/kg	2.4E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.7E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.002
				Arsenic	19.8	mg/kg	2.7E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.1E-08	1.9E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006
				Iron	28100	mg/kg	3.9E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.7E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.004
				Manganese (Soil)	295	mg/kg	4.1E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.9E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004
			Exp. Route Total								4.3E-08					0.01
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	7.2E-11	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	5.3E-10	5.0E-09	(mg/kg/day)	NA	(mg/kg/day)	--
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--
				Arsenic	19.8	mg/kg	1.6E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.5E-09	1.2E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0004
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--
		Manganese (Soil)		295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
		Exp. Route Total								3.0E-09					0.0004	
				Exposure Point Total							4.6E-08					0.01
				Exposure Medium Total							4.6E-08					0.01
Medium Total									4.6E-08					0.01		
Total of Receptor Risks Across All Media										2.6E-07	Total of Receptor Hazards Across All Media				0.06	

TABLE 7.2.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Future
 Receptor Population: Site Maintenance Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units			
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	1.0E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.6E-07	2.8E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0006
				Aluminum	7780	mg/kg	2.6E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.3E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0007
				Antimony	1.00	mg/kg	3.4E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.4E-08	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0002
				Arsenic	2.20	mg/kg	7.4E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.1E-07	2.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0007
				Cobalt	2.20	mg/kg	7.4E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0007
				Iron	4330	mg/kg	1.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.1E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0006
				Manganese (Soil)	55.4	mg/kg	1.9E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.2E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0007
			Exp. Route Total								2.7E-07					0.004
			Dermal	Dieldrin	0.300	mg/kg	6.6E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.1E-07	1.9E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0004
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--
		Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
		Arsenic		2.20	mg/kg	1.5E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.2E-08	4.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
		Cobalt		2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
		Iron		4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
		Manganese (Soil)		55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
		Exp. Route Total								1.3E-07					0.0005	
				Exposure Point Total							4.0E-07					0.004
				Exposure Medium Total							4.0E-07					0.004
		Medium Total									4.0E-07					0.004
		Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	8.1E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.6E-07	2.3E-07	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700					mg/kg	3.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.1E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0009
Arsenic	2.00					mg/kg	6.7E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.0E-07	1.9E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0006
Exp. Route Total											2.6E-07				0.002	
Dermal	Aroclor-1242				2.40	mg/kg	7.4E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.5E-07	2.1E-07	(mg/kg/day)	NA	(mg/kg/day)	--
	Aluminum			9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
Arsenic	2.00			mg/kg	1.3E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.0E-08	3.7E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001		
Exp. Route Total										1.7E-07				0.0001		
				Exposure Point Total							4.3E-07				0.002	
				Exposure Medium Total							4.3E-07				0.002	
Medium Total									4.3E-07				0.002			
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	1.1E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-08	3.2E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001
				Iron	2410	ug/L	8.1E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.3E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00003
			Exp. Route Total								1.7E-08				0.0001	
		Dermal	Arsenic	3.40	ug/L	3.8E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.6E-09	1.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00004	
			Iron	2410	ug/L	2.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.5E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001	
		Exp. Route Total								5.6E-09				0.00005		
		Exposure Point Total							2.3E-08				0.0002			
		Exposure Medium Total							2.3E-08				0.0002			
Medium Total									2.3E-08				0.0002			

TABLE 7.2.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 2

Scenario Timeframe: Future
 Receptor Population: Site Maintenance Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	6.7E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.9E-08	1.9E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	5.8E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.002	
				Arsenic	19.8	mg/kg	6.6E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.0E-06	1.9E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006	
				Iron	28100	mg/kg	9.4E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.6E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.004	
				Manganese (Soil)	295	mg/kg	9.9E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004	
			Exp. Route Total								1.0E-06					0.01	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	5.8E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.2E-08	1.6E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	1.3E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.0E-07	3.7E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								2.4E-07					0.001	
			Exposure Point Total									1.3E-06					0.01
			Exposure Medium Total									1.3E-06					0.01
Medium Total									1.3E-06					0.01			
Total of Receptor Risks Across All Media										2.1E-06	Total of Receptor Hazards Across All Media				0.02		

TABLE 7.2.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NOBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Future
 Receptor Population: Site Maintenance Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient		
							Value	Units	Value	Units		Value	Units	Value	Units			
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	9.1E-10	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.4E-08	7.0E-09	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0001		
				Aluminum	7780	mg/kg	2.3E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0002		
				Antimony	1.00	mg/kg	3.0E-09	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.3E-08	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.00006		
				Arsenic	2.20	mg/kg	6.6E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.0E-08	5.2E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002		
				Cobalt	2.20	mg/kg	6.6E-09	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.2E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002		
				Iron	4330	mg/kg	1.3E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.0E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0001		
				Manganese (Soil)	55.4	mg/kg	1.7E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.00002		
			Exp. Route Total									2.4E-08					0.0009	
			Dermal	Dieldrin	0.300	mg/kg	1.2E-10	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.9E-09	9.3E-10	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.00002		
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
		Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--			
		Arsenic		2.20	mg/kg	2.6E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.9E-10	2.0E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.000007			
		Cobalt		2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--			
		Iron		4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--			
		Manganese (Soil)		55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--			
		Exp. Route Total									2.3E-09					0.00003		
		Exposure Point Total										2.7E-08					0.0009	
		Exposure Medium Total										2.7E-08					0.0009	
		Medium Total																0.0009
		Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	7.2E-09	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.4E-08	5.6E-08	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700					mg/kg	2.9E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.3E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0002		
Arsenic	2.00					mg/kg	6.0E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.1E-09	4.7E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002		
Exp. Route Total											2.4E-08					0.0004		
Dermal	Aroclor-1242				2.40	mg/kg	1.3E-09	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.7E-09	1.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--		
	Aluminum			9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--			
Arsenic	2.00			mg/kg	2.4E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.6E-10	1.9E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.000006				
Exp. Route Total										3.0E-09					0.000006			
Exposure Point Total												2.7E-08					0.0004	
Exposure Medium Total												2.7E-08					0.0004	
Medium Total																0.0004		
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	2.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.1E-09	1.6E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00005		
				Iron	2410	ug/L	1.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002		
			Exp. Route Total									3.1E-09					0.00007	
		Dermal	Arsenic	3.40	ug/L	6.8E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.0E-09	5.3E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00002			
			Iron	2410	ug/L	4.8E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.7E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.000005			
		Exp. Route Total									1.0E-09					0.00002		
Exposure Point Total										4.1E-09					0.00009			
Exposure Medium Total										4.1E-09					0.00009			
Medium Total																0.00009		

TABLE 7.2.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 2

Scenario Timeframe: Future
 Receptor Population: Site Maintenance Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	6.0E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.4E-09	4.7E-09	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	5.2E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.0E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0004	
				Arsenic	19.8	mg/kg	6.0E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.0E-08	4.6E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	28100	mg/kg	8.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.6E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0009	
				Manganese (Soil)	295	mg/kg	8.9E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.9E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.00010	
			Exp. Route Total							9.4E-08						0.003	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.0E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	7.6E-10	8.1E-10	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	2.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.6E-09	1.8E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00006	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total							4.3E-09						0.00006	
			Exposure Point Total								9.8E-08						0.003
			Exposure Medium Total								9.8E-08						0.003
			Medium Total								9.8E-08						0.003
Total of Receptor Risks Across All Media										1.6E-07	Total of Receptor Hazards Across All Media				0.004		

TABLE 7.3.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Receptor Population: Industrial Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	5.2E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	8.4E-07	1.5E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.003	
				Aluminum	7780	mg/kg	1.4E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.8E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.004	
				Antimony	1.00	mg/kg	1.7E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.9E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.001	
				Arsenic	2.20	mg/kg	3.8E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.8E-07	1.1E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.004	
				Cobalt	2.20	mg/kg	3.8E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.004	
				Iron	4330	mg/kg	7.8E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.1E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.003	
				Manganese (Soil)	55.4	mg/kg	9.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.7E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004	
			Exp. Route Total								1.4E-06					0.02	
			Dermal	Dieldrin	0.300	mg/kg	6.9E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.1E-06	1.9E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.004	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	1.5E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.3E-07	4.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								1.3E-06					0.005	
			Exposure Point Total								2.8E-06						0.02
			Exposure Medium Total								2.8E-06						0.02
Medium Total								2.8E-06						0.02			
Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	4.2E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	8.4E-07	1.2E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	1.7E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.7E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.005	
				Arsenic	2.00	mg/kg	3.5E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.2E-07	9.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
			Exp. Route Total								1.4E-06					0.008	
			Dermal	Aroclor-1242	2.40	mg/kg	7.7E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.5E-06	2.2E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	2.00	mg/kg	1.4E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.1E-07	3.9E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001	
				Exp. Route Total								1.8E-06					0.001
			Exposure Point Total								3.1E-06						0.009
			Exposure Medium Total								3.1E-06						0.009
Medium Total								3.1E-06						0.009			
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	1.4E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.1E-08	4.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Iron	2410	ug/L	1.0E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00004	
			Exp. Route Total								2.1E-08					0.0002	
			Dermal	Arsenic	3.40	ug/L	4.7E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	7.1E-09	1.3E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00004	
				Iron	2410	ug/L	3.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.3E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001	
			Exp. Route Total								7.1E-09					0.00006	
			Exposure Point Total								2.8E-08						0.0002
Exposure Medium Total								2.8E-08						0.0002			
Medium Total								2.8E-08						0.0002			

TABLE 7.3.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient			
							Value	Units	Value	Units		Value	Units	Value	Units				
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	3.4E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	2.4E-08	9.4E-09	(mg/kg/day)	NA	(mg/kg/day)	--			
				Aluminum	17200	mg/kg	2.9E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0008			
				Arsenic	19.8	mg/kg	3.3E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.0E-07	9.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003			
				Iron	28100	mg/kg	4.7E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.002			
				Manganese (Soil)	295	mg/kg	4.9E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0002			
			Exp. Route Total															0.006	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	5.8E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.2E-08	1.6E-08	(mg/kg/day)	NA	(mg/kg/day)	--			
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--			
				Arsenic	19.8	mg/kg	1.3E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.0E-07	3.7E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001			
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--			
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--			
			Exp. Route Total															0.001	
			Exposure Point Total																0.007
			Exposure Medium Total																0.007
Medium Total																0.007			
Total of Receptor Risks Across All Media										6.7E-06	Total of Receptor Hazards Across All Media				0.04				

TABLE 7.3.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Receptor Population: Industrial Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	1.7E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	2.6E-07	1.3E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.003	
				Aluminum	7780	mg/kg	4.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.003	
				Antimony	1.00	mg/kg	5.5E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.3E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.001	
				Arsenic	2.20	mg/kg	1.2E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.8E-07	9.4E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
				Cobalt	2.20	mg/kg	1.2E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.4E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
				Iron	4330	mg/kg	2.4E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.9E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.003	
				Manganese (Soil)	55.4	mg/kg	3.1E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.4E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0003	
			Exp. Route Total								4.5E-07						0.02
			Dermal	Dieldrin	0.300	mg/kg	2.2E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	3.5E-08	1.7E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0003	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E+05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	4.8E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	7.2E-09	3.7E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								4.2E-08						0.0005
			Exposure Point Total								4.9E-07						0.02
Exposure Medium Total								4.9E-07						0.02			
Medium Total								4.9E-07						0.02			
Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.3E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.6E-07	1.0E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	5.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.2E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.004	
				Arsenic	2.00	mg/kg	1.1E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-07	8.6E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
			Exp. Route Total								4.3E-07					0.007	
			Dermal	Aroclor-1242	2.40	mg/kg	2.4E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	4.9E-08	1.9E-07	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	2.00	mg/kg	4.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	6.5E-09	3.4E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Exp. Route Total								5.5E-08					0.0001
			Exposure Point Total								4.9E-07					0.007	
			Exposure Medium Total								4.9E-07					0.007	
Medium Total								4.9E-07					0.007				
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	2.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.1E-09	1.6E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00005	
				Iron	2410	ug/L	1.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002	
			Exp. Route Total								3.1E-09					0.00007	
			Dermal	Arsenic	3.40	ug/L	6.8E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.0E-09	5.3E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00002	
				Iron	2410	ug/L	4.8E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.7E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00005	
				Exp. Route Total								1.0E-09					0.00002
			Exposure Point Total								4.1E-09					0.00009	
Exposure Medium Total								4.1E-09					0.00009				
Medium Total								4.1E-09					0.00009				

TABLE 7.3.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 2

Scenario Timeframe: Current/Future
 Receptor Population: Industrial Worker
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	6.0E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.4E-09	4.7E-09	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	5.2E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.0E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0004	
				Arsenic	19.8	mg/kg	6.0E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.0E-08	4.6E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	28100	mg/kg	8.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.6E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0009	
				Manganese (Soil)	295	mg/kg	8.9E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.9E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.00010	
			Exp. Route Total								9.4E-08					0.003	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.0E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	7.6E-10	8.1E-10	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	2.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.6E-09	1.8E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00006	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								4.3E-09					0.00006	
					Exposure Point Total							9.8E-08					0.003
					Exposure Medium Total							9.8E-08					0.003
Medium Total									9.8E-08					0.003			
Total of Receptor Risks Across All Media										1.1E-06	Total of Receptor Hazards Across All Media				0.03		

TABLE 7.4.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	8.6E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.4E-07	5.5E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.001
				Aluminum	7780	mg/kg	2.2E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.001
				Antimony	1.00	mg/kg	2.9E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0005
				Arsenic	2.20	mg/kg	6.3E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.5E-08	4.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Cobalt	2.20	mg/kg	6.3E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
				Iron	4330	mg/kg	1.2E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.9E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.001
				Manganese (Soil)	55.4	mg/kg	1.6E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.0E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0001
			Exp. Route Total								2.3E-07					0.007
			Dermal	Dieldrin	0.300	mg/kg	1.1E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.8E-07	7.1E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.001
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--
		Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
		Arsenic		2.20	mg/kg	2.5E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.7E-08	1.6E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0005	
		Cobalt		2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
		Iron		4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
		Manganese (Soil)		55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
		Exp. Route Total								2.2E-07					0.002	
		Exposure Point Total									4.5E-07					0.009
		Exposure Medium Total									4.5E-07					0.009
		Medium Total														0.009
		Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	6.9E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.4E-07	4.4E-07	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700					mg/kg	2.8E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.002
Arsenic	2.00					mg/kg	5.7E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.6E-08	3.7E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001
Exp. Route Total											2.2E-07				0.003	
Dermal	Aroclor-1242				2.40	mg/kg	1.3E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.5E-07	8.0E-07	(mg/kg/day)	NA	(mg/kg/day)	--
	Aluminum			9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
Arsenic	2.00			mg/kg	2.2E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.4E-08	1.4E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0005		
Exp. Route Total										2.8E-07				0.0005		
Exposure Point Total											5.1E-07				0.003	
Exposure Medium Total											5.1E-07				0.003	
Medium Total														0.003		
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	9.8E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.5E-08	6.2E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002
				Iron	2410	ug/L	6.9E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.4E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00006
			Exp. Route Total								1.5E-08				0.0003	
		Dermal	Arsenic	3.40	ug/L	3.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.8E-09	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007	
			Iron	2410	ug/L	2.2E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002	
		Exp. Route Total								4.8E-09				0.00009		
		Exposure Point Total									1.9E-08				0.0004	
Exposure Medium Total									1.9E-08				0.0004			
Medium Total														0.0004		

TABLE 7.4.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.7E-08	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.3E-07	3.7E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	4.9E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.1E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.003	
				Arsenic	19.8	mg/kg	5.7E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.5E-07	3.6E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.01	
				Iron	28100	mg/kg	8.1E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.1E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.007	
				Manganese (Soil)	295	mg/kg	8.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.4E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0007	
			Exp. Route Total								9.8E-07					0.02	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	2.9E-08	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	2.1E-07	6.2E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	2.2E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.3E-07	1.4E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.005	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								5.4E-07					0.005	
			Exposure Point Total									1.5E-06					0.03
			Exposure Medium Total									1.5E-06					0.03
Medium Total									1.5E-06					0.03			
Total of Receptor Risks Across All Media										2.5E-06	Total of Receptor Hazards Across All Media				0.04		

TABLE 7.4.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	2.2E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	3.4E-08	1.4E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0003	
				Aluminum	7780	mg/kg	5.6E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.6E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0004	
				Antimony	1.00	mg/kg	7.2E-09	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.6E-08	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0001	
				Arsenic	2.20	mg/kg	1.6E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.4E-08	1.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0003	
				Cobalt	2.20	mg/kg	1.6E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.0E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0003	
				Iron	4330	mg/kg	3.1E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.0E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0003	
				Manganese (Soil)	55.4	mg/kg	4.0E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.5E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004	
			Exp. Route Total								5.8E-08						0.002
			Dermal	Dieldrin	0.300	mg/kg	5.6E-10	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	9.0E-09	3.6E-09	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.00007	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
		Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--		
		Arsenic		2.20	mg/kg	1.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.8E-09	7.8E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00003		
		Cobalt		2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--		
		Iron		4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--		
		Manganese (Soil)		55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--		
		Exp. Route Total								1.1E-08						0.00010	
				Exposure Point Total							6.9E-08						0.002
				Exposure Medium Total							6.9E-08						0.002
		Medium Total									6.9E-08						0.002
		Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.7E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	3.4E-08	1.1E-07	(mg/kg/day)	NA	(mg/kg/day)
Aluminum	9700					mg/kg	7.0E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.4E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0004	
Arsenic	2.00					mg/kg	1.4E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.2E-08	9.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0003	
Exp. Route Total											5.6E-08					0.0007	
Dermal	Aroclor-1242				2.40	mg/kg	6.3E-09	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.3E-08	4.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
	Aluminum			9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
Arsenic	2.00			mg/kg	1.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-09	7.1E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00002			
Exp. Route Total										1.4E-08					0.00002		
				Exposure Point Total							7.0E-08					0.0008	
				Exposure Medium Total							7.0E-08					0.0008	
Medium Total									7.0E-08					0.0008			
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	4.9E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	7.3E-09	3.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Iron	2410	ug/L	3.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.2E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00003	
			Exp. Route Total								7.3E-09					0.0001	
		Dermal	Arsenic	3.40	ug/L	1.6E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.4E-09	1.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00003		
			Iron	2410	ug/L	1.1E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.2E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001		
		Exp. Route Total								2.4E-09					0.00004		
				Exposure Point Total							9.7E-09					0.0002	
		Exposure Medium Total							9.7E-09					0.0002			
Medium Total									9.7E-09					0.0002			

TABLE 7.4.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units				
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	2.9E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	2.1E-08	1.8E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	2.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.002	
				Arsenic	19.8	mg/kg	2.8E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.3E-07	1.8E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006	
				Iron	28100	mg/kg	4.0E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.6E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.004	
				Manganese (Soil)	295	mg/kg	4.2E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.7E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004	
			Exp. Route Total								4.5E-07					0.01	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	4.9E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	3.5E-08	3.1E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	1.1E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-07	7.1E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								2.0E-07					0.002	
			Exposure Point Total									6.5E-07					0.01
			Exposure Medium Total									6.5E-07					0.01
Medium Total									6.5E-07					0.01			
Total of Receptor Risks Across All Media										8.0E-07	Total of Receptor Hazards Across All Media				0.02		

TABLE 7.5.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient			
							Value	Units	Value	Units		Value	Units	Value	Units				
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	4.8E-09	(mg/kg/day)	1.8E+01	(mg/kg/day) ⁻¹	7.6E-08	1.8E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0004			
				Aluminum	7780	mg/kg	1.2E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.6E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0005			
				Antimony	1.00	mg/kg	1.6E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.9E-08	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.0001			
				Arsenic	2.20	mg/kg	3.5E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.3E-08	1.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0004			
				Cobalt	2.20	mg/kg	3.5E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0004			
				Iron	4330	mg/kg	6.9E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.5E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0004			
				Manganese (Soil)	55.4	mg/kg	8.8E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.00005			
			Exp. Route Total								1.3E-07					0.002			
			Dermal	Dieldrin	0.300	mg/kg	5.9E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	9.5E-08	2.2E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0004			
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--			
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--			
				Arsenic	2.20	mg/kg	1.3E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.0E-08	4.8E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002			
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--			
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--			
			Exp. Route Total								1.1E-07					0.0006			
			Exposure Point Total								2.4E-07						0.003		
			Exposure Medium Total								2.4E-07						0.003		
			Medium Total								2.4E-07						0.003		
			Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	3.8E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	7.6E-08	1.4E-07	(mg/kg/day)	NA	(mg/kg/day)	--
							Aluminum	9700	mg/kg	1.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.7E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0008
Arsenic	2.00	mg/kg					3.2E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.8E-08	1.2E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0004			
Exp. Route Total											1.2E-07					0.0010			
Dermal	Aroclor-1242	2.40				mg/kg	6.6E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.3E-07	2.4E-07	(mg/kg/day)	NA	(mg/kg/day)	--			
	Aluminum	9700				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--			
	Arsenic	2.00				mg/kg	1.2E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.8E-08	4.4E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001			
Exp. Route Total											1.5E-07					0.0001			
Exposure Point Total											2.8E-07					0.001			
Exposure Medium Total											2.8E-07					0.001			
Medium Total								2.8E-07					0.001						
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	1.1E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.6E-08	4.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001			
				Iron	2410	ug/L	7.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00004			
			Exp. Route Total								1.6E-08					0.0002			
			Dermal	Arsenic	3.40	ug/L	6.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.3E-09	2.3E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00008			
				Iron	2410	ug/L	4.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002			
			Exp. Route Total								9.3E-09					0.00010			
Exposure Point Total									2.6E-08					0.0003					
Exposure Medium Total									2.6E-08					0.0003					
Medium Total									2.6E-08					0.0003					

TABLE 7.5.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	9.6E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	7.0E-08	1.2E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	2.7E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.0E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.001	
				Arsenic	19.8	mg/kg	3.2E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.7E-07	1.2E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.004	
				Iron	28100	mg/kg	4.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.002	
				Manganese (Soil)	295	mg/kg	4.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.7E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0002	
			Exp. Route Total								5.4E-07					0.007	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	9.9E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	7.2E-08	1.2E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	7.6E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.1E-07	2.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0009	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								1.9E-07					0.0009	
					Exposure Point Total							7.3E-07					0.008
					Exposure Medium Total							7.3E-07					0.008
Medium Total									7.3E-07					0.008			
Total of Receptor Risks Across All Media										1.3E-06	Total of Receptor Hazards Across All Media				0.01		

TABLE 7.5.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 2

Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	2.4E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	3.8E-08	8.8E-09	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0002	
				Aluminum	7780	mg/kg	6.2E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.3E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0002	
				Antimony	1.00	mg/kg	8.0E-09	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.9E-08	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.00007	
				Arsenic	2.20	mg/kg	1.8E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.6E-08	6.5E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002	
				Cobalt	2.20	mg/kg	1.8E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.5E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002	
				Iron	4330	mg/kg	3.4E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0002	
				Manganese (Soil)	55.4	mg/kg	4.4E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.00002	
				Exp. Route Total									6.5E-08				
			Dermal	Dieldrin	0.300	mg/kg	2.7E-10	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	4.4E-09	1.0E-09	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.00002	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	6.0E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	9.0E-10	2.2E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.000007	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
				Exp. Route Total								5.3E-09					0.00003
			Exposure Point Total								7.0E-08						0.001
			Exposure Medium Total								7.0E-08						0.001
			Medium Total								7.0E-08						0.001
			Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.9E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	3.8E-08	7.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700	mg/kg					7.7E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0003	
Arsenic	2.00	mg/kg					1.6E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.4E-08	5.9E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002	
Exp. Route Total											6.2E-08					0.0005	
Dermal	Aroclor-1242	2.40				mg/kg	3.1E-09	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	6.1E-09	1.1E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
	Aluminum	9700				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
	Arsenic	2.00				mg/kg	5.4E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.2E-10	2.0E-09	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.000007	
	Exp. Route Total											6.9E-09				0.000007	
Exposure Point Total											6.9E-08					0.0005	
Exposure Medium Total											6.9E-08					0.0005	
Medium Total								6.9E-08					0.0005				
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	5.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.1E-09	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007	
				Iron	2410	ug/L	3.8E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002	
			Exp. Route Total								8.1E-09				0.00009		
			Dermal	Arsenic	3.40	ug/L	3.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.6E-09	1.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00004	
				Iron	2410	ug/L	2.2E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001	
				Exp. Route Total								4.6E-09				0.00005	
			Exposure Point Total								1.3E-08					0.0001	
Exposure Medium Total								1.3E-08					0.0001				
Medium Total								1.3E-08					0.0001				

TABLE 7.5.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Current/Future
 Receptor Population: Trespasser
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units				
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.6E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.2E-08	5.9E-09	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	1.4E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.0E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0005	
				Arsenic	19.8	mg/kg	1.6E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.4E-07	5.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	28100	mg/kg	2.2E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.2E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.001	
				Manganese (Soil)	295	mg/kg	2.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.7E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0001	
			Exp. Route Total								2.5E-07					0.004	
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	2.4E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.7E-09	8.7E-10	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	5.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.1E-09	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
			Exp. Route Total								9.8E-09					0.00007	
			Exposure Point Total									2.6E-07					0.004
			Exposure Medium Total									2.6E-07					0.004
Medium Total									2.6E-07					0.004			
Total of Receptor Risks Across All Media									4.1E-07	Total of Receptor Hazards Across All Media				0.006			

TABLE 7.6.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations							
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient			
							Value	Units	Value	Units		Value	Units						
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	3.3E-07	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	5.3E-06	3.8E-06	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.08			
				Aluminum	7780	mg/kg	8.5E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.9E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.10			
				Antimony	1.00	mg/kg	1.1E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-05	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.03			
				Arsenic	2.20	mg/kg	2.4E-06	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.6E-06	2.8E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.09			
				Cobalt	2.20	mg/kg	2.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.09			
				Iron	4330	mg/kg	4.7E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.5E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.08			
				Manganese (Soil)	55.4	mg/kg	6.1E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.1E-04	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.010			
				Exp. Route Total								8.9E-06					0.5		
				Dermal	Dieldrin	0.300	mg/kg	9.2E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	1.5E-06	1.1E-06	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.02		
					Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
			Antimony		1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--			
			Arsenic		2.20	mg/kg	2.0E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.0E-07	2.4E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.008			
			Cobalt		2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--			
			Iron		4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--			
			Exp. Route Total								1.8E-06					0.03			
			Exposure Point Total									1.1E-05					0.5		
			Exposure Medium Total									1.1E-05					0.5		
			Medium Total									1.1E-05					0.5		
			Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	2.6E-06	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	5.3E-06	3.1E-05	(mg/kg/day)	NA	(mg/kg/day)	--
							Aluminum	9700	mg/kg	1.1E-02	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.2E-01	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.1
Arsenic	2.00	mg/kg					2.2E-06	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.3E-06	2.6E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.09			
Exp. Route Total											8.5E-06					0.2			
Dermal	Aroclor-1242	2.40				mg/kg	1.0E-06	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.1E-06	1.2E-05	(mg/kg/day)	NA	(mg/kg/day)	--			
	Aluminum	9700				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--			
	Arsenic	2.00				mg/kg	1.8E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.8E-07	2.1E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.007			
Exp. Route Total											2.3E-06					0.007			
Exposure Point Total												1.1E-05					0.2		
Exposure Medium Total												1.1E-05					0.2		
Medium Total									1.1E-05					0.2					

TABLE 7.6.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units			
Groundwater - MW	Groundwater	Site 1	Ingestion	Naphthalene	6.70	ug/L	5.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.4E-04	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.03
				Aluminum	6320	ug/L	5.2E-02	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.1E-01	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.6
				Arsenic	19.1	ug/L	1.6E-04	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.4E-04	1.8E-03	(mg/kg/day)	3.0E-04	(mg/kg/day)	6.1
				Iron	44000	ug/L	3.6E-01	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.2E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	6.0
				Manganese (Water)	548	ug/L	4.5E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.3E-02	(mg/kg/day)	2.4E-02	(mg/kg/day)	2.2
				Thallium	4.10	ug/L	3.4E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.9E-04	(mg/kg/day)	6.5E-05	(mg/kg/day)	6.0
			Exp. Route Total								2.4E-04				21	
			Dermal	Naphthalene	6.70	ug/L	1.3E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-04	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.008
				Aluminum	6320	ug/L	7.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.8E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0009
				Arsenic	19.1	ug/L	2.3E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.4E-07	2.7E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.009
				Iron	44000	ug/L	5.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.1E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.009
				Manganese (Water)	548	ug/L	6.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.6E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.08
				Thallium	4.10	ug/L	4.9E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.7E-07	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.009
			Exp. Route Total								3.4E-07				0.1	
			Exposure Point Total								2.4E-04				21	
	Exposure Medium Total								2.4E-04				21			
	Air	Site 1	Inhalation	Naphthalene	6.70	ug/L	5.5E-05	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	6.4E-04	(mg/kg/day)	2.0E-02	(mg/m ³)	0.03
				Aluminum	6320	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/m ³)	--
				Arsenic	19.1	ug/L	0.0E+00	(mg/kg/day)	1.5E+00	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/m ³)	--
				Iron	44000	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/m ³)	--
				Manganese (Water)	548	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	2.4E-02	(mg/m ³)	--
Thallium				4.10	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	6.5E-05	(mg/m ³)	--	
Exp. Route Total											--				0.03	
Exposure Point Total								--				0.03				
Exposure Medium Total								--				0.03				
Medium Total								2.4E-04				21				
Groundwater - DPT	Groundwater	Site 1	Ingestion	Tetrachloroethene	0.540	ug/L	4.4E-06	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	2.4E-06	5.2E-05	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.005
				Exp. Route Total							2.4E-06				0.005	
				Dermal	Tetrachloroethene	0.540	ug/L	9.9E-07	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	5.3E-07	1.2E-05	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.001
			Exp. Route Total							5.3E-07				0.001		
			Exposure Point Total							2.9E-06				0.006		
			Exposure Medium Total							2.9E-06				0.006		
	Air	Site 1	Inhalation	Tetrachloroethene	0.540	ug/L	4.4E-06	(mg/kg/day)	5.4E-01	(ug/m ³) ⁻¹	2.4E-06	5.2E-05	(mg/kg/day)	1.0E-02	(mg/m ³)	0.005
				Exp. Route Total							2.4E-06				0.005	
				Exposure Point Total							2.4E-06				0.005	
				Exposure Medium Total							5.3E-06				0.01	
Medium Total								5.3E-06			0.01					

TABLE 7.6.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient		
							Value	Units	Value	Units		Value	Units					
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	8.0E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.2E-07	9.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003		
				Iron	2410	ug/L	5.7E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	6.6E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0009		
			Exp. Route Total														0.004	
			Dermal	Arsenic	3.40	ug/L	4.5E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	6.7E-09	5.2E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0002		
				Iron	2410	ug/L	3.2E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.7E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00005		
			Exp. Route Total															0.0002
			Exposure Point Total															
Exposure Medium Total																0.004		
Medium Total																0.004		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.0E-07	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	7.3E-07	2.2E-07	(mg/kg/day)	NA	(mg/kg/day)	--		
				Aluminum	17200	mg/kg	1.6E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.9E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.02		
				Arsenic	19.8	mg/kg	1.9E-06	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.8E-06	2.2E-05	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.07		
				Iron	28100	mg/kg	2.6E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.1E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.04		
				Manganese (Soil)	295	mg/kg	2.8E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.2E-04	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.004		
			Exp. Route Total															0.1
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	3.6E-08	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	2.7E-07	8.0E-08	(mg/kg/day)	NA	(mg/kg/day)	--		
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
				Arsenic	19.8	mg/kg	1.6E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.3E-07	1.8E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.006		
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--		
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--		
			Exp. Route Total															0.006
			Exposure Point Total															
Exposure Medium Total																0.1		
Medium Total																0.1		
Total of Receptor Risks Across All Media										2.7E-04	Total of Receptor Hazards Across All Media				22			

Note:
 Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

TABLE 7.6.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCSC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units				
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	3.7E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	5.9E-07	1.3E-06	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.03	
				Aluminum	7780	mg/kg	9.5E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.03	
				Antimony	1.00	mg/kg	1.2E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.3E-06	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.01	
				Arsenic	2.20	mg/kg	2.7E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.0E-07	9.4E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.03	
				Cobalt	2.20	mg/kg	2.7E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.4E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.03	
				Iron	4330	mg/kg	5.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.9E-02	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.03	
				Manganese (Soil)	55.4	mg/kg	6.8E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.4E-04	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.003	
				Exp. Route Total								9.9E-07					
			Dermal	Dieldrin	0.300	mg/kg	4.1E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	6.6E-08	1.4E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.003	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	9.0E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-08	3.2E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
				Exp. Route Total								7.9E-08					0.004
			Exposure Point Total									1.1E-06					0.2
			Exposure Medium Total									1.1E-06					0.2
			Medium Total										1.1E-06				0.2
			Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	2.9E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	5.9E-07	1.0E-05	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700	mg/kg					1.2E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.1E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.04	
Arsenic	2.00	mg/kg					2.4E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.7E-07	8.5E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.03	
Exp. Route Total											9.5E-07					0.07	
Dermal	Aroclor-1242	2.40				mg/kg	4.6E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	9.2E-08	1.6E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
	Aluminum	9700				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
	Arsenic	2.00				mg/kg	8.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.2E-08	2.9E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0010	
	Exp. Route Total											1.0E-07				0.0010	
Exposure Point Total												1.1E-06					0.07
Exposure Medium Total												1.1E-06					0.07
Medium Total										1.1E-06				0.07			

TABLE 7.6.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units			
Groundwater - MW	Groundwater	Site 1	Ingestion	Naphthalene	6.70	ug/L	5.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.9E-04	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.009
				Aluminum	6320	ug/L	5.1E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-01	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.2
				Arsenic	19.1	ug/L	1.5E-05	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.3E-05	5.4E-04	(mg/kg/day)	3.0E-04	(mg/kg/day)	1.8
				Iron	44000	ug/L	3.5E-02	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.2E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	1.8
				Manganese (Water)	548	ug/L	4.4E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.5E-02	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.6
				Thallium	4.10	ug/L	3.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.2E-04	(mg/kg/day)	6.5E-05	(mg/kg/day)	1.8
			Exp. Route Total								2.3E-05					6.2
			Dermat	Naphthalene	6.70	ug/L	2.6E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.1E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.005
				Aluminum	6320	ug/L	1.3E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.5E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0004
				Arsenic	19.1	ug/L	3.8E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.8E-08	1.3E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.004
	Iron	44000		ug/L	8.9E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.1E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.004		
	Manganese (Water)	548	ug/L	1.1E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.9E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.04			
	Thallium	4.10	ug/L	8.3E-09	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.9E-07	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.004			
	Exp. Route Total								5.8E-08					0.06		
	Exposure Point Total								2.3E-05					6.2		
	Exposure Medium Total								2.3E-05					6.2		
	Air	Site 1	Inhalation	Naphthalene	6.70	ug/L	5.4E-06	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.9E-04	(mg/kg/day)	2.0E-02	(mg/m ³)	0.009
				Aluminum	6320	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/m ³)	--
				Arsenic	19.1	ug/L	0.0E+00	(mg/kg/day)	1.5E+00	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/m ³)	--
				Iron	44000	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/m ³)	--
Manganese (Water)				548	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	2.4E-02	(mg/m ³)	--	
Thallium				4.10	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	6.5E-05	(mg/m ³)	--	
Exp. Route Total											--					0.009
Exposure Point Total											--					0.009
Exposure Medium Total											--					6.2
Medium Total											2.3E-05					12
Groundwater - DPT	Groundwater	Site 1	Ingestion	Tetrachloroethene	0.540	ug/L	4.4E-07	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	2.4E-07	1.5E-05	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.002
				Exp. Route Total								2.4E-07				0.002
			Dermat	Tetrachloroethene	0.540	ug/L	1.9E-07	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	1.0E-07	6.7E-06	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.0007
				Exp. Route Total								1.0E-07				0.0007
			Exp. Route Total								3.4E-07				0.002	
			Exposure Point Total								3.4E-07				0.002	
	Exposure Medium Total								3.4E-07				0.002			
	Air	Site 1	Inhalation	Tetrachloroethene	0.540	ug/L	4.4E-07	(mg/kg/day)	5.4E-01	(ug/m ³) ⁻¹	2.4E-07	1.5E-05	(mg/kg/day)	1.0E-02	(mg/m ³)	0.002
				Exp. Route Total								2.4E-07				0.002
				Exp. Route Total								2.4E-07				0.002
Exposure Point Total											2.4E-07				0.002	
Exposure Medium Total								5.7E-07				0.004				
Medium Total								5.7E-07				0.004				

TABLE 7.6.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 3 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	1.3E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.0E-08	4.7E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002	
				Iron	2410	ug/L	9.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.0005	
			Exp. Route Total														0.002
			Dermal	Arsenic	3.40	ug/L	7.5E-10	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.1E-09	2.6E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00009	
				Iron	2410	ug/L	5.3E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00003	
			Exp. Route Total														0.0001
			Exposure Point Total														
Exposure Medium Total															0.002		
Medium Total															0.002		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.6E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.1E-08	5.5E-08	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	1.3E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.7E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.005	
				Arsenic	19.8	mg/kg	1.5E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.3E-07	5.4E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.02	
				Iron	28100	mg/kg	2.2E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.7E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.01	
				Manganese (Soil)	295	mg/kg	2.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.001	
			Exp. Route Total														0.03
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	2.3E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.7E-09	8.0E-09	(mg/kg/day)	NA	(mg/kg/day)	--	
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Arsenic	19.8	mg/kg	5.2E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	7.8E-09	1.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0006	
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
Exp. Route Total														0.0006			
Exposure Point Total															0.04		
Exposure Medium Total															0.04		
Medium Total															0.04		
Total of Receptor Risks Across All Media										2.6E-05	Total of Receptor Hazards Across All Media				13		

Note:
 Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

TABLE 7.7.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient		
							Value	Units	Value	Units		Value	Units	Value	Units			
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	1.4E-07	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	2.3E-06	4.1E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.008		
				Aluminum	7780	mg/kg	3.7E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.01		
				Antimony	1.00	mg/kg	4.7E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-06	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.003		
				Arsenic	2.20	mg/kg	1.0E-06	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.5E-06	3.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.01		
				Cobalt	2.20	mg/kg	1.0E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.01		
				Iron	4330	mg/kg	2.0E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.9E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.008		
				Manganese (Soil)	55.4	mg/kg	2.6E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.6E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.001		
			Exp. Route Total								3.8E-06						0.05	
			Dermal	Dieldrin	0.300	mg/kg	5.6E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	9.0E-07	1.6E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.003		
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--		
				Arsenic	2.20	mg/kg	1.2E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.9E-07	3.6E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001		
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--		
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--		
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--		
Exp. Route Total								1.1E-06					0.004					
Exposure Point Total								4.9E-06						0.06				
Exposure Medium Total								4.9E-06						0.06				
Medium Total															4.9E-06			0.06
Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.1E-06	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.3E-06	3.3E-06	(mg/kg/day)	NA	(mg/kg/day)	--		
				Aluminum	9700	mg/kg	4.6E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.3E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.01		
				Arsenic	2.00	mg/kg	9.4E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-06	2.7E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.009		
				Exp. Route Total							3.7E-06					0.02		
				Dermal	Aroclor-1242	2.40	mg/kg	6.3E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	1.3E-06	1.8E-06	(mg/kg/day)	NA	(mg/kg/day)	--	
			Aluminum		9700	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
			Arsenic		2.00	mg/kg	1.1E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-07	3.3E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.001		
			Exp. Route Total								1.4E-06					0.001		
			Exposure Point Total								5.1E-06						0.02	
			Exposure Medium Total								5.1E-06						0.02	
Medium Total															5.1E-06			0.02

TABLE 7.7.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
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Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units				
Groundwater - MW	Groundwater	Site 1	Ingestion	Naphthalene	6.70	ug/L	6.3E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-04	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.009	
				Aluminum	6320	ug/L	5.9E-02	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.7E-01	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.2	
				Arsenic	19.1	ug/L	1.8E-04	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.7E-04	5.2E-04	(mg/kg/day)	3.0E-04	(mg/kg/day)	1.7	
				Iron	44000	ug/L	4.1E-01	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.2E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	1.7	
				Manganese (Water)	548	ug/L	5.1E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.5E-02	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.6	
				Thallium	4.10	ug/L	3.9E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.1E-04	(mg/kg/day)	6.5E-05	(mg/kg/day)	1.7	
		Exp. Route Total								2.7E-04				6.0			
		Dermal	Naphthalene	6.70	ug/L	3.1E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	9.1E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.005		
			Aluminum	6320	ug/L	1.8E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.1E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0005		
			Arsenic	19.1	ug/L	5.3E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.0E-07	1.6E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.005		
			Iron	44000	ug/L	1.2E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.6E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.005		
			Manganese (Water)	548	ug/L	1.5E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.5E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.05		
	Thallium		4.10	ug/L	1.1E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-07	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.005			
	Exp. Route Total								8.0E-07				0.07				
	Exposure Point Total								2.7E-04				6.1				
	Exposure Medium Total								2.7E-04				6.1				
	Air	Site 1	Inhalation	Naphthalene	6.70	ug/L	6.3E-05	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.8E-04	(mg/kg/day)	2.0E-02	(mg/m ³)	0.009	
				Aluminum	6320	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.7E-01	(mg/kg/day)	0.0E+00	(mg/m ³)	--	
				Arsenic	19.1	ug/L	0.0E+00	(mg/kg/day)	1.5E+00	(ug/m ³) ⁻¹	--	5.2E-04	(mg/kg/day)	0.0E+00	(mg/m ³)	--	
				Iron	44000	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.2E+00	(mg/kg/day)	0.0E+00	(mg/m ³)	--	
				Manganese (Water)	548	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.5E-02	(mg/kg/day)	0.0E+00	(mg/m ³)	--	
				Thallium	4.10	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	1.1E-04	(mg/kg/day)	0.0E+00	(mg/m ³)	--	
		Exp. Route Total								--				0.009			
		Exposure Point Total								--				0.009			
Exposure Medium Total									--				0.009				
Medium Total									2.7E-04				6.1				
Groundwater - DPT		Groundwater	Site 1	Ingestion	Tetrachloroethene	0.540	ug/L	5.1E-06	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	2.7E-06	1.5E-05	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.001
				Exp. Route Total								2.7E-06				0.001	
	Dermal			Tetrachloroethene	0.540	ug/L	2.3E-06	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	1.2E-06	6.7E-06	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.0007	
	Exp. Route Total									1.2E-06				0.0007			
	Exposure Point Total									4.0E-06				0.002			
	Exposure Medium Total									4.0E-06				0.002			
	Air	Site 1	Inhalation	Tetrachloroethene	0.540	ug/L	5.1E-06	(mg/kg/day)	5.4E-01	(ug/m ³) ⁻¹	2.7E-06	1.5E-05	(mg/kg/day)	1.0E-02	(mg/m ³)	0.001	
			Exp. Route Total								2.7E-06				0.001		
			Exposure Point Total								2.7E-06				0.001		
	Exposure Medium Total								6.7E-06				0.004				
	Medium Total								6.7E-06				0.004				

TABLE 7.7.RME
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 3 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations						
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient		
							Value	Units	Value	Units		Value	Units					
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	1.4E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	2.1E-08	4.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001		
				Iron	2410	ug/L	9.7E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.8E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00004		
			Exp. Route Total														0.0002	
			Dermal	Arsenic	3.40	ug/L	7.8E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.2E-08	2.3E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00008		
				Iron	2410	ug/L	5.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.6E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002		
			Exp. Route Total														0.00010	
			Exposure Point Total															0.0003
			Exposure Medium Total															0.0003
			Medium Total															0.0003
			Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	1.5E-08	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	1.1E-07	2.3E-08	(mg/kg/day)	NA	(mg/kg/day)
Aluminum	17200	mg/kg					6.9E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.0E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.002		
Arsenic	19.8	mg/kg					8.0E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.2E-06	2.3E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.008		
Iron	28100	mg/kg					1.1E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.3E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.005		
Manganese (Soil)	295	mg/kg					1.2E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.5E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0005		
Exp. Route Total																	0.01	
Dermal	Benzo(a)pyrene Equivalents	0.200				mg/kg	7.7E-09	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	5.6E-08	1.2E-08	(mg/kg/day)	NA	(mg/kg/day)	--		
	Aluminum	17200				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--		
	Arsenic	19.8				mg/kg	9.5E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-07	2.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0009		
	Iron	28100				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--		
	Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--					
Exp. Route Total														0.0009				
Exposure Point Total															0.02			
Exposure Medium Total															0.02			
Medium Total															0.02			
Total of Receptor Risks Across All Media										2.9E-04	Total of Receptor Hazards Across All Media				6.2			

Note:
 Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

TABLE 7.7.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 1 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Surface Soil	Surface Soil	Site 1	Ingestion	Dieldrin	0.300	mg/kg	1.4E-08	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	2.2E-07	1.4E-07	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.003	
				Aluminum	7780	mg/kg	3.6E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	3.6E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.004	
				Antimony	1.00	mg/kg	4.6E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.6E-07	(mg/kg/day)	4.0E-04	(mg/kg/day)	0.001	
				Arsenic	2.20	mg/kg	1.0E-07	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.5E-07	1.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
				Cobalt	2.20	mg/kg	1.0E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.0E-06	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
				Iron	4330	mg/kg	2.0E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.0E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.003	
				Manganese (Soil)	55.4	mg/kg	2.5E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.5E-05	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0004	
				Exp. Route Total								3.7E-07					0.02
			Dermal	Dieldrin	0.300	mg/kg	1.6E-09	(mg/kg/day)	1.6E+01	(mg/kg/day) ⁻¹	2.5E-08	1.6E-08	(mg/kg/day)	5.0E-05	(mg/kg/day)	0.0003	
				Aluminum	7780	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
				Antimony	1.00	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	6.0E-05	(mg/kg/day)	--	
				Arsenic	2.20	mg/kg	3.4E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	5.2E-09	3.4E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
				Cobalt	2.20	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/kg/day)	--	
				Iron	4330	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--	
				Manganese (Soil)	55.4	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--	
				Exp. Route Total								3.0E-08					0.0004
			Exposure Point Total									4.0E-07					0.02
			Exposure Medium Total									4.0E-07					0.02
			Medium Total									4.0E-07					0.02
			Subsurface Soil	Subsurface Soil	Site 1	Ingestion	Aroclor-1242	2.40	mg/kg	1.1E-07	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	2.2E-07	1.1E-06	(mg/kg/day)	NA	(mg/kg/day)	--
Aluminum	9700	mg/kg					4.4E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	4.4E-03	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.004	
Arsenic	2.00	mg/kg					9.2E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.4E-07	9.2E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
Exp. Route Total												3.6E-07				0.007	
Dermal	Aroclor-1242	2.40				mg/kg	1.8E-08	(mg/kg/day)	2.0E+00	(mg/kg/day) ⁻¹	3.5E-08	1.8E-07	(mg/kg/day)	NA	(mg/kg/day)	--	
	Aluminum	9700				mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--	
	Arsenic	2.00				mg/kg	3.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	4.7E-09	3.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.0001	
	Exp. Route Total											4.0E-08				0.0001	
Exposure Point Total												4.0E-07					0.008
Exposure Medium Total												4.0E-07					0.008
Medium Total									4.0E-07					0.008			

TABLE 7.7.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations					Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient	
							Value	Units	Value	Units		Value	Units	Value	Units		
Groundwater - MW	Groundwater	Site 1	Ingestion	Naphthalene	6.70	ug/L	8.6E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.6E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.004	
				Aluminum	6320	ug/L	8.1E-03	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-02	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.08	
				Arsenic	19.1	ug/L	2.4E-05	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.7E-05	2.4E-04	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.8	
				Iron	44000	ug/L	5.6E-02	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.6E-01	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.8	
				Manganese (Water)	548	ug/L	7.0E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	7.0E-03	(mg/kg/day)	2.4E-02	(mg/kg/day)	0.3	
				Thallium	4.10	ug/L	5.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.3E-05	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.8	
			Exp. Route Total								3.7E-05					2.8	
			Dermal	Naphthalene	6.70	ug/L	5.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.3E-05	(mg/kg/day)	2.0E-02	(mg/kg/day)	0.003	
				Aluminum	6320	ug/L	2.6E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.6E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0003	
				Arsenic	19.1	ug/L	7.9E-08	(mg/kg/day)	1.9E+00	(mg/kg/day) ⁻¹	1.2E-07	7.9E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.003	
	Iron	44000		ug/L	1.8E-04	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.8E-03	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.003			
	Manganese (Water)	548	ug/L	2.3E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	2.3E-05	(mg/kg/day)	9.6E-04	(mg/kg/day)	0.02				
	Thallium	4.10	ug/L	1.7E-08	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.7E-07	(mg/kg/day)	6.5E-05	(mg/kg/day)	0.003				
	Exp. Route Total								1.2E-07					0.03			
	Exposure Point Total														2.8		
	Exposure Medium Total									3.7E-05					2.8		
	Air	Site 1	Inhalation	Naphthalene	6.70	ug/L	8.6E-06	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	8.6E-05	(mg/kg/day)	2.0E-02	(mg/m ³)	0.004	
				Aluminum	6320	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/m ³)	--	
				Arsenic	19.1	ug/L	0.0E+00	(mg/kg/day)	1.5E+00	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	3.0E-04	(mg/m ³)	--	
				Iron	44000	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/m ³)	--	
Manganese (Water)				548	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	2.4E-02	(mg/m ³)	--		
Thallium				4.10	ug/L	0.0E+00	(mg/kg/day)	NA	(ug/m ³) ⁻¹	--	0.0E+00	(mg/kg/day)	6.5E-05	(mg/m ³)	--		
Exp. Route Total											--					0.004	
Exposure Point Total											--						0.004
Exposure Medium Total											--						2.8
Medium Total												3.7E-05					5.7
Groundwater - DPT	Groundwater	Site 1	Ingestion	Tetrachloroethene	0.540	ug/L	6.9E-07	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	3.7E-07	6.9E-06	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.0007	
				Exp. Route Total								3.7E-07				0.0007	
			Dermal	Tetrachloroethene	0.540	ug/L	3.9E-07	(mg/kg/day)	5.4E-01	(mg/kg/day) ⁻¹	2.1E-07	3.9E-06	(mg/kg/day)	1.0E-02	(mg/kg/day)	0.0004	
				Exp. Route Total								2.1E-07				0.0004	
			Exp. Route Total									5.9E-07				0.001	
	Exposure Point Total									5.9E-07				0.001			
	Exposure Medium Total									5.9E-07				0.001			
	Air	Site 1	Inhalation	Tetrachloroethene	0.540	ug/L	6.9E-07	(mg/kg/day)	5.4E-01	(ug/m ³) ⁻¹	3.7E-07	6.9E-06	(mg/kg/day)	1.0E-02	(mg/m ³)	0.0007	
				Exp. Route Total								3.7E-07				0.0007	
				Exp. Route Total									3.7E-07				0.0007
Exposure Point Total									9.6E-07				0.002				
Exposure Medium Total									9.6E-07				0.002				
Medium Total									9.6E-07				0.002				

TABLE 7.7.CTE
 CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 3 OF 3

Scenario Timeframe: Future
 Receptor Population: Residents
 Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				Non-Cancer Hazard Calculations					
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RID/RIC		Hazard Quotient
							Value	Units	Value	Units		Value	Units			
Surface Water	Surface Water	Site 1	Ingestion	Arsenic	3.40	ug/L	2.0E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.0E-09	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007
				Iron	2410	ug/L	1.4E-06	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	1.4E-05	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00002
			Exp. Route Total							3.0E-09					0.00009	
			Dermal	Arsenic	3.40	ug/L	1.1E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	1.7E-09	1.1E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00004
				Iron	2410	ug/L	8.1E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.1E-06	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.00001
			Exp. Route Total							1.7E-09						0.00005
			Exposure Point Total								4.7E-09					
Exposure Medium Total								4.7E-09						0.0001		
Medium Total								4.7E-09						0.0001		
Sediment	Sediment	Site 1	Ingestion	Benzo(a)pyrene Equivalents	0.200	mg/kg	5.9E-10	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	4.3E-09	5.9E-09	(mg/kg/day)	NA	(mg/kg/day)	--
				Aluminum	17200	mg/kg	5.0E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	5.0E-04	(mg/kg/day)	1.0E+00	(mg/kg/day)	0.0005
				Arsenic	19.8	mg/kg	5.8E-08	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	8.7E-08	5.8E-07	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.002
				Iron	28100	mg/kg	8.2E-05	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.2E-04	(mg/kg/day)	7.0E-01	(mg/kg/day)	0.001
				Manganese (Soil)	295	mg/kg	8.7E-07	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	8.7E-06	(mg/kg/day)	7.2E-02	(mg/kg/day)	0.0001
				Exp. Route Total							9.1E-08					
			Dermal	Benzo(a)pyrene Equivalents	0.200	mg/kg	8.7E-11	(mg/kg/day)	7.3E+00	(mg/kg/day) ⁻¹	6.4E-10	8.7E-10	(mg/kg/day)	NA	(mg/kg/day)	--
				Aluminum	17200	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	1.0E+00	(mg/kg/day)	--
				Arsenic	19.8	mg/kg	2.0E-09	(mg/kg/day)	1.5E+00	(mg/kg/day) ⁻¹	3.0E-09	2.0E-08	(mg/kg/day)	3.0E-04	(mg/kg/day)	0.00007
				Iron	28100	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	7.0E-01	(mg/kg/day)	--
				Manganese (Soil)	295	mg/kg	0.0E+00	(mg/kg/day)	NA	(mg/kg/day) ⁻¹	--	0.0E+00	(mg/kg/day)	2.9E-03	(mg/kg/day)	--
				Exp. Route Total							3.6E-09					
			Exposure Point Total								9.5E-08					
Exposure Medium Total								9.5E-08						0.004		
Medium Total								9.5E-08						0.004		
Total of Receptor Risks Across All Media										3.9E-05	Total of Receptor Hazards Across All Media				5.7	

Note:
 Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

RAGS Part D Table 9

Summary of Receptor Risks and Hazards for COPCs

LIST OF TABLES
RAGS PART D TABLE 9
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

Table No.

REASONABLE MAXIMUM EXPOSURES

9.1.RME	Construction Workers
9.2.RME	Maintenance Workers
9.3.RME	Industrial Workers
9.4.RME	Adolescent Trespassers
9.5.RME	Adult Trespassers
9.6.RME	Child Residents
9.7.RME	Adult Residents
9.8.RME	Lifelong Residents

CENTRAL TENDENCY EXPOSURES

9.1.CTE	Construction Workers
9.2.CTE	Maintenance Workers
9.3.CTE	Industrial Workers
9.4.CTE	Adolescent Trespassers
9.5.CTE	Adult Trespassers
9.6.CTE	Child Residents
9.7.CTE	Adult Residents
9.8.CTE	Lifelong Residents

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	2E-07	--	7E-08	--	3E-07	Liver	0.02	--	0.006	0.03
			Aluminum	--	--	--	--	--	Body Weight	0.03	--	--	0.03
			Antimony	--	--	--	--	--	Blood	0.008	--	--	0.008
			Arsenic	2E-07	--	1E-08	--	2E-07	Skin, CVS	0.02	--	0.002	0.03
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.02	--	--	0.02
			Iron	--	--	--	--	--	GS	0.02	--	--	0.02
			Manganese (Soil)	--	--	--	--	--	CNS	0.002	--	--	0.002
			Chemical Total	4E-07	--	8E-08	--	5E-07		0.1	--	0.008	0.1
		Exposure Point Total											
		Exposure Medium Total											
		Medium Total											
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	2E-07	--	9E-08	--	3E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.03	--	--	0.03
			Arsenic	1E-07	--	1E-08	--	2E-07	Skin, CVS	0.02	--	0.002	0.02
			Chemical Total	4E-07	--	1E-07	--	5E-07		0.05	--	0.002	0.05
					Exposure Point Total								
		Exposure Medium Total											
		Medium Total											

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient								
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total				
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal	--	--	0.0003	0.0003				
			Aluminum	--	--	--	--	--	Body Weight	--	--	0.00010	0.00010				
			Arsenic	--	--	6E-09	--	6E-09	Skin, CVS	--	--	0.0010	0.0010				
			Iron	--	--	--	--	--	GS	--	--	0.0010	0.0010				
			Manganese (Water)	--	--	--	--	--	CNS	--	--	0.009	0.009				
			Thallium	--	--	--	--	--	Hair Loss, Liver	--	--	0.0010	0.0010				
			Chemical Total	--	--	6E-09	--	6E-09		--	--	0.01	0.01				
	Exposure Point Total						6E-09					0.01					
	Exposure Medium Total						6E-09					0.01					
	Groundwater	Site 1	Naphthalene	--	1E-09	--	--	1E-09	Respiratory	--	0.0009	--	0.0009				
			Aluminum	--	--	--	--	--	CNS	--	--	--	--				
			Arsenic	--	--	--	--	--	NA	--	--	--	--				
			Iron	--	--	--	--	--	NA	--	--	--	--				
			Manganese (Water)	--	--	--	--	--	NA	--	--	--	--				
Thallium			--	--	--	--	--	NA	--	--	--	--					
Chemical Total			--	1E-09	--	--	1E-09		--	0.0009	--	0.0009					
Exposure Point Total						1E-09					0.0009						
Exposure Medium Total						1E-09					0.0009						
Medium Total						8E-09					0.01						
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	--	--	3E-09	--	3E-09	Liver	--	--	0.00004	0.00004				
			Chemical Total	--	--	3E-09	--	3E-09									
			Exposure Point Total											3E-09			
	Exposure Medium Total						3E-09					0.00004					
	Groundwater	Site 1	Tetrachloroethene	--	2E-11	--	--	2E-11	Liver	--	0.0000008	--	0.0000008				
			Chemical Total	--	2E-11	--	--	2E-11									
			Exposure Point Total											2E-11			
Exposure Medium Total							2E-11									0.0000008	
Medium Total						3E-09					0.00004						

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	Site 1	Arsenic	9E-10	--	3E-10	--	1E-09	Skin, CVS GS	0.0001	--	0.00004	0.0002
			Iron	--	--	--	--	0.00004		--	0.00001	0.00005	
			Chemical Total	9E-10	--	3E-10	--	1E-09	0.0002	--	0.00006	0.0002	
			Exposure Point Total						1E-09				0.0002
			Exposure Medium Total						1E-09				0.0002
Medium Total						1E-09				0.0002			
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	8E-09	--	3E-09	--	1E-08	NA Body Weight	--	--	--	--
			Aluminum	--	--	--	--	--		0.007	--	--	0.007
			Arsenic	2E-07	--	1E-08	--	2E-07	Skin, CVS	0.03	--	0.002	0.03
			Iron	--	--	--	--	--	GS	0.02	--	--	0.02
			Manganese (Soil)	--	--	--	--	--	CNS	0.002	--	--	0.002
			Chemical Total	2E-07	--	2E-08	--	2E-07	0.05	--	0.002	0.05	
			Exposure Point Total						2E-07				0.05
Exposure Medium Total						2E-07				0.05			
Medium Total						2E-07				0.05			
Receptor Total						Receptor Risk Total	1E-06				Receptor HI Total	0.3	

Total Blood HI	0.008
Total Body Weight HI	0.06
Total CNS HI	0.04
Total CVS HI	0.1
Total GS HI	0.04
Total Immune HI	0.02
Total Liver HI	0.03
Total Skin HI	0.08
Total Nasal HI	0.0003
Total Hair Loss HI	0.0010

TABLE 9.1.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	6E-08	--	1E-08	--	7E-08	Liver	0.005	--	0.0010	0.006
			Aluminum	--	--	--	--	--	Body Weight	0.006	--	--	0.006
			Antimony	--	--	--	--	--	Blood	0.002	--	--	0.002
			Arsenic	4E-08	--	2E-09	--	4E-08	Skin, CVS	0.006	--	0.0004	0.006
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.006	--	--	0.006
			Iron	--	--	--	--	--	GS	0.005	--	--	0.005
			Manganese (Soil)	--	--	--	--	--	CNS	0.0006	--	--	0.0006
			Chemical Total	9E-08	--	1E-08	--	1E-07		0.03	--	0.001	0.03
		Exposure Point Total										0.03	
		Exposure Medium Total										0.03	
		Medium Total										0.03	
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	6E-08	--	2E-08	--	7E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.008	--	--	0.008
			Arsenic	3E-08	--	2E-09	--	4E-08	Skin, CVS	0.005	--	0.0003	0.006
			Chemical Total	9E-08	--	2E-08	--	1E-07		0.01	--	0.0003	0.01
					Exposure Point Total								
		Exposure Medium Total										0.01	
		Medium Total										0.01	

TABLE 9.1.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal	--	--	0.00009	0.00009
			Aluminum	--	--	--	--	--	Body Weight	--	--	0.00002	0.00002
			Arsenic	--	--	2E-09	--	2E-09	Skin, CVS	--	--	0.0002	0.0002
			Iron	--	--	--	--	--	GS	--	--	0.0002	0.0002
			Manganese (Water)	--	--	--	--	--	CNS	--	--	0.002	0.002
			Thallium	--	--	--	--	--	Hair Loss, Liver	--	--	0.0002	0.0002
			Chemical Total	--	--	2E-09	--	2E-09		--	--	0.003	0.003
	Exposure Point Total						2E-09					0.003	
	Exposure Medium Total						2E-09					0.003	
	Groundwater	Site 1	Naphthalene	--	3E-10	--	--	3E-10	Respiratory	--	0.0002	--	0.0002
			Aluminum	--	--	--	--	--	CNS	--	--	--	--
			Arsenic	--	--	--	--	--	NA	--	--	--	--
			Iron	--	--	--	--	--	NA	--	--	--	--
			Manganese (Water)	--	--	--	--	--	NA	--	--	--	--
			Thallium	--	--	--	--	--	NA	--	--	--	--
Chemical Total			--	3E-10	--	--	3E-10		--	0.0002	--	0.0002	
Exposure Point Total						3E-10					0.0002		
Exposure Medium Total						3E-10					0.0002		
Medium Total						2E-09					0.003		
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	--	--	1E-09	--	1E-09	Liver	--	--	0.00001	0.00001
			Chemical Total	--	--	1E-09	--	1E-09					
	Exposure Point Total						1E-09					0.00001	
	Exposure Medium Total						1E-09					0.00001	
	Groundwater	Site 1	Tetrachloroethene	--	4E-12	--	--	4E-12	Liver	--	0.0000002	--	0.0000002
			Chemical Total	--	4E-12	--	--	4E-12					
Exposure Point Total						4E-12						0.0000002	
Exposure Medium Total						4E-12						0.0000002	
Medium Total						1E-09						0.00001	

TABLE 9.1.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	Site 1	Arsenic	4E-10	--	1E-10	--	6E-10	Skin, CVS	0.00007	--	0.00002	0.00009		
			Iron	--	--	--	--	GS		0.00002	--	0.00007	0.00003		
			Chemical Total	4E-10	--	1E-10	--	6E-10	0.00009	--	0.00003	0.0001			
			Exposure Point Total						6E-10						0.0001
			Exposure Medium Total						6E-10						0.0001
Medium Total						6E-10						0.0001			
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	2E-09	--	5E-10	--	3E-09	NA	--	--	--	--		
			Aluminum	--	--	--	--	--	Body Weight	0.002	--	--	0.002		
			Arsenic	4E-08	--	2E-09	--	4E-08	Skin, CVS	0.006	--	0.0004	0.007		
			Iron	--	--	--	--	--	GS	0.004	--	--	0.004		
			Manganese (Soil)	--	--	--	--	--	CNS	0.0004	--	--	0.0004		
			Chemical Total	4E-08	--	3E-09	--	5E-08	0.01	--	0.0004	0.01			
Exposure Point Total						5E-08						0.01			
Exposure Medium Total						5E-08						0.01			
Medium Total						5E-08						0.01			
Receptor Total						Receptor Risk Total	3E-07						Receptor HI Total	0.06	

Total Blood HI	0.002
Total Body Weight HI	0.02
Total CNS HI	0.009
Total CVS HI	0.03
Total GS HI	0.009
Total Immune HI	0.006
Total Liver HI	0.006
Total Skin HI	0.02
Total Nasal HI	0.00009
Total Hair Loss HI	0.0002

TABLE 9.2.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Future
Receptor Population: Site Maintenance Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	2E-07	--	1E-07	--	3E-07	Liver	0.0006	--	0.0004	0.0009
			Aluminum	--	--	--	--	--	Body Weight	0.0007	--	--	0.0007
			Antimony	--	--	--	--	--	Blood	0.0002	--	--	0.0002
			Arsenic	1E-07	--	2E-08	--	1E-07	Skin, CVS	0.0007	--	0.0001	0.0008
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.0007	--	--	0.0007
			Iron	--	--	--	--	--	GS	0.0006	--	--	0.0006
			Manganese (Soil)	--	--	--	--	--	CNS	0.00007	--	--	0.00007
			Chemical Total	3E-07	--	1E-07	--	4E-07		0.004	--	0.0005	0.004
Exposure Point Total						4E-07					0.004		
Exposure Medium Total						4E-07					0.004		
Medium Total						4E-07					0.004		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	2E-07	--	1E-07	--	3E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0009	--	--	0.0009
			Arsenic	1E-07	--	2E-08	--	1E-07	Skin, CVS	0.0006	--	0.0001	0.0008
			Chemical Total	3E-07	--	2E-07	--	4E-07		0.002	--	0.0001	0.002
			Exposure Point Total					4E-07					0.002
Exposure Medium Total						4E-07					0.002		
Medium Total						4E-07					0.002		
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	6E-09	--	2E-08	Skin, CVS	0.0001	--	0.00004	0.0001
			Iron	--	--	--	--	--	GS	0.00003	--	0.00001	0.00004
			Chemical Total	2E-08	--	6E-09	--	2E-08		0.0001	--	0.00005	0.0002
			Exposure Point Total					2E-08					0.0002
Exposure Medium Total						2E-08					0.0002		
Medium Total						2E-08					0.0002		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	5E-08	--	4E-08	--	9E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.002	--	--	0.002
			Arsenic	1E-06	--	2E-07	--	1E-06	Skin, CVS	0.006	--	0.001	0.007
			Iron	--	--	--	--	--	GS	0.004	--	--	0.004
			Manganese (Soil)	--	--	--	--	--	CNS	0.0004	--	--	0.0004
			Chemical Total	1E-06	--	2E-07	--	1E-06		0.01	--	0.001	0.01
			Exposure Point Total					1E-06					0.01
Exposure Medium Total						1E-06					0.01		
Medium Total						1E-06					0.01		
Receptor Total						2E-06					0.02		
							Receptor Risk Total	2E-06				Receptor HI Total	0.02

TABLE 9.2.RME
 SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
 REASONABLE MAXIMUM EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 2

Scenario Timeframe: Future
Receptor Population: Site Maintenance Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.0002
Total Body Weight HI	0.003
Total CNS HI	0.001
Total CVS HI	0.010
Total GS HI	0.004
Total Immune HI	0.0007
Total Liver HI	0.0009
Total Skin HI	0.009

TABLE 9.2.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Future
Receptor Population: Site Maintenance Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	1E-08	--	2E-09	--	2E-08	Liver	0.0001	--	0.00002	0.0002
			Aluminum	--	--	--	--	--	Body Weight	0.0002	--	--	0.0002
			Antimony	--	--	--	--	--	Blood	0.00006	--	--	0.00006
			Arsenic	1E-08	--	4E-10	--	1E-08	Skin, CVS	0.0002	--	0.000007	0.0002
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.0002	--	--	0.0002
			Iron	--	--	--	--	--	GS	0.0001	--	--	0.0001
			Manganese (Soil)	--	--	--	--	--	CNS	0.00002	--	--	0.00002
Chemical Total	2E-08	--	2E-09	--	3E-08		0.0009	--	0.00003	0.0009			
Exposure Point Total											0.0009		
Exposure Medium Total											0.0009		
Medium Total											0.0009		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	1E-08	--	3E-09	--	2E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0002	--	--	0.0002
			Arsenic	9E-09	--	4E-10	--	9E-09	Skin, CVS	0.0002	--	0.000006	0.0002
			Chemical Total	2E-08	--	3E-09	--	3E-08		0.0004	--	0.000006	0.0004
			Exposure Point Total										0.0004
Exposure Medium Total											0.0004		
Medium Total											0.0004		
Surface Water	Surface Water	Site 1	Arsenic	3E-09	--	1E-09	--	4E-09	Skin, CVS	0.00005	--	0.00002	0.00007
			Iron	--	--	--	--	--	GS	0.00002	--	0.000005	0.00002
			Chemical Total	3E-09	--	1E-09	--	4E-09		0.00007	--	0.00002	0.00009
			Exposure Point Total										0.00009
Exposure Medium Total											0.00009		
Medium Total											0.00009		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	4E-09	--	8E-10	--	5E-09	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0004	--	--	0.0004
			Arsenic	9E-08	--	4E-09	--	9E-08	Skin, CVS	0.002	--	0.00006	0.002
			Iron	--	--	--	--	--	GS	0.0009	--	--	0.0009
			Manganese (Soil)	--	--	--	--	--	CNS	0.00010	--	--	0.00010
			Chemical Total	9E-08	--	4E-09	--	1E-07		0.003	--	0.00006	0.003
			Exposure Point Total										0.003
Exposure Medium Total											0.003		
Medium Total											0.003		
Receptor Total							Receptor Risk Total	2E-07			Receptor HI Total	0.004	

TABLE 9.2.CTE
 SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
 CENTRAL TENDENCY EXPOSURES
 NCBC GULFPORT
 PAGE 2 OF 2

Scenario Timeframe: Future
Receptor Population: Site Maintenance Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient			
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.0006
Total Body Weight HI	0.0008
Total CNS HI	0.0003
Total CVS HI	0.002
Total GS HI	0.001
Total Immune HI	0.0002
Total Liver HI	0.0002
Total Skin HI	0.002

TABLE 9.3.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	8E-07	--	1E-06	--	2E-06	Liver	0.003	--	0.004	0.007
			Aluminum	--	--	--	--	--	Body Weight	0.004	--	--	0.004
			Antimony	--	--	--	--	--	Blood	0.001	--	--	0.001
			Arsenic	6E-07	--	2E-07	--	8E-07	Skin, CVS	0.004	--	0.001	0.005
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.004	--	--	0.004
			Iron	--	--	--	--	--	GS	0.003	--	--	0.003
			Manganese (Soil)	--	--	--	--	--	CNS	0.0004	--	--	0.0004
			Chemical Total	1E-06	--	1E-06	--	3E-06		0.02	--	0.005	0.02
Exposure Point Total						3E-06					0.02		
Exposure Medium Total						3E-06					0.02		
Medium Total						3E-06					0.02		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	8E-07	--	2E-06	--	2E-06	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.005	--	--	0.005
			Arsenic	5E-07	--	2E-07	--	7E-07	Skin, CVS	0.003	--	0.001	0.005
			Chemical Total	1E-06	--	2E-06	--	3E-06		0.008	--	0.001	0.009
			Exposure Point Total						3E-06				
Exposure Medium Total						3E-06					0.009		
Medium Total						3E-06					0.009		
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	7E-09	--	3E-08	Skin, CVS	0.0001	--	0.00004	0.0002
			Iron	--	--	--	--	--	GS	0.00004	--	0.00001	0.00005
			Chemical Total	2E-08	--	7E-09	--	3E-08		0.0002	--	0.00006	0.0002
			Exposure Point Total						3E-08				
Exposure Medium Total						3E-08					0.0002		
Medium Total						3E-08					0.0002		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	2E-08	--	4E-08	--	7E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0008	--	--	0.0008
			Arsenic	5E-07	--	2E-07	--	7E-07	Skin, CVS	0.003	--	0.001	0.004
			Iron	--	--	--	--	--	GS	0.002	--	--	0.002
			Manganese (Soil)	--	--	--	--	--	CNS	0.0002	--	--	0.0002
			Chemical Total	5E-07	--	2E-07	--	8E-07		0.006	--	0.001	0.007
			Exposure Point Total						8E-07				
Exposure Medium Total						8E-07					0.007		
Medium Total						8E-07					0.007		
Receptor Total				Receptor Risk Total				7E-06	Receptor HI Total				0.04

TABLE 9.3.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient														
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total										

Total Blood HI	0.001
Total Body Weight HI	0.009
Total CNS HI	0.004
Total CVS HI	0.02
Total GS HI	0.005
Total Immune HI	0.004
Total Liver HI	0.007
Total Skin HI	0.01

TABLE 9.3.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	3E-07	--	3E-08	--	3E-07	Liver	0.003	--	0.0003	0.003
			Aluminum	--	--	--	--	--	Body Weight	0.003	--	--	0.003
			Antimony	--	--	--	--	--	Blood	0.001	--	--	0.001
			Arsenic	2E-07	--	7E-09	--	2E-07	Skin, CVS	0.003	--	0.0001	0.003
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.003	--	--	0.003
			Iron	--	--	--	--	--	GS	0.003	--	--	0.003
			Manganese (Soil)	--	--	--	--	--	CNS	0.0003	--	--	0.0003
			Chemical Total	4E-07	--	4E-08	--	5E-07		0.02	--	0.0005	0.02
Exposure Point Total						5E-07					0.02		
Exposure Medium Total						5E-07					0.02		
Medium Total						5E-07					0.02		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	3E-07	--	5E-08	--	3E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.004	--	--	0.004
			Arsenic	2E-07	--	7E-09	--	2E-07	Skin, CVS	0.003	--	0.0001	0.003
			Chemical Total	4E-07	--	6E-08	--	5E-07		0.007	--	0.0001	0.007
			Exposure Point Total					5E-07					0.007
Exposure Medium Total						5E-07					0.007		
Medium Total						5E-07					0.007		
Surface Water	Surface Water	Site 1	Arsenic	3E-09	--	1E-09	--	4E-09	Skin, CVS	0.00005	--	0.00002	0.00007
			Iron	--	--	--	--	--	GS	0.00002	--	0.000005	0.00002
			Chemical Total	3E-09	--	1E-09	--	4E-09		0.00007	--	0.00002	0.00009
			Exposure Point Total					4E-09					0.00009
Exposure Medium Total						4E-09					0.00009		
Medium Total						4E-09					0.00009		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	4E-09	--	8E-10	--	5E-09	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0004	--	--	0.0004
			Arsenic	9E-08	--	4E-09	--	9E-08	Skin, CVS	0.002	--	0.00006	0.002
			Iron	--	--	--	--	--	GS	0.0009	--	--	0.0009
			Manganese (Soil)	--	--	--	--	--	CNS	0.00010	--	--	0.00010
			Chemical Total	9E-08	--	4E-09	--	1E-07		0.003	--	0.00006	0.003
			Exposure Point Total					1E-07					0.003
Exposure Medium Total						1E-07					0.003		
Medium Total						1E-07					0.003		
Receptor Total				Receptor Risk Total					Receptor HI Total				
				1E-06					0.03				

TABLE 9.3.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.001
Total Body Weight HI	0.008
Total CNS HI	0.004
Total CVS HI	0.01
Total GS HI	0.004
Total Immune HI	0.003
Total Liver HI	0.003
Total Skin HI	0.008

TABLE 9.4.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	1E-07	--	2E-07	--	3E-07	Liver	0.001	--	0.001	0.003
			Aluminum	--	--	--	--	--	Body Weight	0.001	--	--	0.001
			Antimony	--	--	--	--	--	Blood	0.0005	--	--	0.0005
			Arsenic	9E-08	--	4E-08	--	1E-07	Skin, CVS	0.001	--	0.0005	0.002
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.001	--	--	0.001
			Iron	--	--	--	--	--	GS	0.001	--	--	0.001
			Manganese (Soil)	--	--	--	--	--	CNS	0.0001	--	--	0.0001
			Chemical Total	2E-07	--	2E-07	--	4E-07		0.007	--	0.002	0.009
Exposure Point Total						4E-07					0.009		
Exposure Medium Total						4E-07					0.009		
Medium Total						4E-07					0.009		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	1E-07	--	3E-07	--	4E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.002	--	--	0.002
			Arsenic	9E-08	--	3E-08	--	1E-07	Skin, CVS	0.001	--	0.0005	0.002
			Chemical Total	2E-07	--	3E-07	--	5E-07		0.003	--	0.0005	0.003
			Exposure Point Total						5E-07				
Exposure Medium Total						5E-07					0.003		
Medium Total						5E-07					0.003		
Surface Water	Surface Water	Site 1	Arsenic	1E-08	--	5E-09	--	2E-08	Skin, CVS	0.0002	--	0.00007	0.0003
			Iron	--	--	--	--	--	GS	0.00006	--	0.00002	0.00008
			Chemical Total	1E-08	--	5E-09	--	2E-08		0.0003	--	0.00009	0.0004
			Exposure Point Total						2E-08				
Exposure Medium Total						2E-08					0.0004		
Medium Total						2E-08					0.0004		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	1E-07	--	2E-07	--	3E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.003	--	--	0.003
			Arsenic	9E-07	--	3E-07	--	1E-06	Skin, CVS	0.01	--	0.005	0.02
			Iron	--	--	--	--	--	GS	0.007	--	--	0.007
			Manganese (Soil)	--	--	--	--	--	CNS	0.0007	--	--	0.0007
			Chemical Total	1E-06	--	5E-07	--	2E-06		0.02	--	0.005	0.03
			Exposure Point Total						2E-06				
Exposure Medium Total						2E-06					0.03		
Medium Total						2E-06					0.03		
Receptor Total						2E-06					0.04		
							Receptor Risk Total	2E-06				Receptor HI Total	0.04

TABLE 9.4.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.0005
Total Body Weight HI	0.006
Total CNS HI	0.002
Total CVS HI	0.02
Total GS HI	0.009
Total Immune HI	0.001
Total Liver HI	0.003
Total Skin HI	0.02

TABLE 9.4.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	3E-08	--	9E-09	--	4E-08	Liver	0.0003	--	0.00007	0.0003
			Aluminum	--	--	--	--	--	Body Weight	0.0004	--	--	0.0004
			Antimony	--	--	--	--	--	Blood	0.0001	--	--	0.0001
			Arsenic	2E-08	--	2E-09	--	3E-08	Skin, CVS	0.0003	--	0.00003	0.0004
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.0003	--	--	0.0003
			Iron	--	--	--	--	--	GS	0.0003	--	--	0.0003
			Manganese (Soil)	--	--	--	--	--	CNS	0.00004	--	--	0.00004
			Chemical Total	6E-08	--	1E-08	--	7E-08		0.002	--	0.00010	0.002
Exposure Point Total						7E-08					0.002		
Exposure Medium Total						7E-08					0.002		
Medium Total						7E-08					0.002		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	3E-08	--	1E-08	--	5E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0004	--	--	0.0004
			Arsenic	2E-08	--	2E-09	--	2E-08	Skin, CVS	0.0003	--	0.00002	0.0003
			Chemical Total	6E-08	--	1E-08	--	7E-08		0.0007	--	0.00002	0.0008
			Exposure Point Total					7E-08					0.0008
Exposure Medium Total						7E-08					0.0008		
Medium Total						7E-08					0.0008		
Surface Water	Surface Water	Site 1	Arsenic	7E-09	--	2E-09	--	1E-08	Skin, CVS	0.0001	--	0.00003	0.0001
			Iron	--	--	--	--	--	GS	0.00003	--	0.00001	0.00004
			Chemical Total	7E-09	--	2E-09	--	1E-08		0.0001	--	0.00004	0.0002
			Exposure Point Total					1E-08					0.0002
Exposure Medium Total						1E-08					0.0002		
Medium Total						1E-08					0.0002		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	2E-08	--	4E-08	--	6E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.002	--	--	0.002
			Arsenic	4E-07	--	2E-07	--	6E-07	Skin, CVS	0.006	--	0.002	0.008
			Iron	--	--	--	--	--	GS	0.004	--	--	0.004
			Manganese (Soil)	--	--	--	--	--	CNS	0.0004	--	--	0.0004
			Chemical Total	4E-07	--	2E-07	--	6E-07		0.01	--	0.002	0.01
			Exposure Point Total					6E-07					0.01
Exposure Medium Total						6E-07					0.01		
Medium Total						6E-07					0.01		
Receptor Total						Receptor Risk Total	8E-07				Receptor HI Total	0.02	

TABLE 9.4.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adolescent

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.0001
Total Body Weight HI	0.002
Total CNS HI	0.0007
Total CVS HI	0.010
Total GS HI	0.004
Total Immune HI	0.0003
Total Liver HI	0.0003
Total Skin HI	0.009

TABLE 9.5.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	8E-08	--	9E-08	--	2E-07	Liver	0.0004	--	0.0004	0.0008
			Aluminum	--	--	--	--	--	Body Weight	0.0005	--	--	0.0005
			Antimony	--	--	--	--	--	Blood	0.0001	--	--	0.0001
			Arsenic	5E-08	--	2E-08	--	7E-08	Skin, CVS	0.0004	--	0.0002	0.0006
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.0004	--	--	0.0004
			Iron	--	--	--	--	--	GS	0.0004	--	--	0.0004
			Manganese (Soil)	--	--	--	--	--	CNS	0.00005	--	--	0.00005
			Chemical Total	1E-07	--	1E-07	--	2E-07		0.002	--	0.0006	0.003
Exposure Point Total						2E-07					0.003		
Exposure Medium Total						2E-07					0.003		
Medium Total						2E-07					0.003		
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	8E-08	--	1E-07	--	2E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0006	--	--	0.0006
			Arsenic	5E-08	--	2E-08	--	7E-08	Skin, CVS	0.0004	--	0.0001	0.0005
			Chemical Total	1E-07	--	2E-07	--	3E-07		0.0010	--	0.0001	0.001
			Exposure Point Total					3E-07					0.001
Exposure Medium Total						3E-07					0.001		
Medium Total						3E-07					0.001		
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	9E-09	--	3E-08	Skin, CVS	0.0001	--	0.00008	0.0002
			Iron	--	--	--	--	--	GS	0.00004	--	0.00002	0.00006
			Chemical Total	2E-08	--	9E-09	--	3E-08		0.0002	--	0.00010	0.0003
			Exposure Point Total					3E-08					0.0003
Exposure Medium Total						3E-08					0.0003		
Medium Total						3E-08					0.0003		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	7E-08	--	7E-08	--	1E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.001	--	--	0.001
			Arsenic	5E-07	--	1E-07	--	6E-07	Skin, CVS	0.004	--	0.0009	0.005
			Iron	--	--	--	--	--	GS	0.002	--	--	0.002
			Manganese (Soil)	--	--	--	--	--	CNS	0.0002	--	--	0.0002
			Chemical Total	5E-07	--	2E-07	--	7E-07		0.007	--	0.0009	0.008
			Exposure Point Total					7E-07					0.008
Exposure Medium Total						7E-07					0.008		
Medium Total						7E-07					0.008		
Receptor Total				Receptor Risk Total				1E-06	Receptor HI Total				0.01

TABLE 9.5.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.0001
Total Body Weight HI	0.002
Total CNS HI	0.0007
Total CVS HI	0.007
Total GS HI	0.003
Total Immune HI	0.0004
Total Liver HI	0.0008
Total Skin HI	0.006

TABLE 9.5.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	4E-08	--	4E-09	--	4E-08	Liver	0.0002	--	0.00002	0.0002
			Aluminum	--	--	--	--	--	Body Weight	0.0002	--	--	0.0002
			Antimony	--	--	--	--	--	Blood	0.00007	--	--	0.00007
			Arsenic	3E-08	--	9E-10	--	3E-08	Skin, CVS	0.0002	--	0.000007	0.0002
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.0002	--	--	0.0002
			Iron	--	--	--	--	--	GS	0.0002	--	--	0.0002
			Manganese (Soil)	--	--	--	--	--	CNS	0.00002	--	--	0.00002
			Chemical Total	6E-08	--	5E-09	--	7E-08		0.001	--	0.00003	0.001
		Exposure Point Total											
		Exposure Medium Total											
		Medium Total											
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	4E-08	--	6E-09	--	4E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0003	--	--	0.0003
			Arsenic	2E-08	--	8E-10	--	2E-08	Skin, CVS	0.0002	--	0.000007	0.0002
			Chemical Total	6E-08	--	7E-09	--	7E-08		0.0005	--	0.000007	0.0005
					Exposure Point Total								
		Exposure Medium Total											
		Medium Total											
Surface Water	Surface Water	Site 1	Arsenic	8E-09	--	5E-09	--	1E-08	Skin, CVS	0.00007	--	0.00004	0.0001
			Iron	--	--	--	--	--	GS	0.00002	--	0.00001	0.00003
			Chemical Total	8E-09	--	5E-09	--	1E-08		0.00009	--	0.00005	0.0001
					Exposure Point Total								
		Exposure Medium Total											
		Medium Total											
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalentis	1E-08	--	2E-09	--	1E-08	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.0005	--	--	0.0005
			Arsenic	2E-07	--	8E-09	--	2E-07	Skin, CVS	0.002	--	0.00007	0.002
			Iron	--	--	--	--	--	GS	0.001	--	--	0.001
			Manganese (Soil)	--	--	--	--	--	CNS	0.0001	--	--	0.0001
			Chemical Total	2E-07	--	1E-08	--	3E-07		0.004	--	0.00007	0.004
					Exposure Point Total								
		Exposure Medium Total											
		Medium Total											
		Receptor Total	Receptor Risk Total					Receptor HI Total					
			4E-07					0.006					

TABLE 9.5.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 2

Scenario Timeframe: Current/Future
Receptor Population: Trespasser
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Blood HI	0.00007
Total Body Weight HI	0.001
Total CNS HI	0.0004
Total CVS HI	0.003
Total GS HI	0.001
Total Immune HI	0.0002
Total Liver HI	0.0002
Total Skin HI	0.003

TABLE 9.6.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	5E-06	--	1E-06	--	7E-06	Liver	0.08	--	0.02	0.10
			Aluminum	--	--	--	--	--	Body Weight	0.10	--	--	0.10
			Antimony	--	--	--	--	--	Blood	0.03	--	--	0.03
			Arsenic	4E-06	--	3E-07	--	4E-06	Skin, CVS	0.09	--	0.008	0.1
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.09	--	--	0.09
			Iron	--	--	--	--	--	GS	0.08	--	--	0.08
			Manganese (Soil)	--	--	--	--	--	CNS	0.010	--	--	0.010
			Chemical Total	9E-06	--	2E-06	--	1E-05		0.5	--	0.03	0.5
			Exposure Point Total					1E-05					0.5
			Exposure Medium Total					1E-05					0.5
Medium Total					1E-05					0.5			
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	5E-06	--	2E-06	--	7E-06	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.1	--	--	0.1
			Arsenic	3E-06	--	3E-07	--	4E-06	Skin, CVS	0.09	--	0.007	0.09
			Chemical Total	9E-06	--	2E-06	--	1E-05		0.2	--	0.007	0.2
			Exposure Point Total					1E-05					0.2
Exposure Medium Total					1E-05					0.2			
Medium Total					1E-05					0.2			

TABLE 9.6.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal Body Weight Skin, CVS GS CNS Hair Loss, Liver	0.03	--	0.008	0.04
			Aluminum	--	--	--	--	--		0.6	--	0.0009	0.6
			Arsenic	2E-04	--	3E-07	--	2E-04		6	--	0.009	6
			Iron	--	--	--	--	--		6	--	0.009	6
			Manganese (Water)	--	--	--	--	--		2	--	0.08	2
			Thallium	--	--	--	--	--		6	--	0.009	6
			Chemical Total	2E-04	--	3E-07	--	2E-04		21	--	0.1	21
	Exposure Point Total						2E-04					21	
	Exposure Medium Total						2E-04					21	
	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Respiratory CNS NA NA NA	--	0.03	--	0.03
			Aluminum	--	--	--	--	--		--	--	--	--
			Arsenic	--	--	--	--	--		--	--	--	--
			Iron	--	--	--	--	--		--	--	--	--
			Manganese (Water)	--	--	--	--	--		--	--	--	--
			Thallium	--	--	--	--	--		--	--	--	--
Chemical Total			--	--	--	--	--	--		0.03	--	0.03	
Exposure Point Total						--				0.03			
Exposure Medium Total						--				0.03			
Medium Total												21	
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	2E-06	--	5E-07	--	3E-06	Liver	0.005	--	0.001	0.006
			Chemical Total	2E-06	--	5E-07	--	3E-06		0.005	--	0.001	0.006
			Exposure Point Total							3E-06			
	Exposure Medium Total						3E-06				0.006		
	Groundwater	Site 1	Tetrachloroethene	--	2E-06	--	--	2E-06	Liver	--	0.005	--	0.005
			Chemical Total	--	2E-06	--	--	2E-06		--	0.005	--	0.005
			Exposure Point Total							2E-06			
Exposure Medium Total						2E-06				0.005			
Medium Total												0.01	

TABLE 9.6.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	Site 1	Arsenic	1E-07	--	7E-09	--	1E-07	Skin, CVS GS	0.003	--	0.0002	0.003
			Iron	--	--	--	--	0.0009		--	0.00005	0.0010	
			Chemical Total	1E-07	--	7E-09	--	1E-07	0.004	--	0.0002	0.004	
			Exposure Point Total						1E-07				0.004
Exposure Medium Total									1E-07				0.004
Medium Total									1E-07				0.004
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	7E-07	--	3E-07	--	1E-06	NA Body Weight	--	--	--	--
			Aluminum	--	--	--	--	--		0.02	--	--	0.02
			Arsenic	3E-06	--	2E-07	--	3E-06	Skin, CVS GS	0.07	--	0.006	0.08
			Iron	--	--	--	--	--		0.04	--	--	0.04
			Manganese (Soil)	--	--	--	--	--	CNS	0.004	--	--	0.004
			Chemical Total	4E-06	--	5E-07	--	4E-06		0.1	--	0.006	0.1
Exposure Point Total									4E-06				0.1
Exposure Medium Total									4E-06				0.1
Medium Total									4E-06				0.1
Receptor Total				Receptor Risk Total					3E-04	Receptor HI Total			22

Note:

Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

Total Blood HI	0.03
Total Body Weight HI	0.8
Total CNS HI	2
Total CVS HI	6
Total GS HI	6
Total Immune HI	0.09
Total Liver HI	6
Total Skin HI	6
Total Nasal HI	0.04
Total Hair Loss HI	6

TABLE 9.6.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	6E-07	--	7E-08	--	7E-07	Liver	0.03	--	0.003	0.03
			Aluminum	--	--	--	--	--	Body Weight	0.03	--	--	0.03
			Antimony	--	--	--	--	--	Blood	0.01	--	--	0.01
			Arsenic	4E-07	--	1E-08	--	4E-07	Skin, CVS	0.03	--	0.001	0.03
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.03	--	--	0.03
			Iron	--	--	--	--	--	GS	0.03	--	--	0.03
			Manganese (Soil)	--	--	--	--	--	CNS	0.003	--	--	0.003
			Chemical Total	1E-06	--	8E-08	--	1E-06		0.2	--	0.004	0.2
			Exposure Point Total					1E-06					0.2
			Exposure Medium Total					1E-06					0.2
Medium Total					1E-06					0.2			
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	6E-07	--	9E-08	--	7E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.04	--	--	0.04
			Arsenic	4E-07	--	1E-08	--	4E-07	Skin, CVS	0.03	--	0.0010	0.03
			Chemical Total	1E-06	--	1E-07	--	1E-06		0.07	--	0.0010	0.07
			Exposure Point Total					1E-06					0.07
Exposure Medium Total					1E-06					0.07			
Medium Total					1E-06					0.07			

TABLE 9.6.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal	0.009	--	0.005	0.01
			Aluminum	--	--	--	--	--	Body Weight	0.2	--	0.0004	0.2
			Arsenic	2E-05	--	6E-08	--	2E-05	Skin, CVS	2	--	0.004	2
			Iron	--	--	--	--	--	GS	2	--	0.004	2
			Manganese (Water)	--	--	--	--	--	CNS	0.6	--	0.04	0.7
			Thallium	--	--	--	--	--	Hair Loss, Liver	2	--	0.004	2
			Chemical Total	2E-05	--	6E-08	--	2E-05		6	--	0.06	6
	Exposure Point Total						2E-05					6	
	Exposure Medium Total						2E-05					6	
	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Respiratory	--	0.009	--	0.009
			Aluminum	--	--	--	--	--	CNS	--	--	--	--
			Arsenic	--	--	--	--	--	NA	--	--	--	--
			Iron	--	--	--	--	--	NA	--	--	--	--
			Manganese (Water)	--	--	--	--	--	NA	--	--	--	--
			Thallium	--	--	--	--	--	NA	--	--	--	--
Chemical Total			--	--	--	--	--		--	0.009	--	0.009	
Exposure Point Total						--					0.009		
Exposure Medium Total						--					0.009		
Medium Total						2E-05					6		
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	2E-07	--	1E-07	--	3E-07	Liver	0.002	--	0.0007	0.002
			Chemical Total	2E-07	--	1E-07	--	3E-07		0.002	--	0.0007	0.002
			Exposure Point Total							3E-07			
	Exposure Medium Total						3E-07				0.002		
	Groundwater	Site 1	Tetrachloroethene	--	2E-07	--	--	2E-07	Liver	--	0.002	--	0.002
			Chemical Total	--	2E-07	--	--	2E-07		--	0.002	--	0.002
			Exposure Point Total							2E-07			
Exposure Medium Total						2E-07				0.002			
Medium Total						6E-07					0.004		

TABLE 9.6.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	1E-09	--	2E-08	Skin, CVS	0.002	--	0.00009	0.002	
			Iron	--	--	--	--	GS		0.0005	--	0.00003	0.0005	
			Chemical Total	2E-08	--	1E-09	--	2E-08		0.002	--	0.0001	0.002	
			Exposure Point Total										0.002	
		Exposure Medium Total						2E-08						0.002
Medium Total						2E-08						0.002		
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	1E-08	--	2E-09	--	1E-08	NA	--	--	--	--	
			Aluminum	--	--	--	--	--	Body Weight	0.005	--	--	0.005	
			Arsenic	2E-07	--	8E-09	--	2E-07	Skin, CVS	0.02	--	0.0006	0.02	
			Iron	--	--	--	--	--	GS	0.01	--	--	0.01	
			Manganese (Soil)	--	--	--	--	--	CNS	0.001	--	--	0.001	
		Chemical Total	2E-07	--	9E-09	--	3E-07		0.03	--	0.0006	0.04		
Exposure Point Total						3E-07						0.04		
Exposure Medium Total						3E-07						0.04		
Medium Total						3E-07						0.04		
Receptor Total						Receptor Risk Total	3E-05						Receptor HI Total	7

Note:

Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

Total Blood HI	0.01
Total Body Weight HI	0.3
Total CNS HI	0.7
Total CVS HI	2
Total GS HI	2
Total Immune HI	0.03
Total Liver HI	2
Total Skin HI	2
Total Nasal HI	0.01
Total Hair Loss HI	2

TABLE 9.7.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	2E-06	--	9E-07	--	3E-06	Liver	0.008	--	0.003	0.01
			Aluminum	--	--	--	--	--	Body Weight	0.01	--	--	0.01
			Antimony	--	--	--	--	--	Blood	0.003	--	--	0.003
			Arsenic	2E-06	--	2E-07	--	2E-06	Skin, CVS	0.01	--	0.001	0.01
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.01	--	--	0.01
			Iron	--	--	--	--	--	GS	0.008	--	--	0.008
			Manganese (Soil)	--	--	--	--	--	CNS	0.001	--	--	0.001
			Chemical Total	4E-06	--	1E-06	--	5E-06		0.05	--	0.004	0.06
			Exposure Point Total					5E-06					0.06
			Exposure Medium Total					5E-06					0.06
Medium Total					5E-06					0.06			
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	2E-06	--	1E-06	--	4E-06	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.01	--	--	0.01
			Arsenic	1E-06	--	2E-07	--	2E-06	Skin, CVS	0.009	--	0.001	0.01
			Chemical Total	4E-06	--	1E-06	--	5E-06		0.02	--	0.001	0.02
			Exposure Point Total					5E-06					0.02
Exposure Medium Total					5E-06					0.02			
Medium Total					5E-06					0.02			

TABLE 9.7.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient					
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal	0.009	--	0.005	0.01	
			Aluminum	--	--	--	--	--	Body Weight	0.2	--	0.0005	0.2	
			Arsenic	3E-04	--	8E-07	--	3E-04	Skin, CVS	2	--	0.005	2	
			Iron	--	--	--	--	--	GS	2	--	0.005	2	
			Manganese (Water)	--	--	--	--	--	CNS	0.6	--	0.05	0.7	
			Thallium	--	--	--	--	--	Hair Loss, Liver	2	--	0.005	2	
			Chemical Total	3E-04	--	8E-07	--	3E-04		6	--	0.07	6	
	Exposure Point Total												6	
	Exposure Medium Total												6	
	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Respiratory	--	0.009	--	0.009	
			Aluminum	--	--	--	--	--	CNS	--	--	--	--	
			Arsenic	--	--	--	--	--	NA	--	--	--	--	
			Iron	--	--	--	--	--	NA	--	--	--	--	
			Manganese (Water)	--	--	--	--	--	NA	--	--	--	--	
			Thallium	--	--	--	--	--	NA	--	--	--	--	
Chemical Total			--	--	--	--	--		--	0.009	--	0.009		
Exposure Point Total												0.009		
Exposure Medium Total												0.009		
Medium Total													6	
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	3E-06	--	1E-06	--	4E-06	Liver	0.001	--	0.0007	0.002	
			Chemical Total	3E-06	--	1E-06	--	4E-06		0.001	--	0.0007	0.002	
			Exposure Point Total											
	Exposure Medium Total												0.002	
	Groundwater	Site 1	Tetrachloroethene	--	3E-06	--	--	3E-06	Liver	--	0.001	--	0.001	
			Chemical Total	--	3E-06	--	--	3E-06		--	0.001	--	0.001	
			Exposure Point Total											
Exposure Medium Total													0.001	
Medium Total													0.004	
Medium Total													7E-06	

TABLE 9.7.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	1E-08	--	3E-08	Skin, CVS	0.0001	--	0.00008	0.0002
			Iron	--	--	--	--	GS		0.00004	--	0.00002	0.00006
			Chemical Total	2E-08	--	1E-08	--	3E-08	0.0002	--	0.00010	0.0003	
			Exposure Point Total						3E-08				0.0003
		Exposure Medium Total						3E-08				0.0003	
Medium Total						3E-08				0.0003			
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	1E-07	--	6E-08	--	2E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.002	--	--	0.002
			Arsenic	1E-06	--	1E-07	--	1E-06	Skin, CVS	0.008	--	0.0009	0.009
			Iron	--	--	--	--	--	GS	0.005	--	--	0.005
			Manganese (Soil)	--	--	--	--	--	CNS	0.0005	--	--	0.0005
		Chemical Total	1E-06	--	2E-07	--	2E-06	0.01	--	0.0009	0.02		
Exposure Point Total						2E-06				0.02			
Exposure Medium Total						2E-06				0.02			
Medium Total						2E-06				0.02			
Receptor Total						Receptor Risk Total	3E-04				Receptor HI Total	6	

Note:

Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

Total Blood HI	0.003
Total Body Weight HI	0.2
Total CNS HI	0.7
Total CVS HI	2
Total GS HI	2
Total Immune HI	0.01
Total Liver HI	2
Total Skin HI	2
Total Nasal HI	0.01
Total Hair Loss HI	2

TABLE 9.7.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	2E-07	--	3E-08	--	2E-07	Liver	0.003	--	0.0003	0.003
			Aluminum	--	--	--	--	--	Body Weight	0.004	--	--	0.004
			Antimony	--	--	--	--	--	Blood	0.001	--	--	0.001
			Arsenic	2E-07	--	5E-09	--	2E-07	Skin, CVS	0.003	--	0.0001	0.003
			Cobalt	--	--	--	--	--	CVS, Immune, CNS	0.003	--	--	0.003
			Iron	--	--	--	--	--	GS	0.003	--	--	0.003
			Manganese (Soil)	--	--	--	--	--	CNS	0.0004	--	--	0.0004
			Chemical Total	4E-07	--	3E-08	--	4E-07		0.02	--	0.0004	0.02
Exposure Point Total											4E-07	0.02	
Exposure Medium Total												4E-07	0.02
Medium Total												4E-07	0.02
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	2E-07	--	4E-08	--	3E-07	NA	--	--	--	--
			Aluminum	--	--	--	--	--	Body Weight	0.004	--	--	0.004
			Arsenic	1E-07	--	5E-09	--	1E-07	Skin, CVS	0.003	--	0.0001	0.003
			Chemical Total	4E-07	--	4E-08	--	4E-07		0.007	--	0.0001	0.008
			Exposure Point Total										
Exposure Medium Total												4E-07	0.008
Medium Total												4E-07	0.008

TABLE 9.7.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Nasal Body Weight Skin, CVS GS CNS Hair Loss, Liver	0.004	--	0.003	0.007		
			Aluminum	--	--	--	--	--		0.08	--	0.0003	0.08		
			Arsenic	4E-05	--	1E-07	--	4E-05		0.8	--	0.003	0.8		
			Iron	--	--	--	--	--		0.8	--	0.003	0.8		
			Manganese (Water)	--	--	--	--	--		0.3	--	0.02	0.3		
			Thallium	--	--	--	--	--		0.8	--	0.003	0.8		
			Chemical Total	4E-05	--	1E-07	--	4E-05		3	--	0.03	3		
	Exposure Point Total						4E-05				3				
	Exposure Medium Total						4E-05				3				
	Groundwater	Site 1	Naphthalene	--	--	--	--	--	Respiratory CNS NA NA NA NA	--	0.004	--	0.004		
			Aluminum	--	--	--	--	--		--	--	--	--		
			Arsenic	--	--	--	--	--		--	--	--	--		
			Iron	--	--	--	--	--		--	--	--	--		
			Manganese (Water)	--	--	--	--	--		--	--	--	--		
			Thallium	--	--	--	--	--		--	--	--	--		
Chemical Total			--	--	--	--	--	--		0.004	--	0.004			
Exposure Point Total						--				0.004					
Exposure Medium Total						--				0.004					
Medium Total												4E-05			3
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	4E-07	--	2E-07	--	6E-07	Liver	0.0007	--	0.0004	0.001		
			Chemical Total	4E-07	--	2E-07	--	6E-07		0.0007	--	0.0004	0.001		
			Exposure Point Total							6E-07				0.001	
	Exposure Medium Total						6E-07				0.001				
	Groundwater	Site 1	Tetrachloroethene	--	4E-07	--	--	4E-07	Liver	--	0.0007	--	0.0007		
			Chemical Total	--	4E-07	--	--	4E-07		--	0.0007	--	0.0007		
			Exposure Point Total							4E-07				0.0007	
Exposure Medium Total						4E-07				0.0007					
Medium Total												1E-06			0.002

TABLE 9.7.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient						
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total		
Surface Water	Surface Water	Site 1	Arsenic	3E-09	--	2E-09	--	5E-09	Skin, CVS	0.00007	--	0.00004	0.0001		
			Iron	--	--	--	--	GS		0.00002	--	0.00001	0.00003		
			Chemical Total	3E-09	--	2E-09	--	5E-09	0.00009	--	0.00005	0.0001			
		Exposure Point Total						5E-09							
Exposure Medium Total									5E-09						
Medium Total									5E-09						
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	4E-09	--	6E-10	--	5E-09	NA	--	--	--	--		
			Aluminum	--	--	--	--	--	Body Weight	0.0005	--	--	0.0005		
			Arsenic	9E-08	--	3E-09	--	9E-08	Skin, CVS	0.002	--	0.00007	0.002		
			Iron	--	--	--	--	--	GS	0.001	--	--	0.001		
			Manganese (Soil)	--	--	--	--	--	CNS	0.0001	--	--	0.0001		
		Chemical Total	9E-08	--	4E-09	--	1E-07	0.004	--	0.00007	0.004				
Exposure Point Total									1E-07						
Exposure Medium Total									1E-07						
Medium Total									1E-07						
Receptor Total				Receptor Risk Total					4E-05	Receptor HI Total					3

Note:

Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

Total Blood HI	0.001
Total Body Weight HI	0.09
Total CNS HI	0.3
Total CVS HI	0.8
Total GS HI	0.8
Total Immune HI	0.003
Total Liver HI	0.8
Total Skin HI	0.8
Total Nasal HI	0.007
Total Hair Loss HI	0.8

TABLE 9.8.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Surface Soil	Surface Soil	Site 1	Dieldrin	8E-06	--	2E-06	--	1E-05					
			Aluminum	--	--	--	--	--					
			Antimony	--	--	--	--	--					
			Arsenic	5E-06	--	5E-07	--	6E-06					
			Cobalt	--	--	--	--	--					
			Iron	--	--	--	--	--					
			Manganese (Soil)	--	--	--	--	--					
Chemical Total	1E-05	--	3E-06	--	2E-05								
		Exposure Point Total						2E-05					
		Exposure Medium Total						2E-05					
Medium Total							2E-05						
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	8E-06	--	3E-06	--	1E-05					
			Aluminum	--	--	--	--	--					
			Arsenic	5E-06	--	4E-07	--	5E-06					
			Chemical Total	1E-05	--	4E-06	--	2E-05					
					Exposure Point Total									2E-05
		Exposure Medium Total						2E-05					
Medium Total							2E-05						

TABLE 9.8.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--					
			Aluminum	--	--	--	--	--					
			Arsenic	5E-04	--	1E-06	--	5E-04					
			Iron	--	--	--	--	--					
			Manganese (Water)	--	--	--	--	--					
			Thallium	--	--	--	--	--					
			Chemical Total	5E-04	--	1E-06	--	5E-04					
	Exposure Point Total						5E-04						
	Exposure Medium Total						5E-04						
	Groundwater	Site 1	Naphthalene	--	--	--	--	--					
			Aluminum	--	--	--	--	--					
			Arsenic	--	--	--	--	--					
			Iron	--	--	--	--	--					
			Manganese (Water)	--	--	--	--	--					
Thallium			--	--	--	--	--						
Chemical Total			--	--	--	--	--						
Exposure Point Total						--							
Exposure Medium Total						--							
Medium Total						5E-04							
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	5E-06	--	2E-06	--	7E-06					
			Chemical Total	5E-06	--	2E-06	--	7E-06					
			Exposure Point Total										
	Exposure Medium Total						7E-06						
	Groundwater	Site 1	Tetrachloroethene	--	5E-06	--	--	5E-06					
			Chemical Total	--	5E-06	--	--	5E-06					
			Exposure Point Total										
	Exposure Medium Total						5E-06						
Medium Total						1E-05							
Surface Water	Surface Water	Site 1	Arsenic	1E-07	--	2E-08	--	2E-07					
			Iron	--	--	--	--	--					
			Chemical Total	1E-07	--	2E-08	--	2E-07					
			Exposure Point Total										
Exposure Medium Total						2E-07							
Medium Total						2E-07							

TABLE 9.8.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	8E-07	--	3E-07	--	1E-06					
			Aluminum	--	--	--	--	--					
			Arsenic	4E-06	--	4E-07	--	4E-06					
			Iron	--	--	--	--	--					
			Manganese (Soil)	--	--	--	--	--					
			Chemical Total	5E-06	--	7E-07	--	6E-06					
Exposure Point Total													
Exposure Medium Total													
Medium Total													
Receptor Total			Receptor Risk Total					6E-04					

Note:
Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

TABLE 9.8.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCS
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 1 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient								
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total				
Surface Soil	Surface Soil	Site 1	Dieldrin	8E-07	--	9E-08	--	9E-07									
			Aluminum	--	--	--	--	--									
			Antimony	--	--	--	--	--									
			Arsenic	6E-07	--	2E-08	--	6E-07									
			Cobalt	--	--	--	--	--									
			Iron	--	--	--	--	--									
			Manganese (Soil)	--	--	--	--	--									
Chemical Total	1E-06	--	1E-07	--	1E-06												
		Exposure Point Total															
		Exposure Medium Total															
Medium Total																	
Subsurface Soil	Subsurface Soil	Site 1	Aroclor-1242	8E-07	--	1E-07	--	9E-07									
			Aluminum	--	--	--	--	--									
			Arsenic	5E-07	--	2E-08	--	5E-07									
			Chemical Total	1E-06	--	1E-07	--	1E-06									
					Exposure Point Total												
		Exposure Medium Total															
Medium Total																	

TABLE 9.8.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 2 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater - MW	Groundwater	Site 1	Naphthalene	--	--	--	--	--					
			Aluminum	--	--	--	--	--					
			Arsenic	6E-05	--	2E-07	--	6E-05					
			Iron	--	--	--	--	--					
			Manganese (Water)	--	--	--	--	--					
			Thallium	--	--	--	--	--					
	Chemical Total	6E-05	--	2E-07	--	6E-05							
	Exposure Point Total					6E-05							
	Exposure Medium Total					6E-05							
	Groundwater	Site 1	Naphthalene	--	--	--	--	--					
			Aluminum	--	--	--	--	--					
			Arsenic	--	--	--	--	--					
Iron			--	--	--	--	--						
Manganese (Water)			--	--	--	--	--						
Thallium			--	--	--	--	--						
Chemical Total	--	--	--	--	--								
Exposure Point Total					--								
Exposure Medium Total					--								
Medium Total					6E-05								
Groundwater - DPT	Groundwater	Site 1	Tetrachloroethene	6E-07	--	3E-07	--	9E-07					
			Chemical Total	6E-07	--	3E-07	--	9E-07					
			Exposure Point Total					9E-07					
	Exposure Medium Total					9E-07							
	Groundwater	Site 1	Tetrachloroethene	--	6E-07	--	--	6E-07					
			Chemical Total	--	6E-07	--	--	6E-07					
Exposure Point Total							6E-07						
Exposure Medium Total					6E-07								
Medium Total					2E-06								
Surface Water	Surface Water	Site 1	Arsenic	2E-08	--	3E-09	--	3E-08					
			Iron	--	--	--	--	--					
			Chemical Total	2E-08	--	3E-09	--	3E-08					
		Exposure Point Total					3E-08						
Exposure Medium Total					3E-08								
Medium Total					3E-08								

TABLE 9.8.CTE
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
CENTRAL TENDENCY EXPOSURES
NCBC GULFPORT
PAGE 3 OF 3

Scenario Timeframe: Future
Receptor Population: Residents
Receptor Age: Lifelong (Child and Adult)

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment	Sediment	Site 1	Benzo(a)pyrene Equivalents	2E-08	--	2E-09	--	2E-08					
			Aluminum	--	--	--	--	--					
			Arsenic	3E-07	--	1E-08	--	3E-07					
			Iron	--	--	--	--	--					
			Manganese (Soil)	--	--	--	--	--					
			Chemical Total	3E-07	--	1E-08	--	3E-07					
Exposure Point Total													
Exposure Medium Total													
Medium Total													
Receptor Total			Receptor Risk Total					6E-05					

Note:
Inhalation exposures are assumed to be equal to the exposures from ingestion of groundwater.

APPENDIX E.2
SAMPLE CALCULATIONS

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL CONSTRUCTION WORKERS		
BASED ON: USEPA, DECEMBER 1989		
BY: L. CIOFANI	CHECKED BY: <i>L. Dansen</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from incidental ingestion of surface soil at the Northwest Undeveloped Area.

EQUATION:
$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT}$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in soil (mg/kg)
- IR = incidental ingestion rate (mg/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- FI = fraction ingested from contaminated source (unitless)
- CF = conversion factor (1.0E-6 kg/mg)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDo = oral noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RfDo (mg/kg/day)

ASSUMPTIONS:

- Cs = 2.2 mg/kg Chemical: Arsenic
- IR = 330 mg/day
- EF = 250 days/year
- ED = 1 years
- FI = 1
- CF = 1.0E-06 kg/mg
- BW = 70 kg
- ATc = 25550 days
- ATnc = 365 days
- CSFo = 1.5E+00 (mg/kg/day)⁻¹
- RfDo = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL CONSTRUCTION WORKERS			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>A. Sanson</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$IEXc = \frac{2.2 \text{ mg/kg} \times 330 \text{ mg/day} \times 250 \text{ days/year} \times 1 \text{ years} \times 1 \times 1.0E-06 \text{ kg/mg}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$IEXc = 1.01E-07 \text{ mg/kg/day}$$

$$ILCR = 1.01E-07 \text{ mg/kg/day} \times 1.50E+00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 1.5E-07$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$IEXnc = \frac{2.2 \text{ mg/kg} \times 330 \text{ mg/day} \times 250 \text{ days/year} \times 1 \text{ years} \times 1 \times 1.0E-06 \text{ kg/mg}}{70 \text{ kg} \times 365 \text{ days}}$$

$$IEXnc = 7.10E-06 \text{ mg/kg/day}$$

$$HQ = 7.10E-06 \text{ mg/kg/day} / 3.00E-04 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$HQ = 2.4E-02$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL CONSTRUCTION WORKERS		
BASED ON: USEPA, JULY 2004		
BY: L. CIOFANI	CHECKED BY: <i>L. Ciofani</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from dermal contact with surface soil at the Northwest Undeveloped Area.

EQUATION:
$$DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$$

Where:

- DEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in soil (mg/kg)
- CF = conversion factor (1.0E-6 kg/mg)
- SA = skin surface available for contact (cm²/day)
- ABS = absorption factor (unitless)
- AF = adherence factor (mg/cm²)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFd = dermal carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDd = dermal noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RfDd (mg/kg/day)

ASSUMPTIONS:

- Cs = 2.2 mg/kg Chemical: Arsenic
- CF = 1.0E-06 kg/mg
- SA = 3300 cm²/day
- AF = 0.3 mg/cm²
- ABS = 0.03
- EF = 250 days/year
- ED = 1 years
- BW = 70 kg
- ATc = 25550 days
- ATnc = 365 days
- CSFd = 1.5E+00 (mg/kg/day)⁻¹
- RfDd = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL CONSTRUCTION WORKERS		
BASED ON: USEPA, JULY 2004		
BY: L. CIOFANI	CHECKED BY: <i>L. Danner</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$\text{DEXc} = \frac{2.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 3300 \text{ cm}^2/\text{day} \times 0.3 \text{ mg/cm}^2 \times 0.03 \times 250 \text{ days/year} \times 1 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$\text{DEXc} = 9.13\text{E-}09 \text{ mg/kg/day}$$

$$\text{ILCR} = 9.13\text{E-}09 \text{ mg/kg/day} \times 1.50\text{E+}00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$\text{ILCR} = 1.4\text{E-}08$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$\text{DEXnc} = \frac{2.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 3300 \text{ cm}^2/\text{day} \times 0.3 \text{ mg/cm}^2 \times 0.03 \times 250 \text{ days/year} \times 1 \text{ years}}{70 \text{ kg} \times 365 \text{ days}}$$

$$\text{DEXnc} = 6.39\text{E-}07 \text{ mg/kg/day}$$

$$\text{HQ} = 6.39\text{E-}07 \text{ mg/kg/day} / 3.00\text{E-}04 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$\text{HQ} = 2.1\text{E-}03$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH GROUNDWATER CONSTRUCTION WORKERS			
BASED ON: USEPA, DECEMBER 1989, JULY 2004			
BY: L. CIOFANI		CHECKED BY: <i>G. Danson</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from dermal contact with groundwater from the undeveloped area.

EQUATION:
$$DAD = \frac{DA_{event} \times EV \times ED \times EF \times A}{BW \times AT}$$

Where:

- DAD = dermally absorbed dose (mg/kg/day)
- DA_{event} = absorbed dose per event (mg/cm²/event)
- EV = event frequency (events/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- A = skin surface available for contact (cm²)
- BW = body weight (kg)
- AT = averaging time (days)
- CSF_d = dermal carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfD_d = dermal noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = DAD (mg/kg/day) x CSF_d (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = DAD (mg/kg/day) / RfD_d (mg/kg/day)

EQUATIONS for DA_{event}:

For Inorganics:

DA_{event} = K_p x C_w x CF x t_{event}

For Organics:

If t_{event} ≤ t', then:
$$DA_{event} = 2 \times FA \times K_p \times C_w \times CF \times \sqrt{\frac{6 \times \tau \times t_{event}}{\pi}}$$

If t_{event} > t', then:
$$DA_{event} = FA \times K_p \times C_w \times CF \times \left[\frac{t_{event}}{1+B} + 2 \times \tau \times \left(\frac{1+3B+3B^2}{(1+B)^2} \right) \right]$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH GROUNDWATER CONSTRUCTION WORKERS			
BASED ON: USEPA, DECEMBER 1989, JULY 2004			
BY: L. CIOFANI		CHECKED BY: <i>L. Danger</i>	DATE: 06/19/09

Where:

- Kp = permeability coefficient from water (cm/hr)
- Cgw = concentration of chemical in groundwater (mg/L)
- tevent = duration of event (hr/event)
- CF = conversion factor (0.001 L/cm³)
- t* = time it takes to reach steady-state (hr/event)
- τ = lag time (hr/event)
- B = Bunge Model Constant (dimensionless)

EXAMPLE CALCULATION OF DAevent

ASSUMPTIONS:

- Cgw = 0.00054 mg/L Chemical: Tetrachloroethene
- Kp = 3.34E-02 cm/hr
- FA = 1 unitless
- tevent = 4 hr/event
- CF = 0.001 L/cm³
- t* = 2.18 hr/event
- τ = 0.91 hr/event
- B = 0.166

tevent > t*, therefore,

$$DA_{event} = (0.0334 \text{ cm/hr}) (0.00054 \text{ mg/L}) (0.001 \text{ L/cm}^3) \times \left[\frac{4 \text{ hr/event}}{1 + 0.166} + 2 \times 0.91 \text{ hr/event} \times \frac{(1 + 3 \times 0.166 + 3 \times 0.166 \times 0.166)}{(1 + 0.166)^2} \right]$$

$$DA_{event} = 1.00E-07 \text{ mg/cm}^2/\text{event}$$

RISK CALCULATIONS

ASSUMPTIONS:

- A = 3300 cm²/day
- EV = 1 event/day
- ED = 1 years
- EF = 30 days/year
- BW = 70 kg
- ATc = 25550 days
- ATnc = 365 days
- CSFd = 5.4E-01 (mg/kg/day)⁻¹
- RfDd = 1.0E-02 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH GROUNDWATER CONSTRUCTION WORKERS			
BASED ON: USEPA, DECEMBER 1989, JULY 2004			
BY: L. CIOFANI		CHECKED BY: <i>L. Daner</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$DADc = \frac{1.00E-07 \text{ mg/cm}^2/\text{event} \times 1 \text{ event/day} \times 1 \text{ years} \times 30 \text{ days/year} \times 3300 \text{ cm}^2/\text{day}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$DADc = 5.54E-09 \text{ mg/kg/day}$$

$$DADc = 5.54E-09 \text{ mg/kg/day} \times 5.40E-01 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 3.0E-09$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$DADnc = \frac{1.00E-07 \text{ mg/cm}^2/\text{event} \times 1 \text{ event/day} \times 1 \text{ years} \times 30 \text{ days/year} \times 3300 \text{ cm}^2/\text{day}}{70 \text{ kg} \times 365 \text{ days}}$$

$$DADnc = 3.88E-07 \text{ mg/kg/day}$$

$$HQ = 3.88E-07 \text{ mg/kg/day} / 1.00E-02 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$HQ = 3.9E-05$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: ESTIMATION OF AMBIENT AIR CONCENTRATIONS IN A TRENCH RESULTING FROM VOLATILE EMISSIONS FROM GROUNDWATER.		
BASED ON: VDEQ, 2004		
BY: L. CIOFANI	CHECKED BY: <i>E. Hansen</i>	DATE: 06/19/09

PURPOSE: To calculate ambient air concentrations resulting from volatilization of tetrachloroethene (PCE) from groundwater in the developed area.

C_{trench} = CGW x VF

Where:

C_{trench} = concentration of contaminant in the trench µg/m³

CGW = concentration of contaminant in groundwater µg/L

VF = volatilization factor L/m³

1. Calculate kiG (gas-phase mass transfer coefficient of component i)

$$kiG = (MW_{H2O}/MW_i)^{0.335} \times (T/298)^{1.005} \times kG, H2O$$

Where:

kiG = gas-phase mass transfer coefficient of component i cm/s

MW_{H2O} = molecular weight of water = 18 g/mol

MW_{PCE} = molecular weight of Tetrachloroethene = 165.83 g/mol

kG, H₂O = gas-phase mass transfer coefficient of water vapor at 25°C cm/s = 0.833 cm/s

T = average system absolute temperature = 298

The value of kG, H₂O is 0.833 cm/s (Superfund Exposure Assessment Manual, U. S. EPA, April 1988)

$$kiG = (18/165.83)^{0.335} \times (298/298)^{1.005} \times 0.833 \text{ cm/s} = 3.96E-01 \text{ cm/s}$$

2. Calculate kiL (liquid-phase mass transfer coefficient of component i)

$$kiL = (MW_{O2}/MW_i)^{0.5} \times (T/298) \times kL, O2$$

Where:

kiL = liquid-phase mass transfer coefficient of component i cm/s

MW_{O2} = molecular weight of O₂ = 32 g/mol

MW_{PCE} = molecular weight of Tetrachloroethene = 165.83 g/mol

T = average system absolute temperature = 298

kL, O₂ = liquid-phase mass transfer coefficient of oxygen at 25°C cm/s = 0.002 cm/s

$$kiL = (32/165.83)^{0.5} \times (298/298) \times 0.002 \text{ cm/s} = 8.79E-04 \text{ cm/s}$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: ESTIMATION OF AMBIENT AIR CONCENTRATIONS IN A TRENCH RESULTING FROM VOLATILE EMISSIONS FROM GROUNDWATER.		
BASED ON: VDEQ, 2004		
BY: L. CIOFANI	CHECKED BY: <i>J. Danz</i>	DATE: 06/19/09

3. Calculate Ki (overall mass transfer coefficient of contaminant)

$$K_i = 1 / \{ (1/k_{iL}) + [(RT) / (H_i \times k_{iG})] \}$$

Where:

K_i = overall mass transfer coefficient of contaminant cm/s
 k_{iL} = liquid-phase mass transfer coefficient of i cm/s = 8.79E-04
 R = ideal gas constant atm-m³/mole-°K = 8.20E-05
 T = average system absolute temperature = 298
 H_i = Henry's Law constant of PCE (atm-m³/mol) = 1.84E-02
 k_{iG} = gas-phase mass transfer coefficient of i cm/s = 3.96E-01

$$K_i = 1 / \{ (1/8.79E-4) + [(298 \times 8.2E-5) / (1.8E-2 \times 0.396)] \} = 8.76E-04 \text{ cm/s}$$

4. Calculation of VF (Volatilization Factor)

$$VF = (K_i \times A \times F \times 10^{-3} \times 10^4 \times 3,600) / (ACH \times V)$$

Where:

VF = volatilization factor (L/m³)
 K_i = overall mass transfer coefficient of contaminant = 8.76E-04 cm/s
 A = area of the trench = 8.18 m²
 F = fraction of floor through which contaminant can enter (unitless) = 1
 ACH = air changes per hour = 360 h⁻¹
 V = volume of trench = 24.92 m³
 10^{-3} = conversion factor L/cm³ 0.001
 10^4 = conversion factor cm²/m² 10000
 $3,600$ = conversion factor seconds/hr 3600

$$VF = (8.76E-04 \times 8.18 \times 1 \times 10^{-3} \times 10^4 \times 3,600) / (360 \times 24.92) = 2.87E-02 \text{ L/m}^3$$

5. Calculation of C_{trench} (concentration of contaminant in the trench)

$$C_{trench} = C_{GW} \times VF$$

Where:

C_{trench} = concentration of contaminant in the trench (µg/m³)
 C_{GW} = concentration of Tetrachloroethene in groundwater = 0.54 µg/L
 VF = volatilization factor = 2.87E-02 L/m³

$$C_{trench} = 0.54 \text{ µg/L} \times 2.87E-02 \text{ L/m}^3 = 1.55E-02 \text{ µg/m}^3$$

$$1.55E-05 \text{ mg/m}^3$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INHALATION OF VOLATILES FROM GROUNDWATER - CONSTRUCTION WORKERS			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>L. Danser</i>	
		DATE: 06/19/09	

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from inhalation of volatiles from groundwater at the undeveloped area.

EQUATION:
$$EC = \frac{Ca \times ET \times EF \times ED}{AT \times 24 \text{ hours/day}}$$

Where:

- EC = exposure concentration (mg/m3)
- Ca = exposure point concentration in air (mg/m3)
- ET = exposure time (hrs/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- AT = averaging time (days)
- IURi = inhalation unit risk ((ug/m3)⁻¹)
- RfCi = inhalation reference concentration (mg/m3)

RISKS:

ILCR (Carcinogens) = Exposure Concentration (mg/m3) x IURi (ug/m3)⁻¹ x 1000 ug/mg
 HQ (Noncarcinogens) = Exposure Concentration (mg/m3) / RFCi (mg/m3)

ASSUMPTIONS:

- Ca = 1.60E-05 mg/m3 Chemical: Tetrachloroethene
- ET = 4 hr/day
- EF = 30 days/year
- ED = 1 years
- ATc = 25550 days
- ATnc = 365 days
- IURi = 5.9E-06 (ug/m3)⁻¹
- RfCi = 2.7E-01 mg/m3

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INHALATION OF VOLATILES FROM GROUNDWATER - CONSTRUCTION WORKERS		
BASED ON: USEPA, DECEMBER 1989		
BY: L. CIOFANI	CHECKED BY: <i>Z. Hanser</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$IEXc = \frac{1.60E-05 \text{ mg/m}^3 \times 4 \text{ hr/day} \times 30 \text{ days/year} \times 1 \text{ years}}{25550 \text{ days} \times 24 \text{ hours/day}}$$

$$IEXc = 3.13E-09 \text{ mg/m}^3$$

$$ILCR = 3.13E-09 \text{ mg/m}^3 \times 5.90E-06 \text{ (ug/m}^3\text{)}^{-1} \times 1000 \text{ ug/mg} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 1.8E-11$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$IEXnc = \frac{1.60E-05 \text{ mg/m}^3 \times 4 \text{ hr/day} \times 30 \text{ days/year} \times 1 \text{ years}}{365 \text{ days} \times 24 \text{ hours/day}}$$

$$IEXnc = 2.19E-07 \text{ mg/m}^3$$

$$HQ = 2.19E-07 \text{ mg/m}^3 / 2.70E-01 \text{ mg/m}^3 = \text{Hazard Quotient}$$

$$HQ = 8.1E-07$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INGESTION OF GROUNDWATER ADULT RESIDENTS		
BASED ON: USEPA, DECEMBER 1989		
BY: L. CIOFANI	CHECKED BY: <i>J. Hansen</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from ingestion of groundwater from the Developed Area.

EQUATION:

$$IEX = \frac{C_{gw} \times CF \times IR \times EF \times ED}{BW \times AT}$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- C_{gw} = exposure point concentration in groundwater (ug/L)
- CF = conversion factor (1.0E-3 mg/ug)
- IR = ingestion rate (L/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDo = oral noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RfDo (mg/kg/day)

ASSUMPTIONS:

- C_{gw} = 0.54 ug/L Chemical: Tetrachloroethene
- IR = 2 L/day
- CF = 1.0E-03 mg/ug
- EF = 350 days/year
- ED = 24 years
- BW = 70 kg
- AT_c = 25550 days
- AT_{nc} = 8760 days
- CSFo = 5.4E-01 (mg/kg/day)⁻¹
- RfDo = 1.0E-02 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INGESTION OF GROUNDWATER ADULT RESIDENTS			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>L. Danser</i>	
		DATE: 06/19/09	

EXAMPLE CARCINOGENIC CALCULATION

$$IEXc = \frac{0.54 \text{ ug/L} \times 0.001 \text{ mg/ug} \times 2 \text{ L/day} \times 350 \text{ days/year} \times 24 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$IEXc = 5.07E-06 \text{ mg/kg/day}$$

$$ILCR = 5.07E-06 \text{ mg/kg/day} \times 5.40E-01 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 2.7E-06$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$IEXnc = \frac{0.54 \text{ ug/L} \times 0.001 \text{ mg/ug} \times 2 \text{ L/day} \times 350 \text{ days/year} \times 24 \text{ years}}{70 \text{ kg} \times 8760 \text{ days}}$$

$$IEXnc = 1.48E-05 \text{ mg/kg/day}$$

$$HQ = \frac{1.48E-05 \text{ mg/kg/day}}{1.00E-02 \text{ (mg/kg/day)}} = \text{Hazard Quotient}$$

$$HQ = 1.5E-03$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SURFACE WATER ADULT TRESPASSERS			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>L. Daner</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from incidental ingestion of surface water.

EQUATION:
$$IEX = \frac{C_{sw} \times CF \times CR_{sw} \times ET \times EF \times ED}{BW \times AT}$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- C_{sw} = exposure point concentration in surface water (ug/L)
- CF = conversion factor (1.0E-3 mg/ug)
- CR_{sw} = contact rate (L/hour)
- ET = exposure time (hours/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDo = oral noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RfDo (mg/kg/day)

ASSUMPTIONS:

- C_{sw} = 3.4 ug/L Chemical: Arsenic
- CR_{sw} = 0.01 L/hr
- CF = 1.0E-03 mg/ug
- ET = 1 hours/day
- EF = 30 days/year
- ED = 19 years
- BW = 70 kg
- ATc = 25550 days
- ATnc = 6935 days
- CSFo = 1.5E+00 (mg/kg/day)⁻¹
- RfDo = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SURFACE WATER ADULT TRESPASSERS		
BASED ON: USEPA, DECEMBER 1989		
BY: L. CIOFANI	CHECKED BY: <i>L. Danser</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$IEX_c = \frac{3.4 \text{ ug/L} \times 1.0E-03 \text{ mg/ug} \times 0.01 \text{ L/hr} \times 1 \text{ hours/day} \times 30 \text{ days/year} \times 19 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$IEX_c = 1.08E-08 \text{ mg/kg/day}$$

$$ILCR = 1.08E-08 \text{ mg/kg/day} \times 1.50E+00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 1.6E-08$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$IEX_{nc} = \frac{3.4 \text{ ug/L} \times 1.0E-03 \text{ mg/ug} \times 0.01 \text{ L/hr} \times 1 \text{ hours/day} \times 30 \text{ days/year} \times 19 \text{ years}}{70 \text{ kg} \times 6935 \text{ days}}$$

$$IEX_{nc} = 3.99E-08 \text{ mg/kg/day}$$

$$HQ = \frac{3.99E-08 \text{ mg/kg/day}}{3.00E-04 \text{ (mg/kg/day)}} = \text{Hazard Quotient}$$

$$HQ = 1.3E-04$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SURFACE WATER ADULT RESIDENTS		
BASED ON: U.S. EPA, DECEMBER 1989, JULY 2004		
BY: L. CIOFANI	CHECKED BY: <i>L. Ganser</i>	DATE: 06/22/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from dermal contact with surface water.

EQUATION:
$$DAD = \frac{DA_{event} \times EV \times ED \times EF \times A}{BW \times AT}$$

Where:

- DAD = dermally absorbed dose (mg/kg/day)
- DA_{event} = absorbed dose per event (mg/cm²/event)
- EV = event frequency (events/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- A = skin surface available for contact (cm²)
- BW = body weight (kg)
- AT = averaging time (days)
- CSF_o = oral carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfD_o = oral noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = DAD (mg/kg/day) x CSF_d (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = DAD (mg/kg/day) / RfD_d (mg/kg/day)

EQUATIONS for DA_{event}:

For Inorganics:

DA_{event} = K_p x C_w x CF x t_{event}

For Organics:

If t_{event} ≤ t', then:
$$DA_{event} = 2 \times FA \times K_p \times C_w \times CF \times \sqrt{\frac{6 \times \tau \times t_{event}}{\pi}}$$

If t_{event} > t', then:
$$DA_{event} = FA \times K_p \times C_w \times CF \times \left[\frac{t_{event}}{1+B} + 2 \times \tau \times \left(\frac{1+3B+3B^2}{(1+B)^2} \right) \right]$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SURFACE WATER ADULT RESIDENTS			
BASED ON: U.S. EPA, DECEMBER 1989, JULY 2004			
BY: L. CIOFANI		CHECKED BY: <i>L. Danson</i>	DATE: 06/22/09

Where:

- Kp = permeability coefficient from water (cm/hr)
- Cgw = concentration of chemical in surface water (mg/L)
- tevent = duration of event (hr/event)
- CF = conversion factor (0.001 L/cm³)
- t* = time it takes to reach steady-state (hr/event)
- τ = lag time (hr/event)
- B = Bunge Model Constant (dimensionless)

EXAMPLE CALCULATION OF DAevent

ASSUMPTIONS:

- Cgw = 3.4 ug/L Chemical: Arsenic
- Kp = 1.00E-03 cm/hr
- tevent = 1 hr/event
- CF = 0.001 L/cm³

DAevent = 0.001 cm/hr x 3.4 ug/L x 0.001 L/cm³ x 1 hr/event x 0.001 mg/ug

DAevent = 3.40E-09 mg/cm²/event

RISK CALCULATIONS

ASSUMPTIONS:

- A = 5700 cm²/day
- EV = 1 event/day
- ED = 24 years
- EF = 30 days/year
- BW = 70 kg
- ATc = 25550 days
- ATnc = 8760 days
- CSFd = 1.5E+00 (mg/kg/day)⁻¹
- RfDd = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SURFACE WATER ADULT RESIDENTS			
BASED ON: U.S. EPA, DECEMBER 1989, JULY 2004			
BY: L. CIOFANI		CHECKED BY: <i>J. Danner</i>	DATE: 06/22/09

EXAMPLE CARCINOGENIC CALCULATION

$$DADc = \frac{3.40E-09 \text{ mg/cm}^2/\text{event} \times 1 \text{ event/day} \times 24 \text{ years} \times 30 \text{ days/year} \times 5700 \text{ cm}^2/\text{day}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$DADc = 7.80E-09 \text{ mg/kg/day}$$

$$DADc = 7.80E-09 \text{ mg/kg/day} \times 1.50E+00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 1.2E-08$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$DADnc = \frac{3.40E-09 \text{ mg/cm}^2/\text{event} \times 1 \text{ event/day} \times 24 \text{ years} \times 30 \text{ days/year} \times 5700 \text{ cm}^2/\text{day}}{70 \text{ kg} \times 8760 \text{ days}}$$

$$DADnc = 2.28E-08 \text{ mg/kg/day}$$

$$HQ = 2.28E-08 \text{ mg/kg/day} / 3.00E-04 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$HQ = 7.6E-05$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT ADULT TRESPASSER			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>L. Danson</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from incidental ingestion of sediment.

EQUATION:
$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT}$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- IR = incidental ingestion rate (mg/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- FI = fraction ingested from contaminated source (unitless)
- CF = conversion factor (1.0E-6 kg/mg)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDo = oral noncarcinogenic reference dose (mg/kg/day)

RISKS:

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹
 HQ (Noncarcinogens) = Intake (mg/kg/day) / RFDo (mg/kg/day)

ASSUMPTIONS:

- Cs = 19.8 mg/kg Chemical: Arsenic
- IR = 50 mg/day
- EF = 30 days/year
- ED = 19 years
- FI = 1
- CF = 1.0E-06 kg/mg
- BW = 70 kg
- ATc = 25550 days
- ATnc = 6935 days
- CSFo = 1.5E+00 (mg/kg/day)⁻¹
- RfDo = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT ADULT TRESPASSER			
BASED ON: USEPA, DECEMBER 1989			
BY: L. CIOFANI		CHECKED BY: <i>L. Sanson</i>	
		DATE: 06/19/09	

EXAMPLE CARCINOGENIC CALCULATION

$$IEXc = \frac{19.8 \text{ mg/kg} \times 50 \text{ mg/day} \times 30 \text{ days/year} \times 19 \text{ years} \times 1.0E-06 \text{ kg/mg}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$IEXc = 3.16E-07 \text{ mg/kg/day}$$

$$ILCR = 3.16E-07 \text{ mg/kg/day} \times 1.50E+00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$ILCR = 4.7E-07$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$IEXnc = \frac{19.8 \text{ mg/kg} \times 50 \text{ mg/day} \times 30 \text{ days/year} \times 19 \text{ years} \times 1.0E-06 \text{ kg/mg}}{70 \text{ kg} \times 6935 \text{ days}}$$

$$IEXnc = 1.16E-06 \text{ mg/kg/day}$$

$$HQ = 1.16E-06 \text{ mg/kg/day} / 3.00E-04 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$HQ = 3.9E-03$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT ADULT TRESPASSER		
BASED ON: USEPA, JULY 2004		
BY: L. CIOFANI	CHECKED BY: <i>L. D'Amico</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic and noncarcinogenic risks from dermal contact with sediment.

EQUATION: $DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$

Where:

- DEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- CF = conversion factor (1.0E-6 kg/mg)
- SA = skin surface available for contact (cm²/day)
- ABS = absorption factor (unitless)
- AF = adherence factor (mg/cm²)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- CSFd = dermal carcinogenic slope factor ((mg/kg/day)⁻¹)
- RfDd = dermal noncarcinogenic reference dose (mg/kg/day)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RfDd (mg/kg/day)

ASSUMPTIONS:

- Cs = 19.8 mg/kg Chemical: Arsenic
- CF = 1.0E-06 kg/mg
- SA = 5700 cm²/day
- AF = 0.07 mg/cm²
- ABS = 0.03
- EF = 30 days/year
- ED = 19 years
- BW = 70 kg
- ATc = 25550 days
- ATnc = 6935 days
- CSFd = 1.5E+00 (mg/kg/day)⁻¹
- RfDd = 3.0E-04 (mg/kg/day)

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT ADULT TRESPASSER		
BASED ON: USEPA, JULY 2004		
BY: L. CIOFANI	CHECKED BY: <i>L. Danse</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$\text{DEXc} = \frac{19.8 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5700 \text{ cm}^2/\text{day} \times 0.07 \text{ mg/cm}^2 \times 0.03 \times 30 \text{ days/year} \times 19 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}}$$

$$\text{DEXc} = 7.55\text{E-}08 \text{ mg/kg/day}$$

$$\text{ILCR} = 7.55\text{E-}08 \text{ mg/kg/day} \times 1.50\text{E+}00 \text{ (mg/kg/day)}^{-1} = \text{Incremental Lifetime Cancer Risk}$$

$$\text{ILCR} = 1.1\text{E-}07$$

EXAMPLE NONCARCINOGENIC CALCULATION

$$\text{DEXnc} = \frac{19.8 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5700 \text{ cm}^2/\text{day} \times 0.07 \text{ mg/cm}^2 \times 0.03 \times 30 \text{ days/year} \times 19 \text{ years}}{70 \text{ kg} \times 6935 \text{ days}}$$

$$\text{DEXnc} = 2.78\text{E-}07 \text{ mg/kg/day}$$

$$\text{HQ} = 2.78\text{E-}07 \text{ mg/kg/day} / 3.00\text{E-}04 \text{ (mg/kg/day)} = \text{Hazard Quotient}$$

$$\text{HQ} = 9.3\text{E-}04$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT FOR MUTAGENIC CHEMICALS - CHILD RESIDENTS		
BASED ON: USEPA, DECEMBER 1989, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>L. Dawson</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic risks for mutagenic chemicals from incidental ingestion of sediment.

EQUATION:
$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT} \times ADAF$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- IR = incidental ingestion rate (mg/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- FI = fraction ingested from contaminated source (unitless)
- CF = conversion factor (1.0E-6 kg/mg)
- BW = body weight (kg)
- AT = averaging time (days)
- ADAF = age-dependent adjustment factor
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)

RISKS:

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹

ASSUMPTIONS:

- Cs = 0.2 mg/kg Chemical: Benzo(a)pyrene Equivalents
- IR = 200 mg/day
- EF = 30 days/year
- ED₁ = 2 years
- ED₂ = 4 years
- FI = 1
- CF = 1.0E-06 kg/mg
- BW = 15 kg
- ATc = 25550 days
- CSFo = 7.3E+00 (mg/kg/day)⁻¹
- ADAF₁ = 10
- ADAF₂ = 3

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT FOR MUTAGENIC CHEMICALS - CHILD RESIDENTS		
BASED ON: USEPA, DECEMBER 1989, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>L. Danson</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$IEXc = \frac{0.2 \text{ mg/kg} \times 200 \text{ mg/day} \times 30 \text{ days/year} \times 2 \text{ years} \times 1.0E-06 \text{ kg/mg}}{15 \text{ kg} \times 25550 \text{ days}} \times 10$$

$$IEXc = 6.26E-08 \text{ mg/kg/day}$$

$$IEXc = \frac{0.2 \text{ mg/kg} \times 200 \text{ mg/day} \times 30 \text{ days/year} \times 4 \text{ years} \times 1.0E-06 \text{ kg/mg}}{15 \text{ kg} \times 25550 \text{ days}} \times 3$$

$$IEXc = 3.76E-08 \text{ mg/kg/day}$$

$$ILCR = (6.26E-08 \text{ mg/kg/day} + 3.76E-08 \text{ mg/kg/day}) \times 7.30E+00 \text{ (mg/kg/day)}^{-1}$$

$$ILCR = 7.3E-07$$

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT FOR MUTAGENIC CHEMICALS - CHILD RESIDENTS		
BASED ON: USEPA, JULY 2004, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>L. Hansen</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic risks for mutagenic chemicals from dermal contact with sediment.

EQUATION:
$$DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$$

Where:

- DEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- CF = conversion factor (1.0E-6 kg/mg)
- SA = skin surface available for contact (cm²/day)
- ABS = absorption factor (unitless)
- AF = adherence factor (mg/cm²)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- ADAF = age-dependent adjustment factor
- CSFd = dermal carcinogenic slope factor ((mg/kg/day)⁻¹)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RFDd (mg/kg/day)

ASSUMPTIONS:

- Cs = 0.2 mg/kg Chemical: Benzo(a)pyrene Equivalents
- CF = 1.0E-06 kg/mg
- SA = 2800 cm²/day
- AF = 0.2 mg/cm²
- ABS = 0.13
- EF = 30 days/year
- ED₁ = 2 years
- ED₂ = 4 years
- BW = 15 kg
- ATc = 25550 days
- CSFd = 7.3E+00 (mg/kg/day)⁻¹
- ADAF₁ = 10
- ADAF₂ = 3

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT FOR MUTAGENIC CHEMICALS - CHILD RESIDENTS		
BASED ON: USEPA, JULY 2004, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>J. Hansen</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$\text{DEXc} = \frac{0.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 2800 \text{ cm}^2/\text{day} \times 0.2 \text{ mg/cm}^2 \times 0.13 \times 30 \text{ days/year} \times 2 \text{ years}}{15 \text{ kg} \times 25550 \text{ days}} \times 10$$

$$\text{DEXc} = 2.28\text{E-}08 \text{ mg/kg/day}$$

$$\text{DEXc} = \frac{0.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 2800 \text{ cm}^2/\text{day} \times 0.2 \text{ mg/cm}^2 \times 0.13 \times 30 \text{ days/year} \times 2 \text{ years}}{15 \text{ kg} \times 25550 \text{ days}} \times 3$$

$$\text{DEXc} = 1.37\text{E-}08 \text{ mg/kg/day}$$

$$\text{ILCR} = (2.28\text{E-}08 \text{ mg/kg/day} + 1.37\text{E-}08 \text{ mg/kg/day}) \times 7.30\text{E+}00 \text{ (mg/kg/day)}^{-1}$$

$$\text{ILCR} = 2.7\text{E-}07$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT FOR MUTAGENIC CHEMICALS - ADULT RESIDENTS		
BASED ON: USEPA, DECEMBER 1989, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>J. Danson</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic risks for mutagenic chemicals from incidental ingestion of sediment.

EQUATION:
$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT} \times ADAF$$

Where:

- IEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- IR = incidental ingestion rate (mg/day)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- FI = fraction ingested from contaminated source (unitless)
- CF = conversion factor (1.0E-6 kg/mg)
- BW = body weight (kg)
- AT = averaging time (days)
- ADAF = age-dependent adjustment factor
- CSFo = oral carcinogenic slope factor ((mg/kg/day)⁻¹)

RISKS:

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)⁻¹

ASSUMPTIONS:

- Cs = 0.2 mg/kg Chemical: Benzo(a)pyrene Equivalents
- IR = 100 mg/day
- EF = 30 days/year
- ED₁ = 10 years
- ED₂ = 14 years
- FI = 1
- CF = 1.0E-06 kg/mg
- BW = 70 kg
- ATc = 25550 days
- CSFo = 7.3E+00 (mg/kg/day)⁻¹
- ADAF₁ = 3
- ADAF₂ = 1

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700
SUBJECT: CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SEDIMENT FOR MUTAGENIC CHEMICALS - ADULT RESIDENTS		
BASED ON: USEPA, DECEMBER 1989, MARCH 2005		
BY: L. CIOFANI	CHECKED BY: <i>L. Sanson</i>	DATE: 06/19/09

EXAMPLE CARCINOGENIC CALCULATION

$$\text{IEXc} = \frac{0.2 \text{ mg/kg} \times 100 \text{ mg/day} \times 30 \text{ days/year} \times 10 \text{ years} \times 1.0\text{E-}06 \text{ kg/mg}}{70 \text{ kg} \times 25550 \text{ days}} \times 3$$

$$\text{IEXc} = 1.01\text{E-}08 \text{ mg/kg/day}$$

$$\text{IEXc} = \frac{0.2 \text{ mg/kg} \times 100 \text{ mg/day} \times 30 \text{ days/year} \times 14 \text{ years} \times 1.0\text{E-}06 \text{ kg/mg}}{70 \text{ kg} \times 25550 \text{ days}} \times 1$$

$$\text{IEXc} = 4.70\text{E-}09 \text{ mg/kg/day}$$

$$\text{ILCR} = (1.01\text{E-}08 \text{ mg/kg/day} + 4.70\text{E-}09 \text{ mg/kg/day}) \times 7.30\text{E+}00 \text{ (mg/kg/day)}^{-1}$$

$$\text{ILCR} = 1.1\text{E-}07$$

CALCULATION WORKSHEET

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT FOR MUTAGENIC CHEMICALS - ADULT RESIDENTS			
BASED ON: USEPA, JULY 2004, MARCH 2005			
BY: L. CIOFANI		CHECKED BY: <i>L. Danner</i>	DATE: 06/19/09

PURPOSE: To estimate intake, carcinogenic risks for mutagenic chemicals from dermal contact with sediment.

EQUATION: $DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$

Where:

- DEX = estimated exposure intake (mg/kg/day)
- Cs = exposure point concentration in sediment (mg/kg)
- CF = conversion factor (1.0E-6 kg/mg)
- SA = skin surface available for contact (cm²/day)
- ABS = absorption factor (unitless)
- AF = adherence factor (mg/cm²)
- EF = exposure frequency (days/year)
- ED = exposure duration (years)
- BW = body weight (kg)
- AT = averaging time (days)
- ADAF = age-dependent adjustment factor
- CSFd = dermal carcinogenic slope factor ((mg/kg/day)⁻¹)

RISKS:

- ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)⁻¹
- HQ (Noncarcinogens) = Intake (mg/kg/day) / RFDd (mg/kg/day)

ASSUMPTIONS:

- Cs = 0.2 mg/kg Chemical: Benzo(a)pyrene Equivalents
- CF = 1.0E-06 kg/mg
- SA = 5700 cm²/day
- AF = 0.07 mg/cm²
- ABS = 0.13
- EF = 30 days/year
- ED₁ = 10 years
- ED₂ = 14 years
- BW = 70 kg
- ATc = 25550 days
- CSFd = 7.3E+00 (mg/kg/day)⁻¹
- ADAF₁ = 3
- ADAF₂ = 1

CLIENT: NCBC GULFPORT		JOB NUMBER: 00700	
SUBJECT: CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SEDIMENT FOR MUTAGENIC CHEMICALS - ADULT RESIDENTS			
BASED ON: USEPA, JULY 2004, MARCH 2005			
BY: L. GIOFANI		CHECKED BY: <i>L. Hansen</i>	
		DATE: 06/19/09	

EXAMPLE CARCINOGENIC CALCULATION

$$\text{DEXc} = \frac{0.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5700 \text{ cm}^2/\text{day} \times 0.07 \text{ mg/cm}^2 \times 0.13 \times 30 \text{ days/year} \times 10 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}} \times 3$$

$$\text{DEXc} = 5.22\text{E-}09 \text{ mg/kg/day}$$

$$\text{DEXc} = \frac{0.2 \text{ mg/kg} \times 1.0\text{E-}06 \text{ kg/mg} \times 5700 \text{ cm}^2/\text{day} \times 0.07 \text{ mg/cm}^2 \times 0.13 \times 30 \text{ days/year} \times 14 \text{ years}}{70 \text{ kg} \times 25550 \text{ days}} \times 1$$

$$\text{DEXc} = 2.44\text{E-}09 \text{ mg/kg/day}$$

$$\text{ILCR} = (5.22\text{E-}09 \text{ mg/kg/day} + 2.44\text{E-}09 \text{ mg/kg/day}) \times 7.30\text{E+}00 \text{ (mg/kg/day)}^{-1}$$

$$\text{ILCR} = 5.6\text{E-}08$$

APPENDIX E.3

VAPOR INTRUSION MODELING RESULTS

DATA ENTRY SHEET

GW-SCREEN
Version 3.1; 02/04

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION
(enter "X" in "YES" box and initial groundwater conc. below)

YES

Reset to
Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_w ($\mu\text{g/L}$)	Chemical
79016	3.20E-01	Trichloroethylene

MORE
↓

ENTER Depth below grade of enclosed space floor, L_f (cm)	ENTER Depth below grade to water table, L_{wt} (cm)	ENTER SCS soil type directly above water table	ENTER Average soil/ groundwater temperature, T_s ($^{\circ}\text{C}$)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
15	76	S	21	5

MORE
↓

ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)	ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^v (g/cm^3)	ENTER Vadose zone soil total porosity, n^v (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^v (cm^3/cm^3)
S			S	1.66	0.375	0.054

MORE
↓

ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)	ENTER Averaging time for carcinogens, AT_c (yrs)	ENTER Averaging time for noncarcinogens, AT_{nc} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
1.0E-06	1	70	30	30	350

Used to calculate risk-based groundwater concentration.

CHEMICAL PROPERTIES SHEET

ABC

Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Henry's law constant at reference temperature, H ($\text{atm}\cdot\text{m}^3/\text{mol}$)	Henry's law constant reference temperature, T_R ($^{\circ}\text{C}$)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B ($^{\circ}\text{K}$)	Critical temperature, T_C ($^{\circ}\text{K}$)	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) $^{-1}$	Reference conc., RfC (mg/m^3)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	1.66E+02	1.47E+03	2.0E-06	0.0E+00

END

INTERMEDIATE CALCULATIONS SHEET

Source-building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^v (cm^3/cm^3)	Vadose zone effective total fluid saturation, S_{ie} (cm^3/cm^3)	Vadose zone soil intrinsic permeability, k_i (cm^2)	Vadose zone soil relative air permeability, k_{rg} (cm^2)	Vadose zone soil effective vapor permeability, k_v (cm^2)	Thickness of capillary zone, L_{cz} (cm)	Total porosity in capillary zone, n_{cz} (cm^3/cm^3)	Air-filled porosity in capillary zone, $\theta_{a,cz}$ (cm^3/cm^3)	Water-filled porosity in capillary zone, $\theta_{w,cz}$ (cm^3/cm^3)	Floor-wall seam perimeter, X_{crack} (cm)
61	0.321	0.003	1.01E-07	0.998	1.01E-07	17.05	0.375	0.122	0.253	4,000

Bldg. ventilation rate, $Q_{building}$ (cm^3/s)	Area of enclosed space below grade, A_B (cm^2)	Crack-to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. groundwater temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. groundwater temperature, H_{TS} (atm- m^3/mol)	Henry's law constant at ave. groundwater temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_{v}^{eff} (cm^2/s)	Capillary zone effective diffusion coefficient, D_{cz}^{eff} (cm^2/s)	Total overall effective diffusion coefficient, D_T^{eff} (cm^2/s)
1.69E+04	1.00E+06	4.00E-04	15	8,420	8.47E-03	3.51E-01	1.79E-04	1.28E-02	5.08E-04	1.65E-03

Diffusion path length, L_d (cm)	Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm^3/s)	Crack effective diffusion coefficient, D_{crack}^{eff} (cm^2/s)	Area of crack, A_{crack} (cm^2)	Exponent of equivalent foundation Peclet number, $\exp(\text{Pe}^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)	Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) $^{-1}$	Reference conc., RfC (mg/m^3)
61	15	1.12E+02	0.10	8.33E+01	1.28E-02	4.00E+02	7.02E+70	1.20E-03	1.35E-01	2.0E-06	NA

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.47E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-07	NA

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based groundwater concentration is based on a route-to-route extrapolation.

END

APPENDIX F

**SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT
FOOD – CHAIN MODELING**

APPENDIX F
FOOD CHAIN MODELING AT SITE 1

The objective of the food chain modeling was to evaluate potential risks to representative receptors from screening-level COPCs in Site 1 sediment and surface water that are known to bioaccumulate or biomagnify. USEPA Region 4 considers chemicals in this category to consist of those so designated in *Bioaccumulation Testing and Interpretation for the Purpose of Sediment Quality Assessment, Status and Needs* (USEPA, 2000), with the exception of PAHs. USEPA Region 4 does not consider PAHs to bioaccumulate unless they are present at percent levels in soil or sediment. Screening-level COPCs in Site 1 sediment and surface water are shown in Tables 7-2 and 7-3 of the ecological risk assessment; those that are known to bioaccumulate or biomagnify consist of aldrin, alpha-BHC, delta-BHC, alpha-chlordane, gamma-chlordane, heptachlor epoxide, arsenic, lead, and zinc. The remaining COPCs are not known to bioaccumulate or biomagnify and were not included in the food chain model.

Risk via the food chain was evaluated using two scenarios. The first scenario used maximum detected COPC concentrations in sediment and surface water and conservative assumptions for body weight, food consumption, and sediment ingestion. The second scenario used average COPC concentrations, and less conservative values for body weight, food consumption, and sediment ingestion, except where noted. For brevity, the first scenario will hereafter be referred to as the conservative scenario, and the second scenario will be referred to as the average scenario. For each scenario, ingested doses for birds and mammals were calculated using the equation shown below.

$$PD = [(C_{\text{food}} \times I_f) + (C_{\text{water}} \times I_w) + (C_{\text{sed}} \times I_{\text{sed}})] \times AUF / BW \quad (\text{Equation 1})$$

where: PD = predicted dose from the ingestion of food and water and the incidental ingestion of sediment (mg/kg/day)

C_{food} = contaminant concentration in food (mg/kg)

I_f = food ingestion rate (kg/day)

C_{water} = contaminant concentration in water (mg/L)

I_w = water ingestion rate (L/day)

C_{sed} = contaminant concentration in sediment (mg/kg)

I_{sed} = sediment ingestion rate (kg/day)

AUF = area use factor (portion of home range that overlaps Site 1)

BW = weight of receptor (kg)

REPRESENTATIVE RECEPTORS AND EXPOSURE FACTORS

The mink (*Mustela vison*) was used to represent mammals that prey upon fish and invertebrates in water bodies along the edge of Site 1. Birds that prey on fish and invertebrates were represented by the green heron (*Butorides virescens*). These two species have a high probability of exposure to surface water and sediment contaminants based on their diet and habitat preferences. The selected species are assumed to be representative of other species within the same trophic group or guild and represent the groups of organisms specified in the assessment endpoints. Information regarding these representative receptors is presented below and in Table F-1. Values for body weight, food consumption, and water consumption were taken preferentially from the *Wildlife Exposure Factors Handbook* (USEPA, 1993). Table E2 presents the values for body weight, food and water consumption, and incidental sediment ingestion that were used in the food chain model (Equation 1), and was derived from Table E1.

Mink

The mink is the most abundant and widespread carnivorous mammal in North America. Mink are found in freshwater and brackish coastal marshes, wetlands, swamps, and along the edges of rivers, streams, lakes, lakes, and ditches (USEPA, 1993). They are never found far from water (Lowery, 1974). Mink tend to use brushy or wooded cover adjacent to water where prey is abundant. Mink den in cavities in tree roots, brush piles, rock piles, logjams, or bank burrows of other animals, particularly muskrats. Mink are largely nocturnal but may move or feed during crepuscular (twilight) periods or during cloudy daylight conditions (USEPA, 1993).

Mink are carnivorous opportunistic predators, taking whatever prey is abundant. They feed on fish, crustaceans, and amphibians in aquatic habitats. Mammals are the most important prey in nearby terrestrial habitats where mink prey especially on mice, rats, and rabbits, and also birds, reptiles, and insects (Lowery, 1974; USEPA, 1993).

Mean body weight values for adult wild mink (non-farm raised) were 1.040 kg (male, summer), 1.233 kg (male, fall), 0.550 kg (female, summer), and 0.586 kg (female, fall) in studies summarized in USEPA's *Wildlife Exposure Factors Handbook* (1993). Because female mink are especially sensitive to COPCs such as Aroclor, mink body weight and food ingestion values in the Site 1 ecological risk assessment were based on female data. Therefore, the BW term in Equation 1 was 0.550 kg in the conservative scenario and 0.568 kg (average female summer and fall) in the average scenario (Tables F-1 and F-2).

Food ingestion rates for mink ranged from 0.12 to 0.22 g/g body weight/day (USEPA, 1993). Food ingestion in the conservative scenario (0.0678 kg/day; Table F-2) was derived by multiplying the maximum food ingestion rate (0.22 g/g body weight/day) by the maximum body weight (1.233 kg), then multiplying by 0.25 to convert the ingestion rate from a wet-weight value to a dry-weight value, based on a 75-percent moisture content in fish (Sample, et al., 1997). Food ingestion in the average scenario (0.0227 kg/day; Table F-2) was derived by multiplying the female food ingestion rate (0.16 g/g body weight/day) by the average female body weight (0.568 kg; Table F-2), then multiplying by 0.25 to convert the ingestion rate from a wet-weight value to a dry-weight value.

Water ingestion rates for mink ranged from 0.028 to 0.11 g/g body weight/day (USEPA, 1993). Water ingestion in the conservative scenario (0.1356 L/day; Table F-2) was derived by multiplying the maximum water ingestion rate (0.11 g/g body weight/day) by the maximum body weight (1.233 kg). Water ingestion rate in the less conservative scenario (0.0392 L/day; Table F-2) was derived by multiplying the average female water ingestion rate (0.069 g/g body weight/day) by the average female body weight (0.568 kg).

The two incidental sediment ingestion rates in Table F-2 (0.0064 kg/day and 0.0021 kg/day) were calculated by multiplying the two food ingestion rates (0.0678 kg/day and 0.0227 kg/day) by incidentally ingested sediment (9.4 percent of diet). The 9.4 percent value is based on the incidental soil/sediment ingestion rate of the raccoon (Beyer, et al., 1994), which also forages on aquatic organisms, because sediment ingestion data were not available for the mink.

Green Heron

The green heron is a common bird in wetland thickets throughout the eastern United States. It is typically a bird of swampy thickets where it forages in both fresh and salt water, especially along forested margins of ponds, lakes, rivers, streams, marshes, and swamps. It prefers thick vegetation but will feed in the open when food is available. Small fish are the primary prey, but green herons also consume insects and a variety of aquatic invertebrates. Breeding populations in Mississippi are non-migratory (Davis and Kushlan, 1994). The green heron would undoubtedly forage in water bodies near Site 1, and its small size relative to other wading birds makes it a good representative of other bird species that prey on aquatic and benthic organisms (a low body weight is usually associated with high food intake per unit body weight).

Data for the green heron were not included in USEPA's *Wildlife Exposure Factors Handbook* (USEPA, 1993), so data were obtained elsewhere. The mean adult body weight of 34 green herons in Florida was 212 g (Dunning, 1993). Minimum and maximum body weights were not

provided, but the standard deviation was 5.92 g (Dunning, 1993). A value of 0.200 kg was used as the BW term in Equation 1 for the conservative scenario (Table F-2). This value is the mean minus two standard deviations from Dunning's data. The BW term in Equation 1 for the average scenario was the mean (0.212 kg) from Dunning's data.

Food ingestion rates for the green heron were not available. Nagy (2001) provided allometric equations for several orders of birds but not for Ciconiiformes (herons). Dry weight food ingestion in the conservative scenario (0.031 kg/day; Table F-2) was derived using the Nagy (2001) equation for "marine birds" based on a 0.224 kg bird. The 0.224 kg body weight value is the mean plus 2 standard deviations from Dunning's (1993) green heron data (see paragraph immediately above); this value would approximate the 98th percentile, and thus, represents a conservative approach. Dry weight food ingestion in the average scenario (0.030 kg/day; Table F-2) was derived using the Nagy (2001) equation for marine birds based on a 0.212 kg bird, which is the mean body weight value from Dunning's (1993) green heron data.

Water ingestion rates for the green heron were not available. Water ingestion in the conservative scenario (0.022 L/day; Table F-2) was derived using equation 3-15 from the *Wildlife Exposure Factors Handbook* (USEPA, 1993) for a 0.224 kg bird. Water ingestion in the average scenario (0.021 L/day; Table F-2) was derived using equation 3-15 from the *Wildlife Exposure Factors Handbook* (USEPA, 1993) for a 0.212 kg bird.

Sediment ingestion data for piscivorous birds were not available in the literature. A sediment ingestion rate of 5 percent for piscivorous birds was used in Equation 1. Unlike shorebirds, herons do not probe the sediment. Green herons and other wading birds typically capture prey with a darting stroke, grasping or spearing with the bill (Davis and Kushlan, 1994). Similarly, piscivorous birds such as the belted kingfisher and osprey capture prey primarily from the water column rather than by probing on or near the sediment substrate. Therefore, an assumed value of 5 percent for incidental sediment ingestion is probably a very conservative estimate for the green heron as well as for other piscivorous birds. The two sediment ingestion rates in Table F-2 (0.0016 kg/day and 0.0015 kg/day) were calculated by multiplying the two food ingestion rates (0.031 kg/day and 0.030 kg/day) by 0.05, assuming that incidentally ingested sediment is 5 percent of the diet.

CHEMICAL CONCENTRATIONS IN FOOD ITEMS

Chemical concentrations in food items (the “ C_{food} ” term in Equation 1) were calculated using biota sediment accumulation factors (BSAFs), which are shown in Table F-3.

Chemical concentrations of organic compounds in food items of piscivorous birds and mammals were estimated using the following equation (USEPA, 2004):

$$C_f = \text{BSAF}(C_s/f_{\text{oc}})f_l \quad (\text{Equation 2})$$

where:

- C_f = chemical concentration in food (mg/kg)
- C_s = chemical concentration in sediment (mg/kg)
- BSAF = biota-sediment accumulation factor (ratio of the concentration of a chemical in tissue, normalized to lipid, to the concentration of the chemical in surface sediment, normalized to organic carbon)
- f_{oc} = total organic carbon (TOC) content of sediment expressed as a decimal fraction
- f_l = organism lipid content expressed as a decimal fraction

BSAFs for organic compounds were obtained from *The Incidence and Severity of Sediment Contamination in Surface Waters of the United States, National Sediment Quality Survey: Second Edition* (USEPA, 2004).

The average sediment TOC for use in the fcm is 16472 mg/kg.

The average total organic carbon (TOC) value in Site 1 samples was used to calculate the dose for piscivorous birds and mammals because these receptors obtain their food over a large area. TOC was measured in five sediment samples at Site 1; the average TOC was 16,472 mg/kg, which equates to 1.6472 percent. Thus, a value of 0.016472 was used to represent the f_{oc} term in Equation 2 for organic compounds.

A lipid content of 3 percent (0.03) is often used for assessing human health effects from the consumption of contaminated fish (USEPA, 2004); this value was divided by 0.25 to convert the lipid content from a wet-weight value to a dry-weight value (0.12), based on a 75 percent moisture content in fish (Sample et al., 1997). Thus, 0.12 was used to represent f_l in Equation 2 for organic compounds.

Sediment-to-fish BSAFs are not available for metals, so sediment-to-aquatic invertebrate BSAFs from ORNL (1998) were used to estimate tissue concentrations of metals (arsenic, lead, and zinc) in food items of piscivorous birds and mammals. The BSAFs for metals are not normalized to lipids or TOC, so concentrations of metals in aquatic and benthic invertebrates were estimated by multiplying each COPC's sediment concentration by its associated BSAF.

AREA USE FACTORS

In ecological risk assessments, the home range size of a representative receptor can be used to determine the proportion of time that an individual animal is expected to contact contaminated environmental media. Home range is defined as the geographic area encompassed by an animal's activities (except migration) over a specified time. The home range of each representative receptor was assumed to be equal in size to Site 1 in both the conservative and average initial estimates of ingested doses (i.e., AUF in Equation 1 = 1.0). Due to the size of Site 1, this assumption is probably overly conservative for piscivorous receptors such as the green heron and mink.

ECOLOGICAL EFFECTS EVALUATION

Potential effects to representative piscivorous birds and mammals were evaluated by comparing the modeled ingested doses to threshold oral toxicity reference values (TRVs), which are doses associated with adverse effects on growth, survival, or reproduction. Because TRVs for the specific representative receptors used herein (mink and green heron) were usually not available, toxicity data from laboratory species were extrapolated to the representative receptor species. No-observed-adverse-effects levels (NOAELs) and lowest-observed-adverse-effects levels (LOAELs) were used to provide a range of risks. TRVs used in this ecological risk assessment and their sources are presented in Table F-4 of this appendix.

TRVs were preferentially obtained from USEPA's Eco-SSL documents, in which numerous toxicity studies were evaluated. The TRVs for arsenic, lead, and zinc shown in Table F-4 represent the geometric means of NOAEL and LOAEL data for growth and reproduction from Eco-SSL documents (USEPA, 2005a; b; 2007). TRVs for aldrin, BHC, and chlordane were not included in Eco-SSL documents, so TRVs for these COPCs were obtained from an Oak Ridge National Laboratory report (Sample et al., 1996) that compiled toxicity data from several sources.

The ratio of the modeled dose to the TRV is called the hazard quotient (HQ). An HQ less than 1.0 in the food-chain modeling (in the conservative scenario and using the NOAEL as the TRV)

indicates that risk to the representative piscivorous receptor is unlikely. A food chain HQ of greater than 1.0 indicates that potential risks to ecological receptors is possible, and the chemical is further evaluated.

Calculation spreadsheets for the representative receptors are presented in Tables F-5, F-6, F-7, and F-8 of this appendix.

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TABLE F-1

DERIVATION OF BODY WEIGHT, FOOD INTAKE, AND WATER INTAKE FACTORS FOR REPRESENTATIVE WILDLIFE RECEPTORS
 SITE 1 DISASTER RECOVERY DISPOSAL AREA
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Species/Factor	Age/Sex/Season ^a	Value	Derivation of Factors Used in Food Chain Modeling		
Mink^b					
Body Weight (g)	A M summer	1040	Minimum Value	0.550 kg	
	A M fall	1233	Maximum Value	1.233 kg	
	A F summer	550	Overall average	0.852 kg	
	A F fall	586	Average female	0.568 kg	
Food Ingestion Rate (g/g-day)	A M summer	0.13	Conservative scenario:	0.0678 kg/day	Maximum ingestion rate (0.22 g/g/day) × maximum body weight (1.233 kg) × 0.25 ^c
	A M winter	0.12			
	A F winter	0.16	Less conservative scenario:	0.0227 kg/day	Female ingestion rate (0.16 g/g/day) × average female body weight (0.568 kg) × 0.25 ^c
	A M year-round	0.22			
Water Ingestion Rate (g/g-day)	A F	0.11	Average female	0.069 g/g/day	
	A M	0.099	Conservative scenario:	0.1356 L/day	Maximum ingestion rate (0.11 g/g/day) × maximum body weight (1.233 kg)
	A F	0.028	Less conservative scenario:	0.03919 L/day	Average female ingestion rate (0.069 g/g/day) × average female body weight (0.568 kg)
Green Heron^d					
Body Weight (g)	AB	212	Mean of 34 adults from Florida = 212 g, standard deviation = 5.92 g (Dunning, 1993)		
			Conservative scenario:	0.200 kg	Mean minus 2 standard deviations (Dunning, 1993)
			Less conservative scenario:	0.212 kg	Mean (Dunning, 1993)
Food Ingestion Rate (g/g-day)	-	-	Conservative scenario:	0.031 kg/day	Using allometric equation from Nagy (2001) for 0.224 kg marine bird (0.224 kg = mean plus 2 standard deviations from Dunning (1993) green heron data)
			Less conservative scenario:	0.030 kg/day	Using allometric equation from Nagy (2001) for 0.212 kg marine bird
Water Ingestion Rate (L/day)	-	-	Conservative scenario:	0.022 L/day	Using equation 3-15 from USEPA (1993) for 0.224 kg bird
			Less conservative scenario:	0.021 L/day	Using equation 3-15 from USEPA (1993) for 0.212 kg bird

Notes:

a A=adult, M=male, F=female, B=both sexes

b Data from Wildlife Exposure Factors Handbook (USEPA, 1993).

c Food ingestion was multiplied by 0.25 (based on 75 percent moisture content in fish) to convert to dry weight ingestion rate.

d Green heron data not available in Wildlife Exposure Factors Handbook (USEPA, 1993). Values obtained from other sources as shown.

TABLE F-2

FOOD CHAIN EXPOSURE FACTORS FOR PISCIVOROUS WILDLIFE
 SITE 1 DISASTER RECOVERY DISPOSAL AREA
 NCBC GULFPORT
 GULFPORT, MISSISSIPPI

Species/Exposure Inputs	Conservative Scenario ⁽¹⁾		Average Scenario ⁽¹⁾	
	Values	Units	Values	Units
<i>Mink</i>				
Body Weight	0.550	kg	0.568	kg
Food Ingestion Rate ⁽²⁾	0.0678	kg/day	0.0227	kg/day
Water Ingestion Rate	0.1356	L/day	0.0392	L/day
Sediment Ingestion Rate ⁽³⁾	0.0064	kg/day	0.0021	kg/day
<i>Green Heron</i>				
Body Weight	0.200	kg	0.212	kg
Food Ingestion Rate ⁽²⁾	0.031	kg/day	0.030	kg/day
Water Ingestion Rate	0.022	L/day	0.021	L/day
Sediment Ingestion Rate ⁽³⁾	0.0016	kg/day	0.0015	kg/day

(1) The derivation of values in this table is presented in Table E-1.

(2) Food ingestion rates are dry-weight values.

(3) Sediment ingestion rates were calculated by multiplying the food ingestion (kg/day) by the proportion of the diet comprised of incidentally ingested sediment (9.4% for mink, 5% for green heron).

**TABLE F-3
BIOTA SEDIMENT ACCUMULATION FACTORS (BSAFs)
SITE 1 DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemicals	BSAF		Source
	Conservative ⁽¹⁾	Average ⁽¹⁾	
Pesticides/ PCBs			
Aldrin	1.80E+00	1.80E+00	USEPA, 2004
alpha-Chlordane	4.77E+00	4.77E+00	USEPA, 2004
gamma-Chlordane	2.22E+00	2.22E+00	USEPA, 2004
Heptachlor Epoxide	1.80E+00	1.80E+00	USEPA, 2004
alpha-BHC	1.80E+00	1.80E+00	USEPA, 2004
delta-BHC	1.80E+00	1.80E+00	USEPA, 2004
Inorganics			
Arsenic	6.90E-01	1.43E-01	ORNL, 1988
Lead	6.07E-01	7.10E-02	ORNL, 1988
Zinc	7.53E+00	1.94E+00	ORNL, 1988

Notes:

1 Conservative and average refer to the exposure scenarios for which the BSAFs were used. For inorganics, conservative value is 90th percentile from ORNL (1998) and average value is median value from ORNL (1988). Only a single BSAF was available for Aroclor-1260 in USEPA (2004); thus, the same BSAF value was used for conservative and average scenarios.

**TABLE F-4
TOXICITY REFERENCE VALUES (TRVs)
SITE 1 DISASTER RECOVERY DISPOSAL AREA
NCBC GULFPORT
GULFPORT, MISSISSIPPI**

Chemical	Concentration (mg/kg/day)	Endpoint	Effect	Study Duration	Species	Primary Reference ⁽¹⁾	Source o
Organics							
Aldrin	0.2	NOAEL	reproductive	chronic	rat	Treon and Cleveland, 1955	Sample et
Aldrin	1	LOAEL	reproductive	chronic	rat	Treon and Cleveland, 1955	Sample et
BHC (mixed isomers) ⁽²⁾	0.14	LOAEL	reproductive	331 days	mink	Bleavins et al., 1984	Sample et
BHC (mixed isomers) ⁽²⁾	0.563	NOAEL	reproductive	90 days	Japanese quail	Vos et al., 1971	Sample et
BHC (mixed isomers) ⁽²⁾	2.25	LOAEL	reproductive	90 days	Japanese quail	Vos et al., 1971	Sample et
Chlordane ⁽³⁾	2.14	NOAEL	mortality	84 days	red-winged blackbird	Stickel et al., 1983	Sample et
Chlordane ⁽³⁾	10.7	LOAEL	mortality	84 days	red-winged blackbird	Stickel et al., 1983	Sample et
Chlordane ⁽³⁾	4.58	NOAEL	reproduction	> 1 year	mouse	WHO, 1984	Sample et
Chlordane ⁽³⁾	9.16	LOAEL	reproduction	> 1 year	mouse	WHO, 1984	Sample et
Heptachlor	1	LOAEL	reproduction	chronic	mink	Crum et al., 1993	Sample et
Inorganics							
Arsenic	2.24	NOAEL	reproduction & growth	chronic ⁽⁶⁾	various birds ⁽⁵⁾	-	USEPA, 2
Arsenic	4.51	LOAEL	reproduction & growth	chronic ⁽⁶⁾	various birds ⁽⁵⁾	-	USEPA, 2
Arsenic	1.04	NOAEL	reproduction & growth	chronic ⁽⁶⁾	various mammals ⁽⁵⁾	-	USEPA, 2
Arsenic	4.55	LOAEL	reproduction & growth	chronic ⁽⁶⁾	various mammals ⁽⁵⁾	-	USEPA, 2
Lead	4.7	NOAEL	reproduction & growth	chronic ⁽⁶⁾	various mammals ⁽⁵⁾	-	USEPA, 2
Lead	186.4	LOAEL	reproduction & growth	chronic ⁽⁶⁾	various mammals ⁽⁵⁾	-	USEPA, 2
Lead	1.63	NOAEL	reproduction & growth	chronic ⁽⁶⁾	various birds ⁽⁵⁾	-	USEPA, 2
Lead	44.6	LOAEL	reproduction & growth	chronic ⁽⁶⁾	various birds ⁽⁵⁾	-	USEPA, 2
Zinc	75.4	NOAEL	reproduction & growth	chronic	various mammals ⁽⁵⁾	-	USEPA, 2
Zinc	297.58	LOAEL	reproduction & growth	chronic	various mammals ⁽⁵⁾	-	USEPA, 2
Zinc	66.1	NOAEL	reproduction & growth	chronic	various birds ⁽⁵⁾	-	USEPA, 2
Zinc	171.44	LOAEL	reproduction & growth	chronic	various birds ⁽⁵⁾	-	USEPA, 2

Footnotes:

- (1) See Sample *et al.* (1996) for full citations of primary references cited in the Sample *et al.* (1996) document.
- (2) BHC mixed isomers used as a surrogate for alpha-BHC and delta-BHC. A NOAEL was not derived in the Bleavins et al (1984) mink study for BHC mixed isomers, so the NOAEL used in the Site 1 food chain evaluation was estimated by dividing the LOAEL by 10.
- (3) Chlordane used as a surrogate for alpha-Chlordane and gamma-Chlordane
- (4) Heptachlor used as a surrogate for heptachlor epoxide. A NOAEL was not derived in the Crum et al. (1993) mink study for heptachlor, so the NOAEL used in the Site 1 food chain evaluation was estimated by dividing the LOAEL by 10.
- (5) Bird and mammal TRVs from USEPA' s Eco-SSL documents represent the geometric means of numerous studies of various durations and species.

TABLE F-5
FOD CHAIN HAZARD QUOTIENTS FOR PISCIVOROUS BIRDS REPRESENTED BY THE MINK
CONSERVATIVE SCENARIO
SITE 1 DISASTER RECOVERY DISPOSAL AREA, NCBC GULFPORT, GULFPORT, MISSISSIPPI

Chemical	Max Sed Conc. (mg/kg)	Max SW Conc. (mg/L)	Fish Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Sediment	Surface Water	Fish				NOAEL	LOAEL
Pesticides/PCBs											
ALDRIN	4.50E-04	0.00E+00	5.90E-03	5.21E-06	0.00E+00	7.27E-04	7.33E-04	2.00E-01	1.00E+00	3.7E-03	7.3E-04
ALPHA-BHC	1.70E-04	0.00E+00	2.23E-03	1.97E-06	0.00E+00	2.75E-04	2.77E-04	1.40E-02	1.40E-01	2.0E-02	2.0E-03
ALPHA-CHLORDANE	6.00E-03	4.00E-06	2.08E-01	6.95E-05	9.86E-07	2.57E-02	2.58E-02	4.58E+00	9.16E+00	5.6E-03	2.8E-03
DELTA-BHC	2.10E-03	0.00E+00	2.75E-02	2.43E-05	0.00E+00	3.39E-03	3.42E-03	1.40E-02	1.40E-01	2.4E-01	2.4E-02
GAMMA-CHLORDANE	3.50E-03	0.00E+00	5.66E-02	4.06E-05	0.00E+00	6.98E-03	7.02E-03	4.58E+00	9.16E+00	1.5E-03	7.7E-04
HEPTACHLOR EPOXIDE	4.60E-04	0.00E+00	6.03E-03	5.33E-06	0.00E+00	7.44E-04	7.49E-04	1.00E-01	1.00E+00	7.5E-03	7.5E-04
Inorganics											
ARSENIC	1.98E+01	3.40E-03	1.37E+01	2.29E-01	8.38E-04	1.68E+00	1.91E+00	1.04E+00	4.55E+00	1.8E+00	4.2E-01
LEAD	3.21E+01	2.00E-03	1.95E+01	3.72E-01	4.93E-04	2.40E+00	2.77E+00	4.70E+00	1.86E+02	5.9E-01	1.5E-02
ZINC	1.32E+02	1.04E-02	9.94E+02	1.53E+00	2.56E-03	1.22E+02	1.24E+02	7.54E+01	2.98E+02	1.6E+00	4.2E-01

Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	5.50E-01	kg	Dose (sediment) = (Cs * Is)(H)/BW	Conc = Concentration
Food Ingestion Rate = (If)	6.78E-02	kg/day	Dose (fish) = (Ci * If)(H)/BW	LOAEL = Lowest Observed Adverse Effects Concentration
Water Ingestion Rate = (Iw)	1.36E-01	L/day	Dose (water) = (Cw * Iw)(H)/BW	NOAEL = No Observed Adverse Effects Concentration
Sediment Ingestion Rate = (Is)	6.37E-03	kg/day	Ci = Contaminant concentration in fish	Sed = Sediment
Home Range = (HR)	Assume 100% on site		Cs = Contaminant concentration in sediment	SW = Surface Water
Contaminated Area = (CA)	Assume equal to home range		Cw = Contaminant concentration in water	
			Total Dose = Dose (sediment) + Dose (fish) + Dose (water)	
			H=HR/CA (Assume = to 1)	

TABLE F-6
FOD CHAIN HAZARD QUOTIENTS FOR PISCIVOROUS MAMMALS REPRESENTED BY THE MINK
AVERAGE SCENARIO
SITE 1 DISASTER RECOVERY DISPOSAL AREA, NCBC GULFPORT, GULFPORT, MISSISSIPPI

Chemical	Avg Sed Conc. (mg/kg)	Avg SW Conc. (mg/L)	Fish Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Sediment	Surface Water	Fish				NOAEL	LOAEL
Pesticides/PCBs											
ALDRIN	3.70E-04	0.00E+00	4.85E-03	1.39E-06	0.00E+00	1.94E-04	1.95E-04	2.00E-01	1.00E+00	9.8E-04	2.0E-04
ALPHA-BHC	3.00E-04	0.00E+00	3.93E-03	1.13E-06	0.00E+00	1.57E-04	1.58E-04	1.40E-02	1.40E-01	1.1E-02	1.1E-03
ALPHA-CHLORDANE	3.00E-03	4.60E-06	1.04E-01	1.13E-05	3.17E-07	4.17E-03	4.18E-03	4.58E+00	9.16E+00	9.1E-04	4.6E-04
DELTA-BHC	6.00E-04	0.00E+00	7.87E-03	2.25E-06	0.00E+00	3.14E-04	3.17E-04	1.40E-02	1.40E-01	2.3E-02	2.3E-03
GAMMA-CHLORDANE	1.80E-03	0.00E+00	2.91E-02	6.76E-06	0.00E+00	1.16E-03	1.17E-03	4.58E+00	9.16E+00	2.6E-04	1.3E-04
HEPTACHLOR EPOXIDE	3.80E-04	0.00E+00	4.98E-03	1.43E-06	0.00E+00	1.99E-04	2.01E-04	1.00E-01	1.00E+00	2.0E-03	2.0E-04
Inorganics											
ARSENIC	4.70E+00	1.90E-03	6.72E-01	1.77E-02	1.31E-04	2.69E-02	4.46E-02	1.04E+00	4.55E+00	4.3E-02	9.8E-03
LEAD	1.48E+01	1.20E-03	1.05E+00	5.56E-02	8.28E-05	4.20E-02	9.77E-02	4.70E+00	1.86E+02	2.1E-02	5.2E-04
ZINC	3.40E+01	7.10E-03	6.58E+01	1.28E-01	4.90E-04	2.63E+00	2.76E+00	7.54E+01	2.98E+02	3.7E-02	9.3E-03

Cells are shaded if the value is greater than 1.0

Body Weight = (BW)	5.68E-01	kg	Dose (sediment) = (Cs * Is)(H)/BW	Conc = Concentration
Food Ingestion Rate = (If)	2.27E-02	kg/day	Dose (fish) = (Ci * If)(H)/BW	LOAEL = Lowest Observed Adverse Effects Concentration
Water Ingestion Rate = (Iw)	3.92E-02	L/day	Dose (water) = (Cw * Iw)(H)/BW	NOAEL = No Observed Adverse Effects Concentration
Sediment Ingestion Rate = (Is)	2.13E-03	kg/day	Ci = Contaminant concentration in fish	Sed = Sediment
Home Range = (HR)	3.50E+01	acres	Cs = Contaminant concentration in sediment	SW = Surface Water
Contaminated Area = (CA)	Assume equal to home range		Cw = Contaminant concentration in water	
			Total Dose = Dose (sediment) + Dose (fish) + Dose (water)	
			H=HR/CA (Assume = to 1)	

TABLE F-7
FOD CHAIN HAZARD QUOTIENTS FOR PISCIVOROUS BIRDS REPRESENTED BY THE GREEN HERON
CONSERVATIVE SCENARIO
SITE 1 DISASTER RECOVERY DISPOSAL AREA, NCBC GULFPORT, GULFPORT, MISSISSIPPI

Chemical	Max Sed. Conc. (mg/kg)	Max SW Conc. (mg/L)	Fish Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Sediment	Surface Water	Fish				NOAEL	LOAEL
Pesticides/PCBs											
ALDRIN	4.50E-04	0.00E+00	5.90E-03	3.60E-06	0.00E+00	9.15E-04	9.18E-04	NV	NV	#VALUE!	#VALUE!
ALPHA-BHC	1.70E-04	0.00E+00	2.23E-03	1.36E-06	0.00E+00	3.46E-04	3.47E-04	5.60E-01	2.25E+00	6.2E-04	1.5E-04
ALPHA-CHLORDANE	6.00E-03	4.00E-06	2.08E-01	4.80E-05	4.40E-07	3.23E-02	3.24E-02	2.14E+00	1.07E+01	1.5E-02	3.0E-03
DELTA-BHC	2.10E-03	0.00E+00	2.75E-02	1.68E-05	0.00E+00	4.27E-03	4.29E-03	5.60E-01	2.25E+00	7.7E-03	1.9E-03
GAMMA-CHLORDANE	3.50E-03	0.00E+00	5.66E-02	2.80E-05	0.00E+00	8.77E-03	8.80E-03	2.14E+00	1.07E+01	4.1E-03	8.2E-04
HEPTACHLOR EPOXIDE	4.60E-04	0.00E+00	6.03E-03	3.68E-06	0.00E+00	9.35E-04	9.39E-04	NV	NV	#VALUE!	#VALUE!
Inorganics											
ARSENIC	1.98E+01	3.40E-03	1.37E+01	1.58E-01	3.74E-04	2.12E+00	2.28E+00	2.24E+00	4.51E+00	1.0E+00	5.0E-01
LEAD	3.21E+01	2.00E-03	1.95E+01	2.57E-01	2.20E-04	3.02E+00	3.28E+00	1.63E+00	4.46E+01	2.0E+00	7.3E-02
ZINC	1.32E+02	1.04E-02	9.94E+02	1.06E+00	1.14E-03	1.54E+02	1.55E+02	6.61E+01	1.71E+02	2.3E+00	9.0E-01

Cells are shaded if the value is greater than 1.0

Body Weight = (BW)

2.00E-01 kg

Food Ingestion Rate = (If)

3.10E-02 kg/day

Water Ingestion Rate = (Iw)

2.20E-02 L/day

Sediment Ingestion Rate = (Is)

0.0016 kg/day

Home Range = (HR)

Assume 100% on site

Contaminated Area = (CA)

Assume equal to home range

Dose (sediment) = (Cs * Is)(H)/BW

Dose (fish) = (Ci * If)(H)/BW

Dose (water) = (Cw * Iw)(H)/BW

Ci = Contaminant concentration in fish

Cs = Contaminant concentration in sediment

Cw = Contaminant concentration in water

Total Dose = Dose (sediment) + Dose (fish) + Dose (water)

H=HR/CA (Assume = to 1)

Conc = Concentration

LOAEL = Lowest Observed Adverse Effects Concentration

NOAEL = No Observed Adverse Effects Concentration

Sed = Sediment

SW = Surface Water

TABLE F-8
FOD CHAIN HAZARD QUOTIENTS FOR PISCIVOROUS BIRDS REPRESENTED BY THE GREEN HERON
AVERAGE SCENARIO
SITE 1 DISASTER RECOVERY DISPOSAL AREA, NCBC GULFPORT, GULFPORT, MISSISSIPPI

Chemical	Avg Sed. Conc. (mg/kg)	Avg SW Conc. (mg/L)	Fish Conc. (mg/kg)	Dose (mg/kg/d) from:			Total Dose (mg/kg/d)	NOAEL (mg/kg/d)	LOAEL (mg/kg/d)	Ecological Effects Quotients	
				Sediment	Surface Water	Fish				NOAEL	LOAEL
Pesticides/PCBs											
ALDRIN	3.70E-04	0.00E+00	4.85E-03	2.62E-06	0.00E+00	6.87E-04	6.89E-04	NV	NV	#VALUE!	#VALUE!
ALPHA-BHC	3.00E-04	0.00E+00	3.93E-03	2.12E-06	0.00E+00	5.57E-04	5.59E-04	5.60E-01	2.25E+00	1.0E-03	2.5E-04
ALPHA-CHLORDANE	3.00E-03	4.60E-06	1.04E-01	2.12E-05	4.56E-07	1.48E-02	1.48E-02	2.14E+00	1.07E+01	6.9E-03	1.4E-03
DELTA-BHC	6.00E-04	0.00E+00	7.87E-03	4.25E-06	0.00E+00	1.11E-03	1.12E-03	5.60E-01	2.25E+00	2.0E-03	5.0E-04
GAMMA-CHLORDANE	1.80E-03	0.00E+00	2.91E-02	1.27E-05	0.00E+00	4.12E-03	4.13E-03	2.14E+00	1.07E+01	1.9E-03	3.9E-04
HEPTACHLOR EPOXIDE	3.80E-04	0.00E+00	4.98E-03	2.69E-06	0.00E+00	7.05E-04	7.08E-04	NV	NV	#VALUE!	#VALUE!
Inorganics											
ARSENIC	4.70E+00	1.90E-03	6.72E-01	3.33E-02	1.88E-04	9.51E-02	1.29E-01	2.24E+00	4.51E+00	5.7E-02	2.9E-02
LEAD	1.48E+01	1.20E-03	1.05E+00	1.05E-01	1.19E-04	1.49E-01	2.54E-01	1.63E+00	4.46E+01	1.6E-01	5.7E-03
ZINC	3.40E+01	7.10E-03	6.58E+01	2.41E-01	7.03E-04	9.31E+00	9.56E+00	6.61E+01	1.71E+02	1.4E-01	5.6E-02

Cells are shaded if the value is greater than 1.0

Body Weight = (BW) 2.12E-01 kg
 Food Ingestion Rate = (If) 3.00E-02 kg/day
 Water Ingestion Rate = (Iw) 2.10E-02 L/day
 Sediment Ingestion Rate = (Is) 1.50E-03 kg/day
 Home Range = (HR) NA acres
 Contaminated Area = (CA) Assume equal to home range

Assume equal to home range

Dose (sediment) = (Cs * Is)(H)/BW
 Dose (fish) = (Ci * If)(H)/BW
 Dose (water) = (Cw * Iw)(H)/BW
 Ci = Contaminant concentration in fish
 Cs = Contaminant concentration in sediment
 Cw = Contaminant concentration in water
 Total Dose = Dose (sediment) + Dose (fish) + Dose (water)
 H=HR/CA (Assume = to 1)

Conc = Concentration
 LOAEL = Lowest Observed Adverse Effects Concentration
 NOAEL = No Observed Adverse Effects Concentration
 Sed = Sediment
 SW = Surface Water
 NV - No Value
 # VALUE - Value could not be calculated

APPENDIX G

PREVIOUS INVESTIGATIONS

39501 - ASSOCIATED AO
02.02.00.0007



Sampling and Analysis Report

CBC Gulfport, Sites 1 & 5
Gulfport, Mississippi

Unit Identification Code: N62604
Contract No. N62467-93-D-1106

February, 1997

**Southern Division
Naval Facilities Engineering Command
North Charleston, South Carolina
29419-9010**

EXECUTIVE SUMMARY

This sampling and analysis report summarizes the results of a field verification action undertaken at Site 1 - Training Area, and Site 5 - Heavy Equipment Training Area of Construction Battalion Center (CBC), Gulfport, Mississippi. The main purpose of field verification action was to determine if dioxin is present in subsurface soils.

Soil boring and sampling was performed at Sites 1 and 5 from 04 December 1996 to 16 December 1996. Soil sampling was performed using a Geoprobe™ sampling system mounted on a four wheel drive all terrain vehicle. Soil samples were analyzed for volatile organics, semi-volatile organics, pesticides, herbicides, metals, dioxins and furans. Analytical results indicate that the only target analyte present above the established screening levels is arsenic. The main contaminant of concern at the sites, 2,3,7,8 - Tetrachlorodibenzo-p-dioxin (TCDD), was not detected in the samples collected. Therefore, it is recommended that the work proceed at Sites 1 and 5 with test trenching, which is the next project activity in the *Work Plan* [MK 1996].

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
CBC	Construction Battalion Center
CDAP	Chemical Data Acquisition Plan
COC	chain-of-custody
DDT	dichlorodiphenyltrichloroethane
HDPE	high-density polyethylene
IDW	investigation derived waste
MDEQ	Mississippi Department of Environmental Quality
MK	Morrison Knudsen Corporation
MS	sample matrix spike
MSD	sample matrix spike duplicate
NCF	Naval Construction Force
NTR	Naval Technical Representative
PPE	personnel protective equipment
ROICC	Resident Officer-in-Charge of Construction
RPD	relative percent difference
SDBE	Small Disadvantaged Business Enterprise
SOUTHNAVFACENGCOM	Southern Division Naval Facilities Engineering Command
TCDD	Tetrachlorodibenzo-p-dioxin

1.0 INTRODUCTION

1.1 BACKGROUND AND OBJECTIVES

This sampling and analysis report summarizes the results of a field verification action undertaken at Site 1 - Training Area, and Site 5 - Heavy Equipment Training Area of Construction Battalion Center (CBC), Gulfport, Mississippi. The sampling and analysis report was prepared by Morrison Knudsen Corporation (MK) for Southern Division Naval Facilities Engineering Command (SOUTHNAVFACENGCOM), pursuant to the scope of work defined in Delivery Order #0002, Statement of Work #09, under Contract #N62467-93-D-1106.

The purpose of field verification action was to determine whether hazardous constituents and, in particular, dioxins and dibenzofurans were present in subsurface soils at Sites 1 and 5. The scope of work included soil boring, sampling and laboratory analysis.

Mobilization of personnel and equipment began on 02 December 1996. Field work was performed from 04 December 1996 to 16 December 1996.

MK provided project management, construction management, as well as environmental, health and safety and quality control oversight. MK's primary subcontractor was Bhate Environmental Associates Inc., a Small Disadvantaged Business Enterprise (SDBE), which provided drilling services. Southwest Laboratory of Oklahoma, Inc. provided analytical laboratory services under contract to MK. ABB Environmental Services provided on-site technical consultation during soil boring and sampling.

The Naval Technical Representative (NTR) and the Resident Officer-in-Charge of Construction (ROICC) provided oversight during field activities and acted as liaison between MK and base officials. The ROICC was provided with the Daily Contractor Production Report and Quality Control Report.

1.2 PLANNING DOCUMENTS

The following documents were used to plan the field verification action.

Work Plan, Revision 0, [MK 1996], including:

- Appendix A, *Site Safety and Health Plan*
- Appendix B, *Quality Control Plan*
- Appendix C, *Chemical Data Acquisition Plan*
- Appendix D, *Waste Management Plan*
- Appendix E, *Environmental Protection Plan*
- Appendix F, *Technical Specifications*

The *Work Plan* describes the definable features of work to be performed for the verification action. The current work included soil boring, soil sampling and laboratory analysis only. The results from the current work will determine if the remaining definable features of work, such as test trenching and drum removal, will be performed.

2.0 SITE BACKGROUND

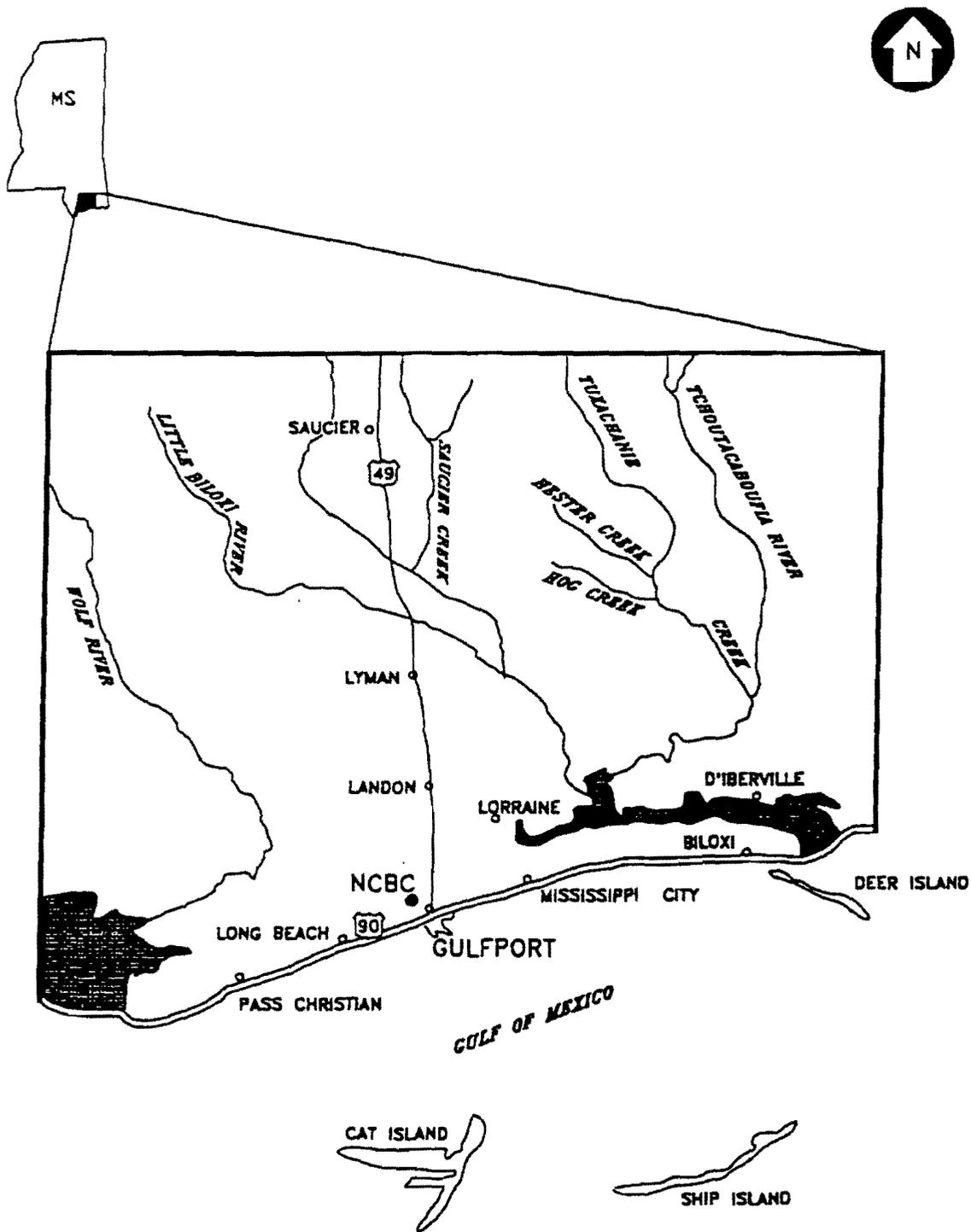
CBC Gulfport is located in the city of Gulfport, in Harrison County, in the southeastern corner of the State of Mississippi, as shown on Figure 2-1. CBC Gulfport supports four Naval Mobile Construction Battalions and serves as the focal point for deployment of Naval Construction Force (NCF) personnel for the Atlantic Fleet battalions. The locations of the two sites are shown on Figure 2-2.

2.1 SITE 1, TRAINING AREA

Site 1, currently used as a Training Area, is shown on Figure 2-3. The site is an inactive landfill, where an unknown quantity of chemical wastes containerized in 55-gallon drums was disposed by trench-and-fill operation between 1942 and 1948. The site was subsequently backfilled with soil and is now covered with planted trees, grass areas and buildings associated with the training mission of the base.

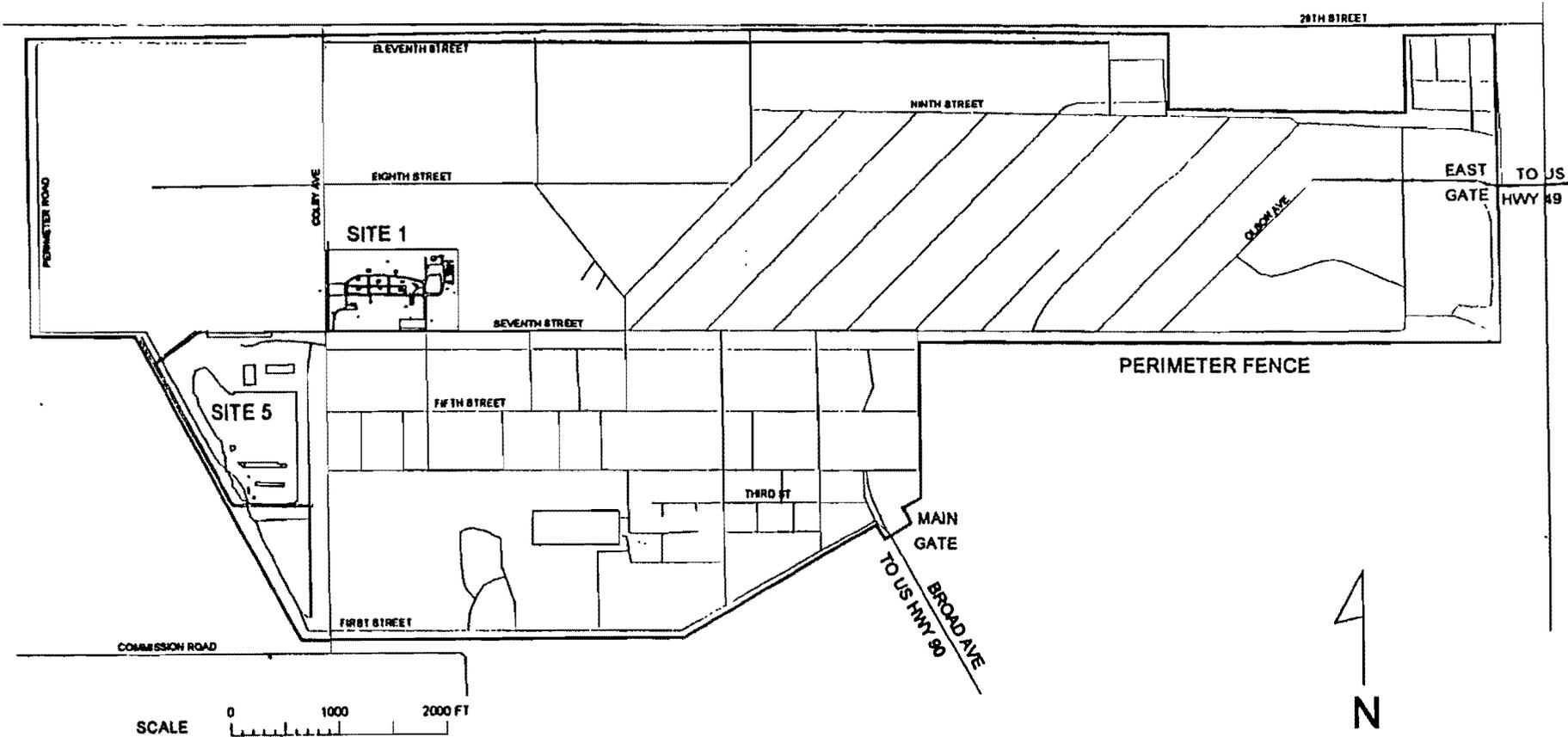
2.2 SITE 5, HEAVY EQUIPMENT TRAINING AREA

Site 5 consists of an area located between Fourth Street and Colby Avenue, as shown on Figure 2-4. An estimated 6,000 cubic yards of solid waste, an unknown quantity of liquid waste (not containerized), 50 to 100 drums of liquid dichlorodiphenyltrichloroethane (DDT) and boxes of powdered DDT were disposed by trench-and-fill method from 1972 to 1976. An unknown quantity of damaged drums containing herbicide orange was also reported to have been disposed at the site. The site was eventually covered with four to six feet of fill. Therefore, the potential for the presence of agent orange provided the need to perform sampling for the presence of dioxin.



NOT TO SCALE

FIGURE 2-1
VICINITY MAP



**FIGURE 2-2
SITE LOCATION MAP**

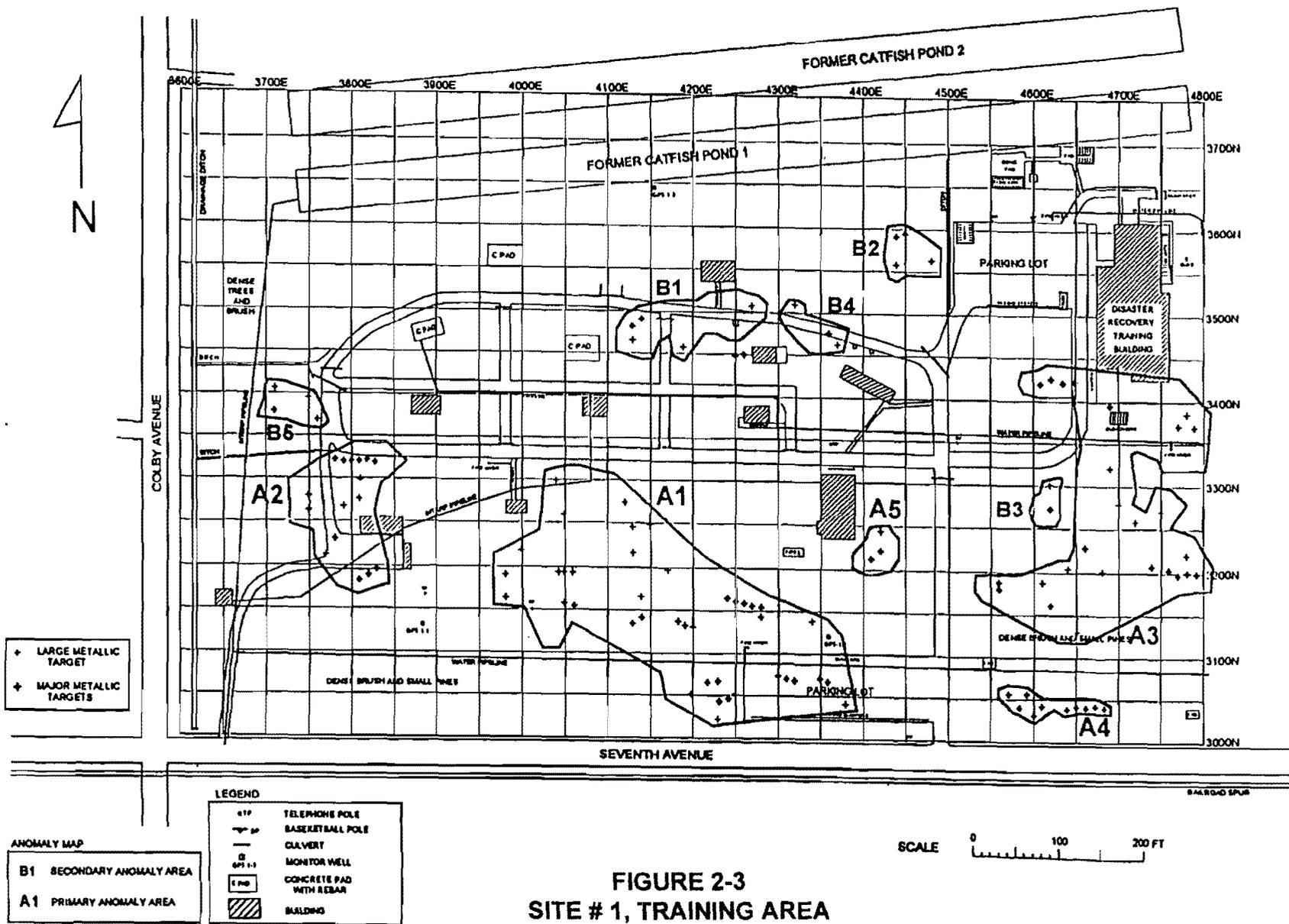
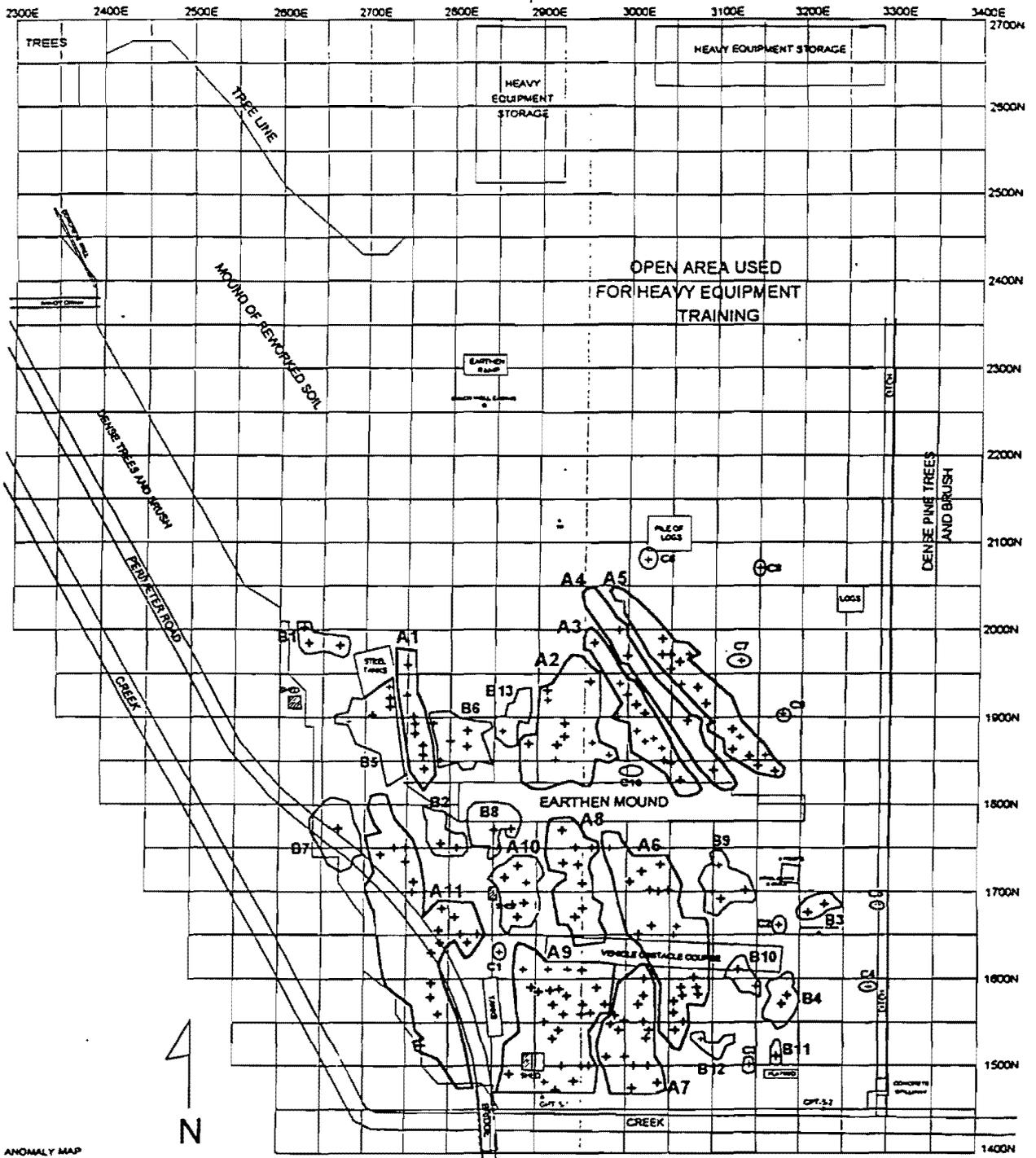


FIGURE 2-3
SITE # 1, TRAINING AREA



ANOMALY MAP

C1	LARGE METAL TARGET
B1	SECONDARY ANOMALY AREA
A1	PRIMARY ANOMALY AREA

LEGEND

○ TP	TELEPHONE POLE
□ GW 2.1	MONITOR WELL
▭	BUILDING/SHED

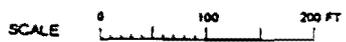


FIGURE 2-4
SITE # 5, HEAVY EQUIPMENT TRAINING AREA

3.0 FIELD ACTIVITIES

Field activities were scheduled around the ongoing training activities at the base. At Site 1, some areas are occupied by the base for training activities. Field activities were performed on the week ends in these areas.

3.1 SOIL BORING

Soil boring and sampling were performed at Sites 1 and 5 from 04 December 1996 to 16 December 1996. Prior to soil boring and sampling excavation permits (Appendix B) were obtained from the base. Soil sampling was performed using a Geoprobe™ sampling system mounted on a four wheel drive all terrain vehicle. At the end of each day, the Geoprobe™ sampling equipment and the vehicle were taken off the base. The photographs of soil boring and sampling activities are provided in Appendix A.

3.1.1 Boring Locations

As discussed in the *Work Plan*, the location of the borings were selected based on the results of previous geophysical investigations [MK, 1995]. Thus, soil borings were located in the following anomaly areas:

- Site 1: Training Area - anomaly areas A1, A2, A3, A4, A5, and B1.
- Site 5: Heavy Equipment Training Area - anomaly areas A1, A2, A3, A5, A6, A9 and A10.

Prior to start of the field work, the boring locations were marked with stakes and flags and excavation permits obtained from the base. The boring locations are shown on Figures 3-1 and 3-2.

3.1.2 Soil Sampling

Generally, two soil samples were collected from each borehole. The first sample was collected just above the water table and the second sample was collected at five feet below the top of the water table. Only one sample was collected when the soil boring encountered groundwater prior to the collection of the first sample. Samples were collected using the Geoprobe™ sampler as follows:

- Stainless steel tubes (1.5 inch outside diameter) were advanced hydraulically to two feet above the groundwater level
- The stop-pin at the end of the stainless steel tube was removed
- A 24-inch long brass liner (segmented to four 6-inch sections) that had been placed inside the tube was advanced to collect the first soil sample
- The brass liner with the soil sample was retrieved from the hole
- The ends of three brass liners were covered with teflon tape, capped and labeled
- A reading of organic vapor concentration was taken from the soil sample of the fourth brass liner and this sample was used as a field duplicate, when required
- The stainless tubes were advanced an additional 5 feet and the second sample was collected

The samples were labeled and placed in a cooler with ice. The chain-of-custody (COC) forms (Appendix C) were completed and the cooler was shipped to the off-site laboratory by a courier service for overnight delivery. The completed boring was backfilled the same day with cement bentonite grout.

3.1.3 Boring Logs

A soil boring log was prepared for each boring, as shown in Appendix D. The boring logs provide information on the sample depth, sample identification number and a brief description of the materials encountered. A review of the boring logs indicated that the sites are underlain by fill material consisting of fine to medium grained sand. Groundwater was encountered below ground surface (bgs) as follows:

- Site 1 - three feet to 12 feet
- Site 5 - 7.5 feet to 10 feet

3.2 DECONTAMINATION

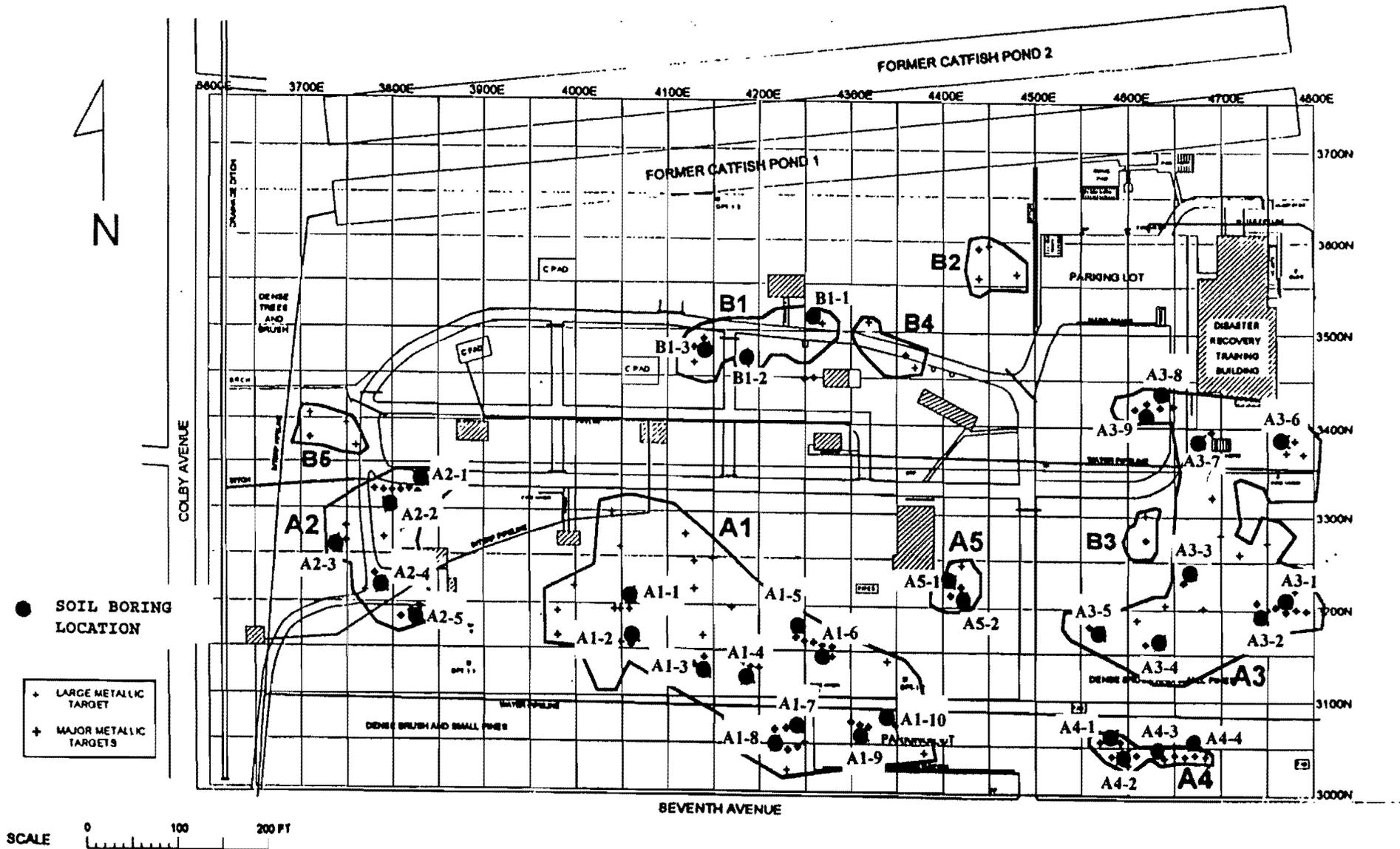
A central decontamination facility was constructed at each site using sand bags and a 60-mil high-density polyethylene (HDPE) liner. Decontamination of boring equipment was performed using a high-pressure/low-volume washer. The equipment was decontaminated prior to start of work and at the end of each day.

Non-disposable sampling equipment were washed with Alconox™ and tap water and rinsed with analyte free water. Sampling tools were decontaminated prior to start of work and after each time they were used. The rinsate collected in the decontamination facility was pumped into 55-gallon drums.

3.3 INVESTIGATION DERIVED WASTE

The investigation derived waste (IDW) associated with soil boring and sampling activities included liquid and soil generated during decontamination, the HDPE liner and the disposable personnel protective equipment (PPE). The liquid, soil and PPE were stored in 55-gallon drums with labels. Samples were collected for disposal characterization from decontamination liquid and soil.¹

¹Note: At the time this report was written, the disposal of IDW was not complete. This information will be updated on the next revision of this report.



**FIGURE 3-1
SOIL BORING LOCATIONS AT SITE # 1**

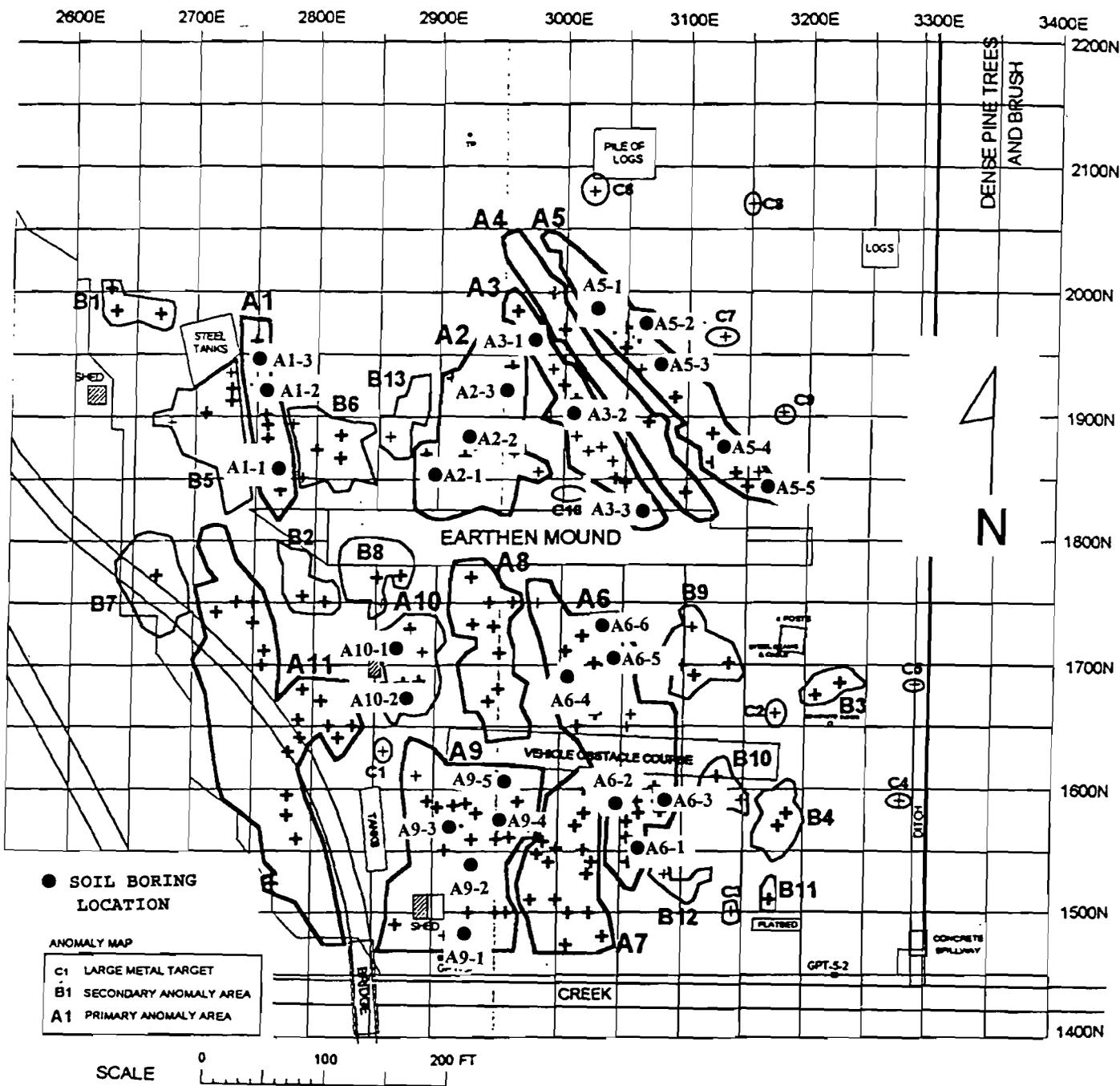


FIGURE 3-2
SOIL BORING LOCATIONS AT SITE # 5

4.0 ANALYTICAL RESULTS

Soil samples were analyzed for volatile organics, semi-volatile organics, pesticides, herbicides, metals, dioxins and furans. The analytical results are summarized in Appendix E. A discussion of the analytical results for each site and data quality control is provided below.

4.1 SITE 1

Analytical results from Site 1 soil borings indicate that, except for arsenic, concentrations of all other compounds were below the screening levels established in Appendix C, *Chemical Data Acquisition Plan (CDAP)*, of the *Work Plan* [MK 1996]. The screening level for arsenic was listed as 0.4 mg/kg, and concentrations reported for the soil borings ranged from 0.40 mg/kg, estimated below the reporting limit, to 4.3 mg/kg. The dioxin 2,3,7,8-TCDD, a main contaminant of concern, was not detected in any samples from this area.

4.2 SITE 5

Analytical results from Site 5 soil borings indicate that, except for arsenic, concentrations of all other compounds were below the screening levels established in Appendix C, *CDAP*, of the *Work Plan* [MK 1996]. The screening level for arsenic was listed as 0.4 mg/kg, and concentrations reported for the soil borings ranged from 0.45 mg/kg, estimated below the reporting limit, to 455 mg/kg. The dioxin 2,3,7,8-TCDD, a main contaminant of concern, was not detected in any samples from this area.

4.3 DATA QUALITY CONTROL

Analytical results were verified and compared with field and laboratory quality control (QC) sample data. The results of this verification are presented in this section.

4.3.1 Field Quality Control

Field quality control samples, including trip blanks, rinsate blanks, field duplicates, and a field blank, were collected during the work at CBC Gulfport to identify potential sources of error or cross contamination that occurred during collection, storage, or shipment of samples to the laboratory and to assist in evaluating precision and representativeness.

Trip blank sample results were evaluated to identify any cross-contamination that may have occurred during storage and shipping of the samples to the analytical laboratory. Trip blank samples were received in sealed containers from the laboratory and were not opened at the site. No target analytes were present in the trip blanks.

Equipment rinsate blanks were evaluated to assess the effectiveness of sampling equipment decontamination. Equipment rinse blanks showed no analytes present above the reporting limits. Several analytes were estimated below the reporting limits for each of the rinse blanks. Dioxin/furans were flagged as being due to laboratory contamination. Toluene, bis(2ethylhexyl)phthalate, barium, chromium, selenium and/or lead were estimated at low levels in the rinse blanks; only barium was detected in a corresponding laboratory blank. However, the levels of these analytes are such that corresponding soil boring sample results are likely not affected.

The field blank sample was evaluated to identify potential sources of error or cross contamination that occurred during collection, storage, or shipment of samples to the laboratory. Although several analytes

were estimated below the reporting limits, the field blank showed no analytes present above the reporting limits. Dioxin/furans were flagged as being due to laboratory contamination. Toluene, chromium and selenium were estimated at low levels in the field blank; none of these analytes were detected in corresponding laboratory blanks. However, the levels of these analytes are such that corresponding soil boring sample results are likely not affected.

Samples GPTS5BA5406D, GPTS5BA9413D, GPTS5BA9314D, GPTS5BA5109D (corrected site-id should read GPTS1BA5109D), and GPTS5BA10206D were identified as field duplicates collected during sampling. Precision objectives for field duplicate samples are established in the CDAP [MK 1996] and data are evaluated to determine potential variability introduced by soil heterogeneity and sampling technique. Field duplicate samples were taken from the fourth sleeve of soil collected for a given soil boring, when there was adequate sample volume available. Precision is evaluated using relative percent difference (RPD) between reported concentrations for analytes which were detected above the reporting limit.

Field duplicate precision for volatiles and herbicides met the precision objective of 30% RPD. Precision was acceptable for the majority of semi-volatile analytes, with the exception of two analytes. RPD for phenol ranged from 29% between samples GPTS5BA9314D and GPTS5BA9314, to 94% between samples GPTS5BA5406D and GPTS5BA5406. Bis(2-ethylhexyl)phthalate precision was acceptable for all field duplicate pairs except GPTS5BA9314D and GPTS5BA9314, which exhibited 81.5% RPD. Pesticide analytes all showed acceptable precision, except heptachlor, which was reported at 1.9 ug/kg in sample GPTS5BA9314, but was not detected in GPTS5BA9314D. Several dioxins / furans were detected in only one sample of a field duplicate pair. Metals were not analyzed for any of the field duplicate samples due to lack of sample volume, and therefore, no precision data is available for metals. Imprecision for the analytes noted may be due in part to the collection method for field duplicates, which resulted in soil from different depths being analyzed. Because no analytes other than arsenic were detected at concentrations above screening levels, results are deemed to be acceptable for intended data quality objectives.

4.3.2 Laboratory Quality Control

Laboratory analytical data was evaluated by the assessment of precision, accuracy, representativeness, comparability and completeness.

Precision is a measure of the reproducibility of measurements under a given set of conditions. Laboratory duplicates, matrix spikes and matrix spike duplicates were used to determine the precision of the analytical process.

Accuracy is a measure of the bias in a measurement system, and defined as the closeness of the reported value to the true value. The accuracy of a measurement system was assessed by evaluating the results of quality control samples such as matrix spikes, analytical surrogates and the use of field/trip blanks, and equipment rinsate blanks.

Representativeness in the laboratory is ensured by using the proper analytical procedures, meeting sample holding times and analyzing and assessing field duplicated samples. Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. Analytical data are considered to be comparable when similar sampling and analytical methods are used and documented per the CDAP [MK 1996]. Laboratory completeness is a measure of the amount of valid measurements obtained from all measurements taken in the project.

The laboratory performed method blank, sample matrix spike and matrix spike duplicate, surrogate, and standard matrix spike analyses in order to evaluate laboratory accuracy and precision. MK reviewed the laboratory data received to determine whether data quality objectives were met for the sampling and

analytical programs through the assessment of precision, accuracy, representativeness, comparability and completeness.

With each volatile and dioxin/furan analysis performed, one or more corresponding method blanks contained low levels of at least one target analyte. In each case, the corresponding sample results have been flagged appropriately. Method blanks analyzed by all other methods were clean. Most sample surrogate recoveries fell within acceptable ranges to meet the project data quality objectives. In cases where surrogate recoveries fell outside of criteria and the samples were rerun, the surrogates recovered similarly in both analyses, indicating the possibility of a matrix interference. In several cases, a spiked sample contained surrogate recoveries that did not meet criteria. However, these spiked samples showed acceptable recoveries for target analytes, indicating that surrogate recoveries in these instances may not predict target analyte performance. The water samples sampled for disposal exhibited low surrogate standards for the pesticide, herbicide, semi-volatile and dioxin/furan analyses.

The sample matrix spikes and matrix spike duplicates (MS/MSD) had acceptable accuracy and precision, with the following exceptions: dinoseb, MCPA, and dalapon recovered outside of established criteria in several herbicides analyses, but the corresponding samples did not contain any hits for these analytes. One analytical batch of pesticides showed recoveries for PPDDT and PPDDD slightly below the criteria. Phenol exhibited low recoveries in one analysis, which may have been in part due to the concentration of phenol in the unspiked sample relative to the spike amount in the MS and MSD; phenol recoveries were acceptable in the corresponding laboratory standard spikes.

Laboratory standard spikes had high recoveries for several herbicides and volatile analytes, for which no corresponding samples showed hits. One analytical batch of pesticides showed recoveries for PPDDE, PPDDT and PPDDD slightly below the criteria. However, all other laboratory spikes performed exhibited acceptable accuracy and precision.

Data quality objectives for accuracy, precision, comparability and completeness were outlined in the CDAP [MK 1996]. Overall, the data quality objectives for this project have been met and data is felt to be acceptable as flagged.

5.0

CONCLUSIONS AND RECOMMENDATIONS

A field verification action was performed at Sites 1 and 5 of CBC Gulfport, Mississippi. Soil boring and sampling was performed at 60 locations. Soil samples were analyzed for volatile organics, semi-volatile organics, pesticides, herbicides, metals, dioxins and furans. Analytical results indicate that the only target analyte present above the established screening levels is arsenic. The main contaminant of concern at the sites, 2,3,7,8 - TCDD, was not detected in the samples collected. Therefore, it is recommended that the work proceed at Sites 1 and 5 with test trenching, which is the next project activity in the *Work Plan* [MK 1996].

6.0 REFERENCES

MK 1996, *Work Plan, CBC Gulfport Sites 1, 4 & 5*. Prepared for the Navy, Southern Division, Naval Facilities Engineering Command by Morrison Knudsen Corporation.

MK 1995, *Geophysical Investigation of Sites 1, 4 & 5 at Naval Construction Battalion Center*. Prepared for the Navy, Southern Division, Naval Facilities Engineering Command by Morrison Knudsen Corporation and Geosphere Midwest Inc.



**APPENDIX A
PROJECT PHOTOGRAPHS**

**APPENDIX A
PROJECT PHOTOGRAPHS**

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**SITE 1
DECONTAMINATION FACILITY AND GEOPROBE RIG**



**SITE 1
DECONTAMINATION OF STEEL TUBES**



**SITE 5
DECONTAMINATION FACILITY AND GEOPROBE RIG**



**SITE 5
DECONTAMINATION OF STEEL TUBES**



**SITE 1
SETTING UP OF THE GEOPROBE AT A SOIL BORING LOCATION**



**SITE 1
SOIL SAMPLING AND AIR MONITORING IN PROGRESS**



SITE 5
SETTING UP OF THE GEOPROBE AT A SOIL BORING LOCATION



SITE 5
SOIL SAMPLING IN PROGRESS



SITE 5
COVERING THE BRASS LINER WITH TEFLON TAPE FOR CAPPING



SITE 5
PLACING THE SAMPLES IN A COOLER



**APPENDIX B
PERMITS, NOTIFICATIONS AND CERTIFICATIONS**

**APPENDIX B
PERMITS, NOTIFICATIONS AND CERTIFICATIONS**

INDEX

1. EXCAVATION PERMIT, SITE # 1. 2 pages
2. EXCAVATION PERMIT, SITE # 5 2 pages

EXCAVATION PERMIT

DATE: 12-4-96

PW NUMBER: DIG 97022

APPROVAL IS GRANTED FOR 90 DAYS EXCEPT FOR TELEPHONES WHICH IS GOOD FOR 10 DAYS.

REQUESTING COMMAND: CBC Gulfport Rolco

WORK REQUEST/SERVICE CALL #: _____ JOB ORDER # _____

LOCATION: North of 7th St, east of Colby + west of Building 109

PLANNED START DATE: 12-6-96

PLANNED COMPLETION DATE: _____

DESCRIPTION OF WORK: SOIL BORING site 1 (NCTC)

REQUESTING OFFICIAL: Vince Quint

OK ELECTRICAL: Vince Quint (SIGNATURE) 421.6 (CODE) 12.4.96 (DATE)

* GAS: Vince Quint (needs to be marked) (SIGNATURE) 421.6 (CODE) 12.4.96 (DATE)

* WATER: Lines needs to be marked (SIGNATURE) 421.6 (CODE) 12.4.96 (DATE)

OK SEWER: _____ (SIGNATURE) _____ (CODE) 12.4.96 (DATE)

OK MONACO FIRE ALARM: Vince Quint (SIGNATURE) _____ (CODE) 12.4.96 (DATE)

TELEPHONE: ~~Vince Quint~~ (SIGNATURE) _____ (CODE) _____ (DATE)

OK CABLE TV: Vince Quint (SIGNATURE) 421.6 (CODE) 12.4.96 (DATE)

MISSISSIPPI ONE CONTROL NUMBER: 9612-04-0748-0016

1-800-227-6477 *** PHONE PERMIT IS GOOD FOR 10 WORKING DAYS. OUR CODE *****NABA*****

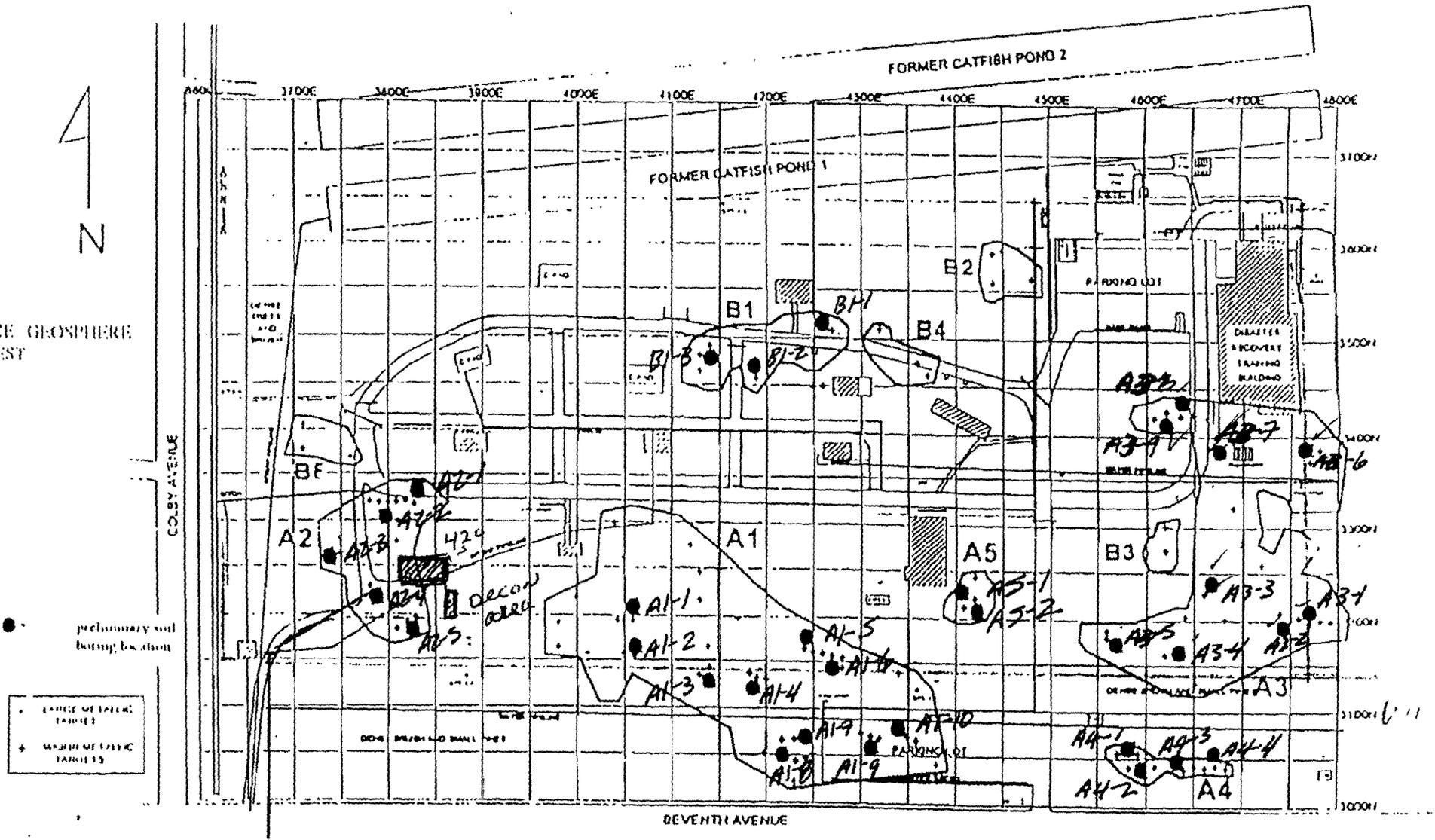
NOTES

1. MISSISSIPPI ONE CONTROL HAS BEEN NOTIFIED AND WILL MARK TELEPHONE LINES OR WILL MARK CLEAR AT THE SITE BY 12.6.96. (DATE)

2. WHEN READY TO DIG, IF UTILITY LINES ARE IDENTIFIED ABOVE TO BE MARKED, CALL FMED CODE 420 EXT. 2170 OR 2171.

2170 12-4-96

SOURCE GEOSPHERE
MIDWEST



G 11

Figure C-2
Site 1, Preliminary Soil Boring Locations

SCALE 0 100 200 FT



EXCAVATION PERMIT

REQUESTING COMMAND: ROLCC

WORK REQUEST NO: DIG 97020 DRAWING NO: C-61 & 62

LOCATION: SITE #1 E5 (SEE DRAW # 61 & 62)

PLANNED START DATE: 4 DEC. 1996

PLANNED COMPLETION DATE: 20 DEC 96

DESCRIPTION OF WORK: DRILL EXPLORATORY HOLES AT

LOCATIONS INDICATED ON DNG # 61 & 62, FROM 2' TO 20'
BELOW EXISTING GRADE

REQUESTING OFFICIAL: Billy [Signature]

UNDERGROUND UTILITY CHECK

ELECTRICAL: [Signature] (SIGNATURE) (CODE) 11-25 (DATE)

GAS: Clear (SIGNATURE) (CODE) 421.6 (DATE) 11-25-96

WATER: clear (SIGNATURE) (CODE) 421.6 (DATE) 11-25-96

SEWER: clear (SIGNATURE) (CODE) 421.6 (DATE) 11-25-96

MONACO FIRE ALARM: [Signature] (SIGNATURE) (CODE) 11-25 (DATE)

TELEPHONE: _____ (SIGNATURE) (CODE) (DATE)

MISSISSIPPI ONE CONTROL NO: 9611 25 0956 0208
1-800-227-6477 *** PHONE PERMIT IS GOOD FOR 10 WORKING DAYS.

APPROVAL IS GRANTED FOR 90 DAYS FOR ALL ITEMS WITH THE EXCEPTION OF TELEPHONES.

F.M.E.D. (DATE)

~~STAR~~ APPROVAL SITE WEST OF COLBY ONLY

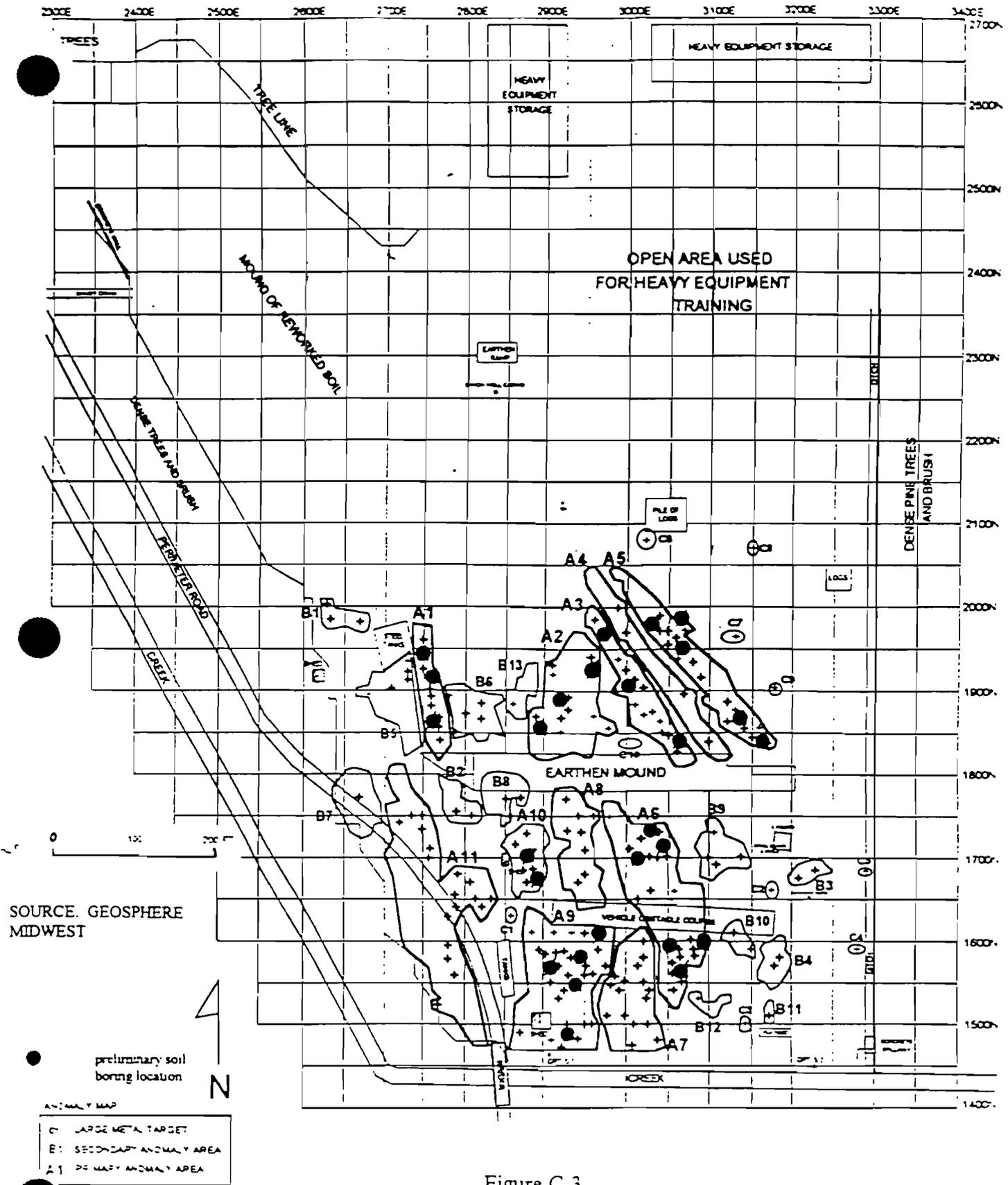
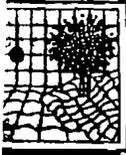


Figure C-3
Site 5. Preliminary Soil Boring Locations



**APPENDIX C
CHAIN-OF-CUSTODY FORMS**

(14 Pages)



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany - Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax 918-251-2599

Alan Fosdick

216-5255316

SAMPLING FIRM

Bhate for MK

CLIENT CONTACT

Alan Fosdick

PHONE NUMBER

(216) 523-3422

P.O. or PROPOSAL NUMBER

PROJECT NAME

CBC Golfport Sites 1-5 Soil Boring

MPLER: (Signature)

James M. Thomas

ANALYTICAL TESTS REQUESTED

Vol 8240
MC 44
Lab 10
Sugc 9270
Dinkw 2750
Perr 2010
Herc 2010
350

AMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	REMARKS
12-590		8:00 7:45		✓	GPT55BA5306	Soil	3	Return from Bhate
		8:15 8:35			GPT55BA5313			Use this as field duplicate
		8:55 9:14			GPT55BA5406			
		10:35			GPT55BA5414			Keith
		11:00			GPT55BA5505			
		11:20			GPT55BA5513			
		14:00			GPT55BA3105			
		14:25			GPT55BA3112			
		14:45			GPT55BA3206			
		15:05			GPT55BA3313			
		15:50			GPT55BA3306			
		16:10		✓	GPT55BA3311			
		16:53			TS ¹¹	Soil	3	
		16:53			Direct blank glass		1	01255014

RELINQUISHED BY: (Signature) *James M. Thomas* DATE *12/5/96* TIME *18:00* RECEIVED BY: (Signature) *Ted E* *2236194574*

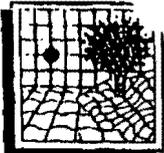
RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE *12/6/96* TIME *0930* RECEIVED FOR LABORATORY BY: (Signature) *Thomas*

RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature)

REMARKS



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
 1700 W Albany - Broken Arrow, Oklahoma 74012-1421
 Office: 918-251-2858 • Fax 918-251-2598

TESTING FIRM Bhate for MK	CLIENT CONTACT ALAN Fosdick	PHONE NUM. (216) 523-3316
P.O. or PROPOSAL NUMBER	PROJECT NAME BS Gulfport Sites 1+5 Soil Borings	

SAMPLER (Signature)
 Matt Thomas *James M. Thomas*

ANALYTICAL TESTS REQUESTED							REMARKS
VOI	Metals	SVOC	PCOC	PCOC	PCOC	PCOC	

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	VOI	Metals	SVOC	PCOC	PCOC	PCOC	PCOC	REMARKS
	12-6-96	8:03			GPTS5BA2106	Soil	3	X	X	X	X	X	X		Return Brass liners to Bhate
		8:23			GPTS5BA2113										
		8:50			GPTS5BA2207										
		9:05			GPTS5BA22105										
		10:20			GPTS5BA2307										
		10:50			GPTS5BA2314										
		11:15			GPTS5BA1100										
		11:50			GPTS5BA1113										
		14:45			GPTS5BA121X0										
		15:00			GPTS5BA1212										
		15:45			GPTS5BA1306										
	12-6-96	15:45			GPTS5BA1313	Soil	3	X	X	X	X	X	X		

RELINQUISHED BY (Signature) *James M. Thomas* DATE 12/1/96 TIME 18:00 RECEIVED BY (Signature) *Fed Et* 2236194494

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE TIME RECEIVED FOR LABORATORY BY (Signature)

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

REMARKS



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany • Broken Arrow, Oklahoma 74012-1421
Office 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM <i>Bhate for MK</i>	CLIENT CONTACT <i>Alary Fosdick</i>	PHONE NUMBER <i>210-523-3422</i>
--------------------------------------	----------------------------------------	-------------------------------------

P.O. or PROPOSAL NUMBER	PROJECT NAME <i>CBC Gulfport Sites 1 & 5 Soil Samples</i>
-------------------------	------------------------------------------------------------------

SAMPLER (Signature)
S. W. Thomas

ANALYTICAL TESTS REQUESTED	
<i>✓</i> Metals <i>0240</i> <i>6010 174710</i>	<i>✓</i> Trace Metals <i>0270</i> <i>6010</i>
<i>✓</i> Organics <i>0270</i> <i>6010</i>	<i>✓</i> Other <i>0270</i> <i>6010</i>

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	ANALYTICAL TESTS REQUESTED						REMARKS
	12-7-90	09:30		+	GPTS1DA41010	Soil	3	X	X	X	X	X	X	
	12-9-90	07:45		-	GPTS5BA101010									
	12-9-90	08:14		-	GPTS5BA10113									
	12-9-90	08:55		-	GPTS5BA10210									<i>Duplicate</i>
	12-9-90	09:10		-	GPTS5BA10213									
	12-9-90	10:00		-	GPTS5BA10606									
	12-9-90	10:23		-	GPTS5BA10613									
	12-9-90	10:35		-	GPTS5BA10505									
	12-9-90	10:55		-	GPTS5BA10505	Soil	3	X	X	X	X	X	X	
	12-7-90	16:33		-	Trip blank									<i>Return Brass liners to bhate</i>

RELINQUISHED BY (Signature) <i>Don Bennett</i>	DATE <i>12-9-90</i>	TIME <i>16:50</i>	RECEIVED BY (Signature) <i>Fed Ex</i>
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RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)
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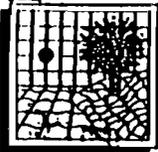
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RELINQUISHED BY (Signature)	DATE <i>12/6/96</i>	TIME <i>0915</i>	RECEIVED FOR LABORATORY BY (Signature) <i>J. R. Bennett</i>
-----------------------------	------------------------	---------------------	----------------------------------------------------------------

RELINQUISHED BY (Signature)	DATE	TIME	RECEIVED BY (Signature)
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REMARKS <i>4</i>

101



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany • Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM

Bhate for MK

CLIENT CONTACT

Alan Fostick

PHONE NUMBER

216-523-3422

P.O. of PROPOSAL NUMBER

PROJECT NAME

CBC Gulfport Sites 1 & 5 Soil Borings

SAMPLER (Signature)

James H. Thomas

ANALYTICAL TESTS REQUESTED

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	ANALYTICAL TESTS REQUESTED						REMARKS	
								WPC 8240	Trace Metals	SVOC 8270	Di. and P. PCBs	Residuals 8160	Herocins 8150		
	12-8-96	8:35			GPTS1BA4303	soil	3	X	X	X	X	X	X		Please ship all brass lines back to Bhate Bhate 1608 13 th Ave Birmingham Ala 35205
	12-8-96	14:05			GPTS1BB1200										
	12-8-96	10:30			GPTS1BA4403										
	12-8-96	15:10			GPTS5BA5102										
	12-8-96	09:10			GPTS1BA4313										
	12-8-96	11:25			GPTS1BB1103										
	12-8-96	8:10			GPTS1BA4210										
	12-8-96	07:50		✓	GPTS1BA4207										
	12-7-96	09:45		✓	GPTS1BA4109										
	12-8-96	15:31		★	GPTS5BA5109									Duplicate, Analyze twice	
	12-8-96	14:20		✓	GPTS1BB1303										
	12-8-96	11:37		✓	GPTS1BB1110										
	12-8-96	14:40		✓	GPTS1BB1310										
	12-8-96	10:45		✓	GPTS1BA4413										
	12-7-96	09:30		✓	GPTS1BA4103										
	12-8-96	14:20		✓	GPTS1DB1310	soil	3	X	X	X	X	X			

RELINQUISHED BY: (Signature)

DATE

TIME

RECEIVED BY: (Signature)

Don B... ..

12-7-96 16:50

Fed Ex

RELINQUISHED BY: (Signature)

DATE

TIME

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)

DATE

TIME

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)

DATE

TIME

RECEIVED FOR LABORATORY BY: (Signature)

12/10/96

09:15

[Signature]

RELINQUISHED BY: (Signature)

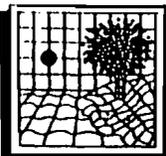
DATE

TIME

RECEIVED BY: (Signature)

REMARKS:

42



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany • Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM Bhate Cor MK	CLIENT CONTACT Alan Furdick	PHONE NUMBER 280-523-3422
-------------------------------	--------------------------------	------------------------------

P.O. or PROPOSAL NUMBER	PROJECT NAME CBC Gulfport Sites 1+5 Soil Boring
-------------------------	----------------------------------------------------

SAMPLER (Signature) *Alan M. Furdick*

ANALYTICAL TESTS REQUESTED							REMARKS
VOC (P24)	Metals (P24)	SIOC (P270)	Other (P270)	Pesticides (P270)	Herbicides (P270)	ALS	

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	VOC (P24)	Metals (P24)	SIOC (P270)	Other (P270)	Pesticides (P270)	Herbicides (P270)	ALS	REMARKS
	12-10-96	07:45			GPT55BA6405	Soil	3	X	X	X	X	X	X		Return Brass Liners to Bhate
	12-10-96	08:00			GPT55BA6412										
	12-10-96	08:25			GPT55BA6405										
	12-10-96	08:45			GPT55BA6412										
	12-10-96	09:50			GPT55BA6405										
	12-10-96	09:59			GPT55BA6213										
	12-10-96	10:20			GPT55BA6105										
	12-10-96	10:40			GPT55BA6112										
	12-10-96	11:20			GPT55BA9505										
	12-10-96	11:40			GPT55BA9513										
	12-10-96	12:20			GPT55BA6105										Duplicate
	12-10-96	10:20			GPT55BA6105										
	12-10-96	14:15			GPT55BA9405										
	12-10-96	14:35			GPT55BA9413										
	12-10-96	15:00			GPT55BA94130		3	X	X	X	X	X	X		Duplicate
	12-10-96	17:20			Trip Blank	Soil	2	X							

RELINQUISHED BY: (Signature) <i>Alan M. Furdick</i>	DATE 12/10/96	TIME 17:20	RECEIVED BY: (Signature) <i>Furdick</i>	2236194472
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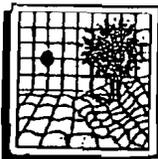
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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
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RELINQUISHED BY: (Signature)	DATE 12/11/96	TIME 09:30	RECEIVED FOR LABORATORY BY: (Signature) <i>Jules</i>
------------------------------	------------------	---------------	---------------------------------------------------------

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
------------------------------	------	------	--------------------------

REMARKS



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W Albany • Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax: 918-251-2599

SAMPLING: r.Bha. For MK

CLIENT CONTACT: Alan Fiedick

PHONE NUMBER: (616) 523-342

P.O. or PROPOSAL NUMBER:

PROJECT NAME: CBC! Gulfport Sites 1+5 Soil Borings

SAMPLER: (Signature) James M. Thomas

ANALYTICAL TESTS REQUESTED	
VOC 8240	REMARKS
608/712A	
SWC 8270	
Distillation	
Metals	
Metals 8080	
8156	

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	REMARKS
	12-11-96	08:00		X	GPTSSBA930	Soil	3	
	12-11-96	08:20		|	GPTSSBA9314		3	
	12-11-96	08:30		|	GPTSSBA9314		1	Duplicate
	12-11-96	09:20		|	GPTSSBA9200		3	
	12-11-96	09:25		|	GPTSSBA9214		3	
	12-11-96	10:40		|	GPTSSBA9100		3	Hot High VOC
	12-11-96	10:11:00		Y	GPTSSBA9114		2	Hot High VOC
	12-11-96	12:54		Y	RIP Blank 4	water	2	

RELINQUISHED BY: (Signature) James M. Thomas
 DATE: 12-11-96
 TIME: 17:05
 RECEIVED BY: (Signature) Fed Ex
 DATE: 12-12-96
 TIME: 19:44:24

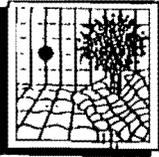
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 DATE:
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 RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)
 DATE:
 TIME:
 RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature)
 DATE: 12/12/96
 TIME: 0930
 RECEIVED FOR LABORATORY BY (Signature) [Signature]

RELINQUISHED BY: (Signature)
 DATE:
 TIME:
 RECEIVED BY: (Signature)

REMARKS:
 12



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany • Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM BHate for MK	CLIENT CONTACT Alan Fosdick	PHONE NUMBER
--------------------------------------	---------------------------------------	--------------

P.O. or PROPOSAL NUMBER	PROJECT NAME GBS Gulfport Sites 1 to 5 Soil Borings
-------------------------	---------------------------------------------------------------

SAMPLER (Signature)
Alan M. Thomas

ANALYTICAL TESTS REQUESTED						REMARKS
JOC 8240	MEANS 801/2/3/4/5	SUPR 8270	DIURETIC 8270	POTASSIUM 8270	PERSSIDE 8270	

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	JOC 8240	MEANS 801/2/3/4/5	SUPR 8270	DIURETIC 8270	POTASSIUM 8270	PERSSIDE 8270	REMARKS
	12-12-96	14:00		X	GPTSIBA5205	Soil	3	X	X	X	X	X	X	
	12-12-96	14:45			GPTSIBA1502		3							
	12-12-96	15:00			GPTSIBA1509		3							
	12-12-96	15:30			GPTSIBA1102		3							
	12-12-96	15:45			GPTSIBA1109		3	↓	↓	↓	↓	↓	↓	
	12-13-96	7:51			GPTSIBA1202		2	X	X	X	X	X	X	
	12-13-96	8:03	///		GPTSIBA1209		4							
	12-13-96	8:35			GPTSIBA1302		3							
	12-13-96	8:48	/		GPTSIBA1310		3							
	12-13-96	9:17			GPTSIBA1402		3							
	12-13-96	1:50			GPTSIBA1410		3							
	12-13-96	11:30			GPTSIBA1602		2							
	12-13-96	11:42			GPTSIBA1609		3							
	12-13-96	1:45			GPTSIBA1702		3							
	12-13-96	1:55			GPTSIBA1710		2							
	12-13-96	2:47		↓	GPTSIBA1804		3	↓	↓	↓	↓	↓	↓	

RELINQUISHED BY: (Signature) <i>Alan M. Thomas</i>	DATE 12/13/96	TIME 17:32	RECEIVED BY: (Signature) <i>Felcy</i>	2236194450
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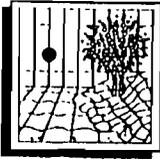
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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
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RELINQUISHED BY: (Signature)	DATE 12/14/96	TIME 0945	RECEIVED FOR LABORATORY BY: (Signature) <i>William</i>
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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)
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REMARKS:



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany - Broken Arrow, Oklahoma 74012-1421
Office 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM

REA FuELMk

CLIENT CONTACT

Allen Fordick

PHONE NUMBER

P.O. or PROPOSAL NUMBER

PROJECT NAME

CBC Support Ms. sites 145

SAMPLER (Signature)

[Signature]

ANALYTICAL TESTS REQUESTED

VOC 8240
Meth. 60477
SVOC 8270
Pesticides 8080
Herbicides 8150

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	ANALYTICAL TESTS REQUESTED						REMARKS
	12-14-96	5:10		✓	GPTS1BA1704	Soil	3	X	X	X	X	X	X	potential hot for VOC
	12-14-96	7:30			GPTS1BA1711		3							
	12-14-96	8:40			GPTS1BA11204		3							(return mass lined to 23 hater)
	12-14-96	2:55			GPTS1BA11011		3							
	12-14-96	9:40			GPTS1BA3702		3							
	12-14-96	1:57			GPTS1BA3707		3							
	12-14-96	11:50			GPTS1BA3802		3							
	12-14-96	12:01			GPTS1BA3809		3							
	12-14-96	3:00			GPTS1BA3702		3							
	12-14-96	3:10			GPTS1BA3710		3							
	12-14-96	3:40			GPTS1BA3603		3							
	12-14-96	4:08			GPTS1BA3610		4							Duplicate included
	12-14-96	10:00			GPTS1BA3303		3							
	12-18-96	7:45			GPTS1BA3310		3							
	12-14-96	8:05			GPTS1BA3103		3							Hit on PID
	12-14-96	8:20			GPTS1BA3110		4							Duplicate included

RELINQUISHED BY: (Signature) *[Signature]* DATE: 12/14/96 TIME: 16:30 RECEIVED BY: (Signature) *[Signature]* 2236194446

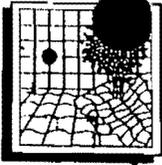
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RELINQUISHED BY: (Signature) DATE: TIME: RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE: 12/17/96 TIME: 0945 RECEIVED FOR LABORATORY BY: (Signature) *[Signature]*

RELINQUISHED BY: (Signature) DATE: TIME: RECEIVED BY: (Signature)

REMARKS



CHAIN OF CUSTODY RECORD

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 W. Albany • Broken Arrow, Oklahoma 74012-1421
Office: 918-251-2858 • Fax 918-251-2599

SAMPLING FIRM
BEA FOR MK

CLIENT CONTACT
ALLEN FOSLUICK

PHONE NUMBER

P.O. or PROPOSAL NUMBER

PROJECT NAME
CBC Gulfport + MS. sites 1-5

SAMPLER (Signature)
[Signature]

ANALYTICAL TESTS REQUESTED					
VOC 8240	METAB 2774	S.VOC 9270	Pesticide 8080	Herbicide 8110	Other
X	X	X	X	X	X

SAMPLE ID	DATE	TIME	COMP	GRAB	LOCATION	MATRIX	NUMBER OF CONTAINERS	ANALYTICAL TESTS REQUESTED						REMARKS	
	12-16-96	8:47		X	GPTSIBA3203	Soil	3	X	X	X	X	X	X		<i>return Brass liners to State</i>
	12-16-96	8:52			GPTSIBA3211		3								
	12-16-96	1:32			GPTSIBA3403		3								
	12-16-96	2:42			GPTSIBA3410		3								
	12-16-96	10:46			GPTSIBA3503		3								
	12-16-96	10:17			GPTSIBA3510		3								
	12-16-96	1:12			GPTSIBA2103		3								
	12-16-96	1:18			GPTSIBA2112		3								
	12-16-96	1:33			GPTSIBA2203		3								
	12-16-96	1:50			GPTSIBA2210		3								
	12-16-96	2:12			GPTSIBA2303		3								
	12-16-96	2:21			GPTSIBA2310		3								
	12-16-96	2:57			GPTSIBA2403		3								
	12-16-96	2:42			GPTSIBA2410		3								
	12-16-96	3:14			GPTSIBA2506		3								
	12-16-96	3:30			GPTSIBA2519		3								

RELINQUISHED BY (Signature) *[Signature]* DATE 12/16/96 TIME 16:30 RECEIVED BY (Signature) *FEJEX* 2236194446

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

RELINQUISHED BY (Signature) DATE 12/17/96 TIME 0945 RECEIVED FOR LABORATORY BY (Signature) *[Signature]*

RELINQUISHED BY (Signature) DATE TIME RECEIVED BY (Signature)

REMARKS: *32*



**APPENDIX D
SOIL BORING LOGS**

**APPENDIX D
SOIL BORING LOGS**

INDEX

1.	SITE 1, SOIL BORING LOGS	33 Pages
2.	SITE 5, SOIL BORING LOGS	27 Pages

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-12-96 (15:17)

DATE COMPLETED:
12-12-96 (15:52)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4.0'	18"	FID 2.0	GPT S1 BA1102	Sand: medium, black (3-4'), light brown (tan) @ 2.5-3.0', saturated @ tip	
9-11.0'	20"	FID 1.0	GPT S1 BA1109	Sand: medium/fine, medium brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-2

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-13-96 (7:40)

DATE COMPLETED:
12-13-96 (8:20)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4'	12"	FID 30.0	GPT S1 BA1202	Sand: medium, grey to reddish/brown, saturated @ tip	
9-11.0'	24"	FID 12.0	GPT S1 BA1209	Sand: fine, grey/tan, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A1-3

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-13-96 (8:30)

DATE COMPLETED:
12-13-96 (8:58)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4'	16"	FID 12.0 (backgrd 0.0)	GPT S1 BA1302	Sand: medium, tan, moist	
9-11.0'	24"	FID 0.0	GPT S1 BA1310	Sand: medium, coarse; gravel: dark brown/black, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A1-4

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-13-96 (9:05)

DATE COMPLETED:
12-13-96 (9:40)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 5.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2.5-4.5'	16"	FID 11.0	GPT S1 BA1402	Sand: medium/coarse, light brown, grey, black mottled silts, v. moist	
10-12.0'	24"	FID 3.0	GPT S1 BA1410	Sand: fine/medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-5

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-12-96 (14:20)

DATE COMPLETED:
12-12-96 (15:08)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4.0'	18"	FID 22.0 (backgrd 0 0)	GPT S1 BA1502	Sand: medium, brown @ tip, tan/orange after first 6", saturated @ tip	
9-11.0'	24"	FID 70.0	GPT S1 BA1509	Sand: medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport					
TASK: Soil Boring Installation					
SOIL BORING NO.: A1-6		SITE: 1		DRILLING CONTRACTOR: Bhate	
DRILLING MAKE and MODEL: Geoprobe 4220				START DATE: 12-13-96 (10:07)	
DATE COMPLETED: 12-13-96 (13:00)					
ANOMALY AREA: A1					
GROUND ELEVATION (ft. MSL):			TOTAL DEPTH (ft): 11.0		HOLE DIAMETER: 1.5 in
LOGGED BY: Matt Thomas				DEPTH TO WATER (ft bgs): 4.5	
Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	2-4'	12"	FID 9.0	GPT S1 BA1602	Sand: medium/fine, dark brown, saturated
	9-11.0'	24"	FID 0.0	GPT S1 BA1609	Sand: medium/fine, dark brown, saturated
GENERAL NOTES:					

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A1-7

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-13-96 (13:25)

DATE COMPLETED:
12-13-96 (14:03)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 6.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	16"	FID 19.0	GPT S1 BA1703	Sand/silt/clay: medium sand, grey, v. moist	
10-12'	12"	FID 5.0	GPT S1 BA1710	Sand: fine, medium/coarse; gravel: small, coarse; brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-8

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-13-96 (14:10)

DATE COMPLETED:
12-13-96 (15:18)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 13.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 6.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
4-6.0'	16"	FID 34.0	GPT S1 BA1804	Sand/silt: medium, tan, moist	
11-13'	24"	FID 5.0	GPT S1 BA1811	Sand: fine/medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-9

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (7:45)

DATE COMPLETED:
12-14-96 (8:26)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 13.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 6.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
4-6'	18"	FID 8,600 (backgrd 0.0)	GPT S1 BA1904	Sand: medium, light brown, moist	
11.5-13.5'	23"	FID 8.0 (backgrd. 0.0)	GPT S1 BA1911	Sand: medium/coarse, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-10

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (8:30)

DATE COMPLETED:
12-14-96 (9:06)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 13

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 6.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
4-6'	16"	FID 20.0 (backgrd 0.0)	GPT S1 BA11004	Sand: medium/coarse, brown saturated @ tip	
11-13'	23"	FID 1.0 (backgrd 0.0)	GPT S1 BA11011	Sand: fine, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A2-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (12:57)

DATE COMPLETED:
12-16-96

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 5.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	3.0 (backgrd 0.0)	GPT S1 BA2103	Sand: medium, saturated at 5'	
10-12'	24"	0.0 (backgrd 0.0)	GPT S1 BA2110	Sand: fine, tan w/orange stains, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport					
TASK: Soil Boring Installation					
SOIL BORING NO.: A2-2		SITE: 1		DRILLING CONTRACTOR: Bhate	
DRILLING MAKE and MODEL: Geoprobe 4220				START DATE: 12-16-96 (1:28)	DATE COMPLETED: 12-16-96 (1:40)
ANOMALY AREA: A2					
GROUND ELEVATION (ft. MSL):			TOTAL DEPTH (ft): 12.0		HOLE DIAMETER: 1.5 in
LOGGED BY: R.W. Henderson				DEPTH TO WATER (ft bgs): 5.0	
Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	3-5'	18"	5.8 (backgrd 0.0)	GPT S1 BA2203	Sand: medium/fine, grey, saturated @ tip
	10-12'	24"	1.0 (backgrd 1.0)	GPT S1 BA2210	Sand: medium, light brown w/medium brown stain, saturated
GENERAL NOTES:					

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A2-3

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (2:05)

DATE COMPLETED:
12-16-96 (2:30)

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	20"	9.0 (backgrd 0.0)	GPT S1 BA2303	Sand: medium, brown saturated @ tip	
10-12'	24"	0.0 (backgrd 0.0)	GPT S1 BA2310	Sand: medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A2-4

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (2:38)

DATE COMPLETED:
12-16-96 (2:47)

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.5

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	16"	11.6 (backgrd 0.0)	GPT S1 BA2403	Sand: medium, light tan, saturated @ tip	
9.5-11.5'	20"	0 (backgrd 0.0)	GPT S1 BA2409	Sand: fine, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A2-5

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (3:15)

DATE COMPLETED:
12-16-96 (3:23)

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.5

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2.5-4.5'	18"	8.4 (backgrd 0.2)	GPT S1 BA2502	Sand: medium, brown saturated @ tip	
9.5-11.5'	24"	0.2 (backgrd 0.2)	GPT S1 BA2509	Sand: medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (8:05)

DATE COMPLETED:
12-16-96 (8:25)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12

HOLE DIAMETER: 1.5 in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 6.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	200	GPT S1 BA3103	Sand: medium, black, saturated @ tip, PID backgrd 0.0	
10-12'	23"	4.0 (backgrd 0.0)	GPT S1 BA3110	Sand: medium, dark brown to black, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-2

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (8:40)

DATE COMPLETED:
12-16-96 (8:58)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 13

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 5.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	90.0 (backgrd 0.0)	GPT S1 BA3203	Sand: tan, medium, moist @ tip, odor in sample	
11-13'	24"	16.0 (backgrd 0.0)	GPT S1 BA3211	Sand: medium, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-3

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-15-96 (9:40)

DATE COMPLETED:
12-16-96 (7:55)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12

HOLE DIAMETER: 1.5 in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 5.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	20	GPT S1 BA3303	Sand: medium, dark brown/black at 5' depth, moist @ tip	
10-12'	24"	3.6	GPT S1 BA3310	Sand: medium/fine, saturated, dark brown	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A3-4

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (9:23)

DATE COMPLETED:
12-16-96 (9:45)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 5.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3.0-5.0'	17"	22.0 (backgrd 0.0)	GPT S1 BA3403	Sand: medium, black, saturated @ tip, odor in sample	
10-12'	23"	22.0 (backgrd 0.0)	GPT S1 BA3411	Sand: medium/fine light to medium brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A3-5

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-16-96 (9:58)

DATE COMPLETED:
12-16-96 (10:20)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: R.W. Henderson

DEPTH TO WATER (ft bgs): 5.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	17"	16.6 (backgrd 0.0)	GPT S1 BA3503	Sand: medium, brown, saturated @ tip	
10-12'	22"	6.6 (backgrd 0.0)	GPT S1 BA3510	Sand: medium/fine, medium to light brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-6

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (15:40)

DATE COMPLETED:
12-14-96 (17:35)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 5.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	16"		HNU 16.2	GPT S1 BA3603	Sand: medium, dark brown, saturated @ tip
10-12'	24"		HNU 0.0	GPT S1 BA3610	Sand: fine/medium, dark brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-7

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (2:30)

DATE COMPLETED:
12-14-96 (3:20)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2.5-4.5'	18"	HNU 48.0 (backgrd. 0.0)	GPT S1 BA3702	Sand: medium/fine, dark brown, moist	
10-12'	24"	HNU -0.0 sample 20.0 hole	GPT S1 BA3710	Sand: fine, saturated, dark brown	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-8

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (11:38)

DATE COMPLETED:
12-14-96 (12:07)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4'	18"	FID 6.0 (backgrd 0.0) RAE 0.0	GPT S1 BA3802	Sand: medium, dark brown, moist	
9-11'	24"	FID 16.0 (backgrd 0.0) RAE 0.0	GPT S1 BA3809	Sand: medium/fine, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-9

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-14-96 (9:20)

DATE COMPLETED:
12-14-96 (10:03)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2-4'	16"	FID 50.0 (backgrd 0.0)	GPT S1 BA3902	Sand: medium, light brown, saturated @ tip	
9-11'	24"	FID 14.0 (backgrd 8.0)	GPT S1 BA3909	Sand: fine, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A4-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-7-96 (8:29)

DATE COMPLETED:
12-7-96 (9:45)

ANOMALY AREA: A4

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
refusal 2.5' offset 5' South					
refusal 3.0' offset 2.5' back					
refusal 3'4" offset 7.5' forward					
refusal 3.0' offset 6'W 3'N					
3-5.0	10"		RAE 40.5	GPT S5 BA4103	Sand: medium to coarse, grey, saturated @ tip, tan mottling
9-11.0'	18"		RAE 8.4	GPT S5 BA4109	Sand: medium, light to dark brown, saturated

GENERAL NOTES:

At 3' depth it appeared the probe penetrated something. The sample cone also had a small piece of metal wedged into the shoe. Additionally, after 3 gallons of grout the hole wasn't fully grouted so the grout was forced to bridge and plug the hole.

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A4-2

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-7-96 (9:55)

DATE COMPLETED:
12-8-96 (8:07)

ANOMALY AREA: A4

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	refusal 14" offset 5'W				
	refusal 14" offset 3'W 5'S				
	PID failure (10:35)				
	3-5'	16"	RAE 0.0	GPT S1 BA4203	Sand: medium/coarse, grey, moist
	10.5-12.5	18"	RAE 18.9	GPT S1 BA4210	Sand: medium, brown, saturated

GENERAL NOTES:

Left the hole on 12-7-96 because of PID failure.

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A4-3

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (8:15)

DATE COMPLETED:
12-8-96 (9:17)

ANOMALY AREA: A4

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	RAE 0.0	GPT S1 BA4 303	Sand: coarse/medium, grey, moist	
13-15'	20"	RAE 1.4	GPT S1 BA4313	Sand: coarse/medium, reddish brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A4-4

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (10:15)

DATE COMPLETED:
12-8-96 (10:50)

ANOMALY AREA: A4

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"	RAE 0.0 HNU 0.6	GPT S1 BA4403	Sand: coarse/medium, grey, moist	
13-15'	24"	HNU 0.3	GPT S1 BA4413	Sand: medium, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A5-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (14:55)

DATE COMPLETED:
12-8-96 (15:30)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 11.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
2.5-4.0'	16"	HNU 7.8	GPT S1 BA5102	Sand: medium, tan, v. moist, black-staining	
9.5-11.5'	16"	HNU 0.5	GPT S1 BA5109	Sand: coarse/medium, dark brown, saturated, oily residue	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A5-2

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-12-96 (13:50)

DATE COMPLETED:
12-12-96 (14:10)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 7'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5-7'	18"		FID 8.0	GPT S1 BA5205	Sand: medium/fine, dark brown, saturated

GENERAL NOTES:

Only one sample was taken as it was below the actual G.W. level.

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: B1-1

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (11:00)

DATE COMPLETED:
12-8-96 (11:40)

ANOMALY AREA: B1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	20"	HNU 2.8	GPT S1 BB1103	Sand: medium, dark brown, v. moist	
10-12'	24"	HNU 0.4	GPT S1 BB1110	Sand: coarse, tan, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
B1-2

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (13:40)

DATE COMPLETED:
12-8-96 (14:10)

ANOMALY AREA: B1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 7.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 3.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5-7.5'	20"		0.5	GPT S1 BB1205	Clay (grey/brown) + Sand (medium, tan) saturated
no further sampling (perched water)					

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: B1-3

SITE: 1

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12-8-96 (14:15)

DATE COMPLETED:
12-8-96 (14:45)

ANOMALY AREA: B1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 12.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 4.5

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
3-5'	18"		HNU 7.6	GPT S1 BB1303	Sand/clay: grey @ 3' + brown @ 5', saturated @ tip
10-12'	24"		HNU 0.2	GPT S1 BB1310	Sand: medium/fine, tan, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A1-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/6/96 (11:00)

DATE COMPLETED:
12/6/96 (12:00)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9.0

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6.5 - 8.5'	18"	HNU 2.5	GPT S5 BA1106	Sand: Medium, reddish, saturated @ tip	
13.0 - 15.0'	22"	HNU 0.8 RAE 0.0	GPT S5 BA1113	Sand: Medium, reddish brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A1-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/6/96 (14:30)

DATE COMPLETED:
12/6/96 (15:05)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 0.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6.0 - 8.0'	16"	RAE (HNU low battery) 7.5	GPT S5 BA1206	Sand/Wood: Medium, dark brown, saturated @ tip	
12.5 - 14.5'	24"	RAE 0.0	GPT S5 BA1212	Sand: Medium, dark reddish brown saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A1-3

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/6/96 (15:15)

DATE COMPLETED:
12/6/96 (15:40)

ANOMALY AREA: A1

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6 - 8.0'	18"	RAE 18.7	GPT S5 BA1306	Sand: Medium, tan, moist	
13.0 - 15.0'	24"	RAE 0.0	GPT S5 BA1313	Sand: Medium, reddish brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A2-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
4220

START DATE:
12/6/96 (7:33)

DATE COMPLETED:
12/6/96 (8:25)

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6-8'	18"		HNU 4.5	GPT S5 BA2106	Sand: Medium, grey, moist, sweet odor
13-15'	24"		HNU 14.0	GPT S5 BA2113	Sand: Medium, brown/reddish, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A2-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/6/96 (8:35)

DATE COMPLETED:
12/6/96

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 16.5'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 10.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
7.5-9.0'	16"	HNU 4.4	GPT S5 BA2207	Sand: Medium, brown very moist	
14.5 - 16.5'	24"	HNU 0.2 (backgrd)	GPT S5 BA2214	Sand: Medium, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A2-3

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/6/96 (10:09)

DATE COMPLETED:
12/6/96 (10:51)

ANOMALY AREA: A2

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 16.0

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
7.0 - 9.0'	18"	HNU 1.3	GPT S5 BA2307	Sand: Medium, tan, reddish saturated @ tip	
14.0 - 16.0'	24"	HNU 0.2	GPT S5 BA2314	Sand: Medium, tan/brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/5/96 (13:40)

DATE COMPLETED:
12/5/96 (14:25)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
Refusal at 5', offset 5'					Cone tip had a piece of steel wedge in when it was removed after refusal occurred
5.5-7.5'	16"		HNU 1.1	GPT S5 BA3105	Sand: Fine/medium, grey/white, moist
12.5-14.5	22"		HNU 1.4	GPT S5 BA3112	Sand: Fine/medium, lighter reddish/brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A3-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/5/96 (14:35)

DATE COMPLETED:
12/5/96 (15:10)

ANOMALY AREA: A3

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6-8'	18"	HNU 16.0	GPT S5 BA3206	Sand: Medium, white, saturated @ tip	
13-15'	24"	HNU 0.4	GPT S5 BA3213	Sand: Fine/medium, brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport					
TASK: Soil Boring Installation					
SOIL BORING NO.: A3-3		SITE: 5		DRILLING CONTRACTOR: Bhate	
DRILLING MAKE and MODEL: Geoprobe 4220				START DATE: 12/5/96 (15:35)	DATE COMPLETED: 12/5/96 (16:15)
ANOMALY AREA: A3					
GROUND ELEVATION (ft. MSL):			TOTAL DEPTH (ft): 13.0'		HOLE DIAMETER: 1.5 in
LOGGED BY: Matt Thomas				DEPTH TO WATER (ft bgs): 8.5'	
Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	6-8'	18"	HNU 4.2	GPT S5 BA3306	Sand: Medium, white, very moist
	11-13'	24"	HNU 0.6	GPT S5 BA3311	Sand: Fine, reddish/brown w/grey mix, saturated
GENERAL NOTES: Originally planned to sample 5' below g.w.; but at 11.0' the stop pin came cut. Therefore, rather than redrilling the hole a sample was collected from 11 to 13 feet.					

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A5-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/4/96 (12:55)

DATE COMPLETED:
12/4/96 (13:45)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 17'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
8-10'	18"	10.3	GPT S5BA5 108	Sand: Fine, grey/white, saturated	
15-17'	24"	0.3 background	GPT S5BA5115	Sand: Fine, brown/red, saturated dark oil-like liquid	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A5-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/4/96 (13:45)

DATE COMPLETED:
12/4/96 (14:25)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6-8'	18"	11.7	GPT S5 BA5206	Sand: fine, reddish/brown, moist	
13.0-15	24"	.3 background	GPT S5 BA5213	Sand: fine, reddish/brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport					
TASK: Soil Boring Installation					
SOIL BORING NO.: A5-3		SITE: 5		DRILLING CONTRACTOR: Bhate	
DRILLING MAKE and MODEL: Geoprobe 4220				START DATE: 12/5/96 (7:45)	DATE COMPLETED: 12/5/96 (8:35)
ANOMALY AREA: A5					
GROUND ELEVATION (ft. MSL):			TOTAL DEPTH (ft): 15.0'		HOLE DIAMETER: 1.5 in
LOGGED BY: Matt Thomas				DEPTH TO WATER (ft bgs): 8.5	
Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval (ft)	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	6-8	16"	HNU 2.9 RAE 25.0	GPT S5 BA5306	Sand: Fine, reddish, moist
	13-15	24"	HNU 0.6 RAE 21.1	GPT S5 BA5313	Sand: Fine reddish/brown, saturated
GENERAL NOTES:					

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A5-4

SITE: 5

DRILLING CONTRACTOR:

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/5/96 (9:45)

DATE COMPLETED:
12/5/96 (10:35)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6-8'	18"		HNU 13.6	GPT S5 BA5406	Sand: Fine, grey/white saturated @ tip
13-14.5'	18"		HNU 0.4 background	GPT S5 BA5414	Sand: Fine, reddish/brown, saturated, some dark liquid staining

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A5-5

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/5/96 (0:40)

DATE COMPLETED:
12/5/96 (11:20)

ANOMALY AREA: A5

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5-7.5	18"		HNU 2.2	GPT S5 BA5505	Sand: Fine, grey/white moist, yellow streak
13-14.5	18"		HNU 0.9	GPT S5 BA5513	Sand: Fine, reddish/brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A6-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (1:10)

DATE COMPLETED:
12/10/96 (10:51)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	22"	HNU 0.7	GPT S5 BA6105	Sand: Medium, tan/gray, saturated @ tip	
12.5' - 14.5'	24"	HNU 0.3	GPT S5 BA6112	Sand: Medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A6-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (9:37)

DATE COMPLETED:
12/10/96 (10:05)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	12" (soft)		HNU 2.1	GPT S5 BA6205	Sand: Medium, grey, moist
13.0 - 15.0'	24"		HNU 0.4	GPT S5 BA6213	Sand: Medium, dark brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A6-3

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (8:15)

DATE COMPLETED:
12/10/96 (8:52)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	18"	HNU 0.7	GPT S5 BA6305	Sand: Medium, tan/grey, very moist	
12.5 - 14.5'	24"	HNU 0.3	GPT S5 BA6312	Sand: Medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A6-4

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (7:20)

DATE COMPLETED:
12/10/96 (8:10)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	20"		HNU 1.3	GPT S5 BA6405	Sand: Medium, dark brown, very moist
12.5 - 14.5'	24"		HNU 0.3	GPT S5 BA6412	Sand: Medium, dark brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A6-5

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/9/96 (10:27)

DATE COMPLETED:
12/9/96 (11:05)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 14.5

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 7.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	20"	HNU 17.0	GPT S5 BA6505	Sand: Medium, tan, saturated at tip	
12.5 - 14.5'	18"	HNU 7.4	GPT S5 BA6512	Sand: Medium/coarse, reddish brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A6-6

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/9/96 (9:48)

DATE COMPLETED:
12/9/96 (10:22)

ANOMALY AREA: A6

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6 - 8'	18"		HNU 11.0	GPT S5 BA6606	Sand: Medium, dark brown, saturated @ tip
13 - 15'	24"		HNU 0.8	GPT S5 BA6613	Sand: Medium, reddish brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A9-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/11/96 (10:10)

DATE COMPLETED:
12/11/96 (11:50)

ANOMALY AREA: A9

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): M7 16.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6 - 8.0'	18"	FID 3,200 (.10,000 hole reding)	GPT S5 BA9106	Sand: Medium, tan, moist, black staining mottled	
14 - 16.0'	20"	FID 4,400 HNU 0.2	GPT S5 BA9114	Sand: Medium, dark brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A9-2

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Georprobe 4220

START DATE:
12/11/96 (9:12)

DATE COMPLETED:
12/11/96 (10:00)

ANOMALY AREA: A9

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 16.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6 - 8.0'	18"	FID 100	GPT S5 BA9206	Sand: Medium, reddish dark gray, moist	
14 - 16.0'	24"	FID 3.0	GPT S5 BA9214	Sand: Medium/fine, dark brown saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A9-3

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/11/96 (8:00)

DATE COMPLETED:
12/11/96 (9:03)

ANOMALY AREA: A9

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 16.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9'4"

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6.5 - 8.5'	18"		HNU 1.4	GPT S5 BA9306	Sand: Medium, light black, moist
14 - 16.0'	24"		FID 2.0	GPT S5 BA9314	Sand: Medium/fine, reddish light brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A9-4

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (3:30)

DATE COMPLETED:

ANOMALY AREA: A10

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5 in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9.0'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	18"		HNU 1.9	GPT S5 BA9405	Sand: Medium, gray, moist
13.0 - 15.0'	23"		HUN 0.4	GPT S5 BA9413	Sand: Fine, dark brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.:
A9-5

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/10/96 (11:00)

DATE COMPLETED:
12/10/96 (11:50)

ANOMALY AREA: A9

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 9.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
5.5 - 7.5'	20"	HNU 1.1	GPT S5 BA9505	Sand/Silt: Medium, gray, moist	
13.0 - 15.0'	18"	HNU 0.4	GPT S5 BA9513	Sand: Medium, light brown, saturated	

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport

TASK: Soil Boring Installation

SOIL BORING NO.: A10-1

SITE: 5

DRILLING CONTRACTOR: Bhate

DRILLING MAKE and MODEL:
Geoprobe 4220

START DATE:
12/9/96 (7:25)

DATE COMPLETED:
12/9/96 (8:13)

ANOMALY AREA: A10

GROUND ELEVATION (ft. MSL):

TOTAL DEPTH (ft): 15.0'

HOLE DIAMETER: 1.5
in

LOGGED BY: Matt Thomas

DEPTH TO WATER (ft bgs): 8.5'

Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
6 - 8'	18"		HNU 9.9	GPT S5 BA10106	Sand: Medium, tan, moist
13 - 15'	24"		HNU 0.4	GPT S5 BA10113	Sand: Medium, brown, saturated

GENERAL NOTES:

SOIL BORING LOG

SITE: CBC Gulfport					
TASK: Soil Boring Installation					
SOIL BORING NO.: A10-2		SITE: 5		DRILLING CONTRACTOR: Bhate	
DRILLING MAKE and MODEL: Geoprobe 4220				START DATE: 12/9/96 (8:20)	DATE COMPLETED: 12/9/96 (9:10)
ANOMALY AREA: A10					
GROUND ELEVATION (ft. MSL):			TOTAL DEPTH (ft): 15.0'		HOLE DIAMETER: 1.5 in
LOGGED BY: Matt Thomas				DEPTH TO WATER (ft bgs): 8.5'	
Depth below surface (ft)	SAMPLE				Description: Name, grain size distribution, color, moisture content, density, unusual observation (staining, odor, etc.)
	Sample Interval	Recovery (Inches)	PID Result (ppm)	Sample I.D. (Offsite analysis)	
	Refusal @ 5.0' offset 5'W				Fibrous material found in the cone tip
	6 - 8'	18"	HNU 17.0	GPT S5 BA10206	Sand: Medium, grey w/reddish tint, very moist contains small wood fibers
	13 - 15"	23"	HNU 3.0	GPT S5 BA10213	Sand: Medium, dark brown, saturated
GENERAL NOTES:					



APPENDIX E
SUMMARY OF ANALYTICAL RESULTS

**APPENDIX E
SUMMARY OF ANALYTICAL RESULTS**

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Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1004	GPTS1BA1011	GPTS1BA1102	GPTS1BA1109	GPTS1BA1202	GPTS1BA1209
			12/14/96	12/14/96	12/12/96	12/12/96	12/13/96	12/13/96
SW6010	ARSENIC	MGKG	0.510B	3.200	0.400U*	0.430B*	0.380U*	0.390U*
SW6010	BARIUM	MGKG	7.700	0.480B	7.000	20.300	0.440B	0.590B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	3.200	0.750B	1.900 *	6.100 *	0.520B*	5.100 *
SW6010	LEAD	MGKG	2.100	0.630	1.100 *	4.200 *	0.490 *	1.200 *
SW6010	SELENIUM	MGKG	0.350U	0.360U	0.370U	0.370U	0.350U	0.360U
SW6010	SILVER	MGKG	0.220U	0.230U	0.230U	0.240U	0.220U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.270	0.040U	0.040U	0.040U
SW8080	2,2-BIS(PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.900U	3.000U	3.000U	3.000U	3.700	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	DIELDRIN	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	ENDRIN	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	ENDRIN KETONE	UGKG	2.900U	3.000U	3.000U	3.000U	2.900U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	GAMMA-HEXOCHLOROCYHEXANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.500U	1.500U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	16.000U	16.000U	15.000U	15.000U
SW8080	PCB 1016	UGKG	38.000U	40.000U	40.000U	40.000U	38.000U	39.000U
SW8080	PCB 1221	UGKG	38.000U	40.000U	40.000U	40.000U	38.000U	39.000U
SW8080	PCB 1232	UGKG	38.000U	40.000U	40.000U	40.000U	38.000U	39.000U
SW8080	PCB 1242	UGKG	38.000U	40.000U	40.000U	40.000U	38.000U	39.000U
SW8080	PCB 1248	UGKG	38.000U	40.000U	40.000U	40.000U	38.000U	39.000U
SW8080	PCB 1254	UGKG	77.000U	82.000U	82.000U	82.000U	78.000U	80.000U
SW8080	PCB 1260	UGKG	77.000U	82.000U	82.000U	82.000U	78.000U	80.000U
SW8080	TOXAPHENE	UGKG	95.000U	100.000U	100.000U	100.000U	96.000U	99.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	18.000U	20.000U	20.000U	20.000U	19.000U	19.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	115.000U	122.000U	122.000U	122.000U	116.000U	119.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	71.000U	76.000U	76.000U	76.000U	72.000U	74.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	43.000U	45.000U	45.000U	45.000U	43.000U	44.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	61.000U	65.000U	65.000U	65.000U	62.000U	63.000U
SW8150	2-METHOXY-3,6-DICHLORO BENZOIC ACID	UGKG	26.000U	28.000U	28.000U	28.000U	27.000U	27.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	17.000U	17.000U	17.000U	16.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1610.000U	1710.000U	1700.000U	1710.000U	1630.000U	1670.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3450.000U	3660.000U	3660.000U	3660.000U	3490.000U	3570.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1004	GPTS1BA1011	GPTS1BA1102	GPTS1BA1109	GPTS1BA1202	GPTS1BA1209
			12/14/96	12/14/96	12/12/96	12/12/96	12/13/96	12/13/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5750.000U	6100.000U	6100.000U	6100.000U	5820.000U	5950.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	120.000B	28.000B	85.000B	6.000JB	76.000	14.000
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	ISOPHORONE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1004	GPTS1BA1011	GPTS1BA1102	GPTS1BA1109	GPTS1BA1202	GPTS1BA1209
			12/14/96	12/14/96	12/12/96	12/12/96	12/13/96	12/13/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	760.000U	800.000U	800.000U	800.000U	770.000U	780.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	150.000J	390.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	4-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	CARBAZOLE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	FLUORENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	72.000J	390.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	76.000J	390.000U
SW8270	PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	120.000J	390.000U
SW8270	BENZO[GH]PERYLENE	UGKG	380.000U	400.000U	400.000U	400.000U	51.000J	390.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BENZOIC ACID	UGKG	170.000J	51.000J	2000.000U	2000.000U	1900.000U	1900.000U
SW8270	BENZYL ALCOHOL	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	110.000J	48.000J	400.000U	60.000J	58.000J	390.000U
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	CHRYSENE	UGKG	380.000U	400.000U	400.000U	400.000U	100.000J	390.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1004	GPTS1BA1011	GPTS1BA1102	GPTS1BA1109	GPTS1BA1202	GPTS1BA1209
			12/14/96	12/14/96	12/12/96	12/12/96	12/13/96	12/13/96
SW827A	NITROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	160.000J	390.000U
SW827A	HEXACHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	HEXACHLORO-1,3-BUTADIENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	HEXACHLOROCYCLOPENTADIENE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	HEXACHLOROETHANE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	INDENO[1,2,3-C,D]PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	51.000J	390.000U
SW827A	N-NITROSDIPHENYLAMINE	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	NAPHTHALENE / TAR CAMPHOR	UGKG	380.000U	400.000U	400.000U	400.000U	380.000U	390.000U
SW827A	PENTACHLOROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	2000.000U	1900.000U	1900.000U
SW827A	PHENANTHRENE	UGKG	380.000U	400.000U	400.000U	400.000U	65.000J	390.000U
SW827A	PHENOL	UGKG	2500.000	1500.000	1400.000	680.000	970.000	880.000
SW829A	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.328U	0.392U	0.190U	0.296U	26.200	0.164U
SW829A	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	10.300	0.364U	34.000	1.66J	270.000	0.629
SW829A	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.204U	0.334U	0.110U	0.243U	16.400	0.110U
SW829A	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	1.650	0.548U	17.300	0.263U	29.800	0.128U
SW829A	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.209U	0.333U	0.131U	0.171U	24.400	0.100U
SW829A	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	107.000B	3.960X	163.000B	10.400B	460.000B	3.410B
SW829A	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.358U	0.724U	1.800	0.516U	0.404U	0.238U
SW829A	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.199U	0.331U	0.212U	0.362U	25.600	0.170U
SW829A	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.569U	0.549U	0.290U	0.349U	0.286U	0.286U
SW829A	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.299U	0.467U	0.262U	0.274U	4.800	0.281U
SW829A	1,2,3,4,6,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	2.680	0.364U	11.100	0.574X	70.500	0.629
SW829A	1,2,3,4,6,8-HEPTACHLORODIBENZOFURAN	NGKG	0.204U	0.334U	0.142XB	0.247XB	16.400B	0.211XB
SW829A	1,2,3,4,7,9-HEPTACHLORODIBENZOFURAN	NGKG	0.244U	0.399U	0.131U	0.290U	1.090U	0.132U
SW829A	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.479U	0.851U	0.363U	0.408U	0.504U	0.199U
SW829A	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.267U	0.425U	0.168U	0.218U	5.870I	0.127U
SW829A	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.308U	0.548U	0.234U	0.263U	1.320X	0.128U
SW829A	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.209U	0.333U	0.131U	0.171U	0.621U	0.100U
SW829A	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.336U	0.597U	0.899	0.286U	0.354U	0.139U
SW829A	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.302U	0.481U	0.190U	0.247U	0.898U	0.144U
SW829A	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.358U	0.724U	0.387U	0.516U	0.404U	0.238U
SW829A	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.198U	0.330U	0.211U	0.361U	0.286U	0.170U
SW829A	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.273U	0.435U	0.172U	0.223U	0.993X	0.130U
SW829A	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.199U	0.331U	0.212U	0.362U	0.287U	0.170U
SW829A	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.299U	0.467U	0.262U	0.274U	0.236U	0.281U
SW829A	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.569U	0.549U	0.290U	0.349U	0.286U	0.286U

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1302	GPTS1BA1310	GPTS1BA1402	GPTS1BA1410	GPTS1BA1502	GPTS1BA1509
			12/13/96	12/13/96	12/13/96	12/13/96	12/12/96	12/12/96
SW6010	ARSENIC	MGKG	0.380U*	1.600 *	0.390U	0.830B	0.400B*	0.540B*
SW6010	BARIUM	MGKG	6.600	0.730B	8.400	0.830B	6.300	0.820B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.130B	0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	2.900 *	3.100 *	4.000	2.300	3.400 *	1.900 *
SW6010	LEAD	MGKG	1.500 *	1.500 *	25.900	1.400	1.500 *	0.700 *
SW6010	SELENIUM	MGKG	0.350U	0.370U	0.350U	0.390U	0.350U	0.390U
SW6010	SILVER	MGKG	0.220U	0.230U	0.220U	0.250U	0.220U	0.250U
SW7471	MERCURY	MGKG	0.050	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS(PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	BETA-ENDOSULFAN	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	DIELDRIN	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	ENDOSULFAN SULFATE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	ENDRIN	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	ENDRIN ALDEHYDE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	ENDRIN KETONE	UGKG	2.900U	3.100U	2.900U	3.200U	2.900U	3.200U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.500U	1.700U	1.500U	1.700U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	15.000U	17.000U	15.000U	17.000U
SW8080	PCB 1016	UGKG	38.000U	41.000U	38.000U	43.000U	39.000U	43.000U
SW8080	PCB 1221	UGKG	38.000U	41.000U	38.000U	43.000U	39.000U	43.000U
SW8080	PCB 1232	UGKG	38.000U	41.000U	38.000U	43.000U	39.000U	43.000U
SW8080	PCB 1242	UGKG	38.000U	41.000U	38.000U	43.000U	39.000U	43.000U
SW8080	PCB 1248	UGKG	38.000U	41.000U	38.000U	43.000U	39.000U	43.000U
SW8080	PCB 1254	UGKG	78.000U	83.000U	78.000U	87.000U	79.000U	87.000U
SW8080	PCB 1260	UGKG	78.000U	83.000U	78.000U	87.000U	79.000U	87.000U
SW8080	TOXAPHENE	UGKG	96.000U	100.000U	96.000U	110.000U	98.000U	110.000U
W8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	20.000U	19.000U	21.000U	21.000U	19.000U
W8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	116.000U	123.000U	116.000U	130.000U	130.000U	118.000U
W8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	72.000U	77.000U	72.000U	81.000U	81.000U	73.000U
W8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	43.000U	48.000U	43.000U	48.000U	48.000U	44.000U
W8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	62.000U	65.000U	62.000U	69.000U	69.000U	62.000U
W8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	27.000U	28.000U	27.000U	30.000U	30.000U	27.000U
W8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	17.000U	16.000U	18.000U	18.000U	16.000U
W8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1630.000U	1730.000U	1630.000U	1820.000U	1820.000U	1650.000U
W8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3490.000U	3700.000U	3490.000U	3900.000U	3900.000U	3530.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1302	GPTS1BA1310	GPTS1BA1402	GPTS1BA1410	GPTS1BA1502	GPTS1BA1509
			12/13/96	12/13/96	12/13/96	12/13/96	12/12/96	12/12/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5810.000U	6170.000U	5810.000U	6490.000U	6500.000U	5880.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	1.000J
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	ACETONE	UGKG	25.000B	23.000	190.000B	15.000	120.000	58.000
SW8240	BENZENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	23.000U	13.000U	12.000U	13.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	12.000U	6.000U	6.000U	6.000U
W8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	4-CHLORO-3-CRESOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	ISOPHORONE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	1,2-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	DIBENZ[AH]ANTHRACENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
W8270	1,3-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1302	GPTS1BA1310	GPTS1BA1402	GPTS1BA1410	GPTS1BA1502	GPTS1BA1509
			12/13/96	12/13/96	12/13/96	12/13/96	12/12/96	12/12/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	770.000U	810.000U	770.000U	860.000U	780.000U	860.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	CARBAZOLE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	FLUORENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	ANTHRACENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	PYRENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BENZOIC ACID	UGKG	1900.000U	2000.000U	91.000J	50.000J	120.000J	180.000J
SW8270	BENZYL ALCOHOL	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	380.000U	410.000U	380.000U	200.000J	130.000J	120.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	CHRYSENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1302	GPTS1BA1310	GPTS1BA1402	GPTS1BA1410	GPTS1BA1502	GPTS1BA1509
			12/13/96	12/13/96	12/13/96	12/13/96	12/12/96	12/12/96
SW8270	NITROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	HEXACHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	HEXACHLOROETHANE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	INDENO[1,2,3-C,D]PYRINE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	430.000U
SW8270	PENTACHLOROPHENCL	UGKG	1900.000U	2000.000U	1900.000U	2100.000U	1900.000U	2100.000U
SW8270	PHENANTHRENE	UGKG	380.000U	410.000U	380.000U	430.000U	390.000U	79.000J
SW8270	PHENOL	UGKG	1300.000	2500.000	1800.000	2500.000	1800.000	2900.000
SW8290	*OCTACHLORODIBENZOFURAN, NOI-SPECIFIC	NGKG	0.187U	0.213U	8.970	0.438U	0.175U	0.245U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	4.520	2.060	22.200	0.350U	1.200	1.020
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.103U	0.123U	9.700	0.178U	0.249U	0.149U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DOXINS	NGKG	0.119U	2.580	0.530U	0.240U	1.170	0.191U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.108U	0.133U	0.716	0.191U	0.165U	0.108U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	52.400B	14.600B	182.000B	3.040XB	13.800B	3.560XB
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.231U	0.690	0.642U	0.466U	0.331U	0.414U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.130U	0.155U	1.090	0.227U	0.190U	0.260U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.379U	0.229U	0.423U	0.446U	0.258U	1.310
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.219U	0.171U	2.080	0.381U	0.267U	0.230U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.820	1.180X	10.900	0.350U	0.447X	0.616X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.160XB	0.212XB	5.630B	0.178U	0.249U	0.227XB
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.123U	0.147U	0.438U	0.212U	0.297U	0.178U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-F-DIOXIN	NGKG	0.185U	0.284U	0.823U	0.373U	0.416U	0.296U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.138U	0.169U	0.429U	0.244U	0.211U	0.137U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-F-DIOXIN	NGKG	0.119U	0.183U	0.530U	0.240U	0.268U	0.191U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.108U	0.133U	0.336U	0.191U	0.165U	0.108U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-F-DIOXIN	NGKG	0.129U	0.199U	0.577U	0.261U	0.292U	0.208U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.157U	0.192U	0.486U	0.276U	0.239U	0.156U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-F-DIOXIN	NGKG	0.231U	0.256U	0.642U	0.466U	0.331U	0.414U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.130U	0.154U	0.438U	0.227U	0.189U	0.259U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.142U	0.173U	0.440U	0.250U	0.216U	0.141U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.130U	0.155U	0.439U	0.227U	0.190U	0.260U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.219U	0.171U	0.544U	0.381U	0.267U	0.230U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,F][1,4]DIOXIN	NGKG	0.379U	0.229U	0.423U	0.446U	0.258U	0.334U

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1602	GPTS1BA1609	GPTS1BA1702	GPTS1BA1710	GPTS1BA1804	GPTS1BA1811
			12/13/96	12/13/96	12/13/96	12/13/96	12/13/96	12/13/96
SW6010	ARSENIC	MGKG	0.390U	1.200B	0.380U	0.400U	0.550B	1.700
SW6010	BARIUM	MGKG	4.200	1.400	30.300	0.640B	14.400	0.770B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	0.050U	0.060U
SW6010	CHROMIUM	MGKG	2.600	1.500	4.600	1.900	4.300	1.700
SW6010	LEAD	MGKG	2.400	1.200	4.300	0.430	2.900	0.930
SW6010	SELENIUM	MGKG	0.350U	0.370U	0.340U	0.360U	0.340U	0.430U
SW6010	SILVER	MGKG	0.220U	0.240U	0.220U	0.230U	0.220U	0.270U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040	0.050U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	BETA-ENDOSULFAN	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	DIELDRIN	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	ENDOSULFAN SULFATE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	ENDRIN	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	ENDRIN ALDEHYDE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	ENDRIN KETONE	UGKG	2.900U	3.100U	2.900U	3.000U	2.800U	3.600U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.500U	1.600U	1.500U	1.900U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	15.000U	16.000U	15.000U	19.000U
SW8080	PCB 1016	UGKG	38.000U	41.000U	38.000U	40.000U	38.000U	48.000U
SW8080	PCB 1221	UGKG	38.000U	41.000U	38.000U	40.000U	38.000U	48.000U
SW8080	PCB 1232	UGKG	38.000U	41.000U	38.000U	40.000U	38.000U	48.000U
SW8080	PCB 1242	UGKG	38.000U	41.000U	38.000U	40.000U	38.000U	48.000U
SW8080	PCB 1248	UGKG	38.000U	41.000U	38.000U	40.000U	38.000U	48.000U
SW8080	PCB 1254	UGKG	78.000U	84.000U	77.000U	82.000U	76.000U	97.000U
SW8080	PCB 1260	UGKG	78.000U	84.000U	77.000U	82.000U	76.000U	97.000U
SW8080	TOXAPHENE	UGKG	96.000U	100.000U	95.000U	100.000U	94.000U	120.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	20.000U	18.000U	20.000U	20.000U	23.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	116.000U	125.000U	115.000U	122.000U	122.000U	145.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	72.000U	78.000U	71.000U	76.000U	76.000U	90.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	43.000U	46.000U	43.000U	45.000U	45.000U	54.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	62.000U	66.000U	61.000U	65.000U	65.000U	77.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	27.000U	29.000U	26.000U	28.000U	28.000U	33.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	18.000U	16.000U	17.000U	17.000U	20.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1630.000U	1750.000U	1610.000U	1710.000U	1710.000U	2030.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3490.000U	3750.000U	3450.000U	3660.000U	3660.000U	4350.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA1602	GPTS1BA1609	GPTS1BA1702	GPTS1BA1710	GPTS1BA1804	GPTS1BA1811
			12/13/96	12/13/96	12/13/96	12/13/96	12/13/96	12/13/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5810.000U	6250.000U	5750.000U	6100.000U	6100.000U	7250.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	*XYLENES	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1-DICHLOROETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1-DICHLOROETHENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	2.000J
SW8240	1,2-DICHLOROETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	2-BUTANONE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	2-HEXANONE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	VINYL ACETATE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	ACETONE	UGKG	330.000B	12.000JB	51.000B	9.000JB	170.000B	22.000B
SW8240	BENZENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMODICHLOROMETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMOFORM	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMOMETHANE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	CARBON DISULFIDE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CARBON TETRACHLORIDE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROBENZENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROETHANE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	VINYL CHLORIDE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	CHLOROFORM	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROMETHANE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	METHYLENE CHLORIDE	UGKG	12.000U	6.000U	6.000U	1.000J	6.000U	7.000U
SW8240	ETHYLBENZENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	23.000U	12.000U	11.000U	12.000U	11.000U	14.000U
SW8240	STYRENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TETRACHLOROETHYLENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	5.000J
SW8240	TOLUENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TRICHLOROETHYLENE	UGKG	12.000U	6.000U	6.000U	6.000U	6.000U	3.000J
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	ISOPHORONE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DIBENZ[AH]ANTHRACTHENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1602	GPTS1BA1609	GPTS1BA1702	GPTS1BA1710	GPTS1BA1804	GPTS1BA1811
			12/13/96	12/13/96	12/13/96	12/13/96	12/13/96	12/13/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	770.000U	820.000U	760.000U	800.000U	750.000U	960.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	CARBAZOLE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	FLUORENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	ANTHRACENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	PYRENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BENZO[GH]PERYLENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BENZOIC ACID	UGKG	110.000J	110.000J	1800.000U	2000.000U	48.000J	94.000J
SW8270	BENZYL ALCOHOL	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	41.000J	60.000J	380.000U	66.000J	380.000U	58.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	CHRYSENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1602	GPTS1BA1609	GPTS1BA1702	GPTS1BA1710	GPTS1BA1804	GPTS1BA1811
			12/13/96	12/13/96	12/13/96	12/13/96	12/13/96	12/13/96
SW8270	NITROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	HEXACHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	HEXACHLOROETHANE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2300.000U
SW8270	PHENANTHRENE	UGKG	380.000U	410.000U	380.000U	400.000U	380.000U	480.000U
SW8270	PHENOL	UGKG	1700.000	3000.000	1400.000	1000.000	3600.000	2900.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	13.700	0.570U	0.664U	2.040U	0.234U	0.519
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	63.300	0.454	31.500	1.040U	11.100	0.191U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	22.500	0.440U	1.960	1.170U	0.179U	0.140U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	4.180	0.428U	32.600	0.924U	1.740	0.713
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	17.200	0.234U	0.295U	0.481U	0.118U	0.119U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	191.000B	3.000B	97.600B	22.900B	150.000B	7.410B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.390U	0.426U	7.540	1.380U	0.249U	0.431U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	12.800	0.283U	0.336U	0.616U	0.233U	0.255U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	5.160	0.522U	6.300	1.280U	0.325U	0.272U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	11.400	0.264U	0.461U	0.940U	0.205U	0.270U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	23.000	0.774U	10.700	2.880X	1.560	0.620X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	10.500B	0.440U	1.960B	1.170U	0.205XB	0.515XB
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.819U	0.526U	0.355U	1.400U	0.214U	0.168U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.740U	0.726U	0.671U	1.440U	0.262U	0.271U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.574U	0.298U	0.377U	0.614U	0.150U	0.152U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.477U	0.468U	0.432U	0.924U	0.168U	0.175U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.450U	0.234U	0.295U	0.481U	0.118U	0.119U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.519U	0.509U	1.470	1.010U	0.183U	0.190U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.650U	0.338U	0.427U	0.695U	0.170U	0.172U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.390U	0.426U	0.782U	1.380U	0.249U	0.431U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.260U	0.282U	0.335U	0.614U	0.233U	0.254U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.588U	0.306U	0.386U	0.629U	0.154U	0.156U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.261U	0.283U	0.336U	0.616U	0.233U	0.255U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.460U	0.264U	0.461U	0.940U	0.205U	0.270U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.358U	0.522U	0.681U	1.280U	0.325U	0.272U

Gulfp...te 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1904	GPTS1BA1911	GPTS1BA2103	GPTS1BA2110	GPTS1BA2203	GPTS1BA2210
			12/14/96	12/14/96	12/16/96	12/16/96	12/16/96	12/16/96
SW6010	ARSENIC	MGKG	0.380U	2.300	0.400U	0.440U	0.410U	0.400U
SW6010	BARIUM	MGKG	7.600	0.530B	13.100	2.600	5.100	0.960
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	3.100	0.510B	4.500	1.200B	2.600	1.400
SW6010	LEAD	MGKG	1.500	0.650	2.100	0.910	1.900	0.970
SW6010	SELENIUM	MGKG	0.340U	0.360U	0.360U	0.400U	0.370U	0.370U
SW6010	SILVER	MGKG	0.220U	0.230U	0.230U	0.250U	0.240U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	DIELDRIN	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	ENDRIN	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	ENDRIN KETONE	UGKG	2.900U	3.000U	3.000U	3.300U	3.100U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.600U	1.700U	1.600U	1.600U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	16.000U	17.000U	16.000U	16.000U
SW8080	PCB 1016	UGKG	38.000U	40.000U	40.000U	43.000U	41.000U	40.000U
SW8080	PCB 1221	UGKG	38.000U	40.000U	40.000U	43.000U	41.000U	40.000U
SW8080	PCB 1232	UGKG	38.000U	40.000U	40.000U	43.000U	41.000U	40.000U
SW8080	PCB 1242	UGKG	38.000U	40.000U	40.000U	43.000U	41.000U	40.000U
SW8080	PCB 1248	UGKG	38.000U	40.000U	40.000U	43.000U	41.000U	40.000U
SW8080	PCB 1254	UGKG	77.000U	81.000U	81.000U	88.000U	84.000U	82.000U
SW8080	PCB 1260	UGKG	77.000U	81.000U	81.000U	88.000U	84.000U	82.000U
SW8080	TOXAPHENE	UGKG	95.000U	100.000U	100.000U	110.000U	100.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	18.000U	19.000U	19.000U	21.000U	20.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	115.000U	120.000U	120.000U	132.000U	125.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	71.000U	75.000U	75.000U	82.000U	78.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	43.000U	45.000U	45.000U	49.000U	46.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	61.000U	64.000U	64.000U	70.000U	66.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	26.000U	28.000U	28.000U	30.000U	29.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	17.000U	17.000U	18.000U	18.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1610.000U	1690.000U	1690.000U	1840.000U	1750.000U	1710.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3450.000U	3610.000U	3610.000U	3950.000U	3750.000U	3660.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA1904	GPTS1BA1911	GPTS1BA2103	GPTS1BA2110	GPTS1BA2203	GPTS1BA2210
			12/14/96	12/14/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5750.000U	6020.000U	6020.000U	6580.000U	6250.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	800.000B	160.000B	77.000B	50.000B	40.000B	6.000JB
SW8240	BENZENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	57.000U	24.000U	12.000U	13.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	29.000U	12.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	ISOPHORONE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1904	GPTS1BA1911	GPTS1BA2103	GPTS1BA2110	GPTS1BA2203	GPTS1BA2210
			12/14/96	12/14/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	45.000J	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	760.000U	800.000U	800.000U	880.000U	820.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	4-NITROANILINE	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	CARBAZOLE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	FLUORENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	ANTHRACENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	PYRENE	UGKG	42.000J	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BENZOIC ACID	UGKG	300.000J	43.000J	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	110.000J	65.000J	40.000J	440.000U	46.000J	83.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	CHRYSENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA1904	GPTS1BA1911	GPTS1BA2103	GPTS1BA2110	GPTS1BA2203	GPTS1BA2210
			12/14/96	12/14/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8270	NITROBENZENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	HEXACHLOROBENENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	HEXACHLORO-1,3-UTADIENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	HEXACHLOROCYC.OPENTADIENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	HEXACHLOROETHINE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	INDENO[1,2,3-C,D]FYRENE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	380.000U	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	NAPHTHALENE / T,R CAMPHOR	UGKG	62.000J	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	1800.000U	1900.000U	1900.000U	2100.000U	2000.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	94.000J	400.000U	400.000U	440.000U	410.000U	400.000U
SW8270	PHENOL	UGKG	5700.000	760.000	790.000	430.000J	130.000J	2400.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.220U	0.370U	0.419U	0.283U	0.442U	0.261U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	38.200	1.070	16.000	1.010	3.180	1.190
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.177U	0.103U	0.244U	0.236U	0.226U	0.195U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	23.700	0.184U	7.040	0.217U	1.230	0.140U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.103U	0.147U	0.103U	0.149U	0.130U	0.089U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	279.000B	10.500B	110.000	38.300	14.600	16.500
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.976	0.316U	0.312U	0.275U	0.423U	0.267U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.271U	0.210U	0.161U	0.148U	0.221U	0.181U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.477U	0.366U	0.308U	0.329U	0.336U	0.314U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.530U	0.219U	0.236U	0.158U	0.271U	0.243U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	6.770	0.292U	9.890	1.040X	0.431U	0.764X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.177U	0.103U	0.244U	0.236U	0.226U	0.195U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.212U	0.124U	0.292U	0.282U	0.270U	0.233U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.250U	0.285U	0.325U	0.338U	0.446U	0.218U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.131U	0.188U	0.131U	0.191U	0.165U	0.114U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.161U	0.184U	0.209U	0.217U	0.287U	0.140U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.103U	0.147U	0.103U	0.149U	0.130U	0.089U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	1.540	0.200U	2.630	0.237U	0.312U	0.153U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.149U	0.213U	0.149U	0.216U	0.187U	0.129U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.437U	0.316U	0.312U	0.275U	0.423U	0.267U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.270U	0.210U	0.161U	0.148U	0.220U	0.180U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.135U	0.193U	0.134U	0.195U	0.170U	0.116U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.271U	0.210U	0.161U	0.148U	0.221U	0.181U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.530U	0.219U	0.236U	0.158U	0.271U	0.243U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.477U	0.366U	0.308U	0.329U	0.336U	0.314U

Gulfp...te 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA2303	GPTS1BA2310	GPTS1BA2403	GPTS1BA2409	GPTS1BA2502	GPTS1BA2509
			12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
SW6010	ARSENIC	MGKG	0.410U	0.990B	0.480B	0.410U	0.400U	0.410U
SW6010	BARIUM	MGKG	0.700B	0.670B	2.800	0.750B	1.700	0.410B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	1.100B	0.610B	3.100	0.790B	3.900	1.400
SW6010	LEAD	MGKG	0.860	1.100	1.000	0.450	1.100	0.820
SW6010	SELENIUM	MGKG	0.370U	0.370U	0.370U	0.380U	0.360U	0.370U
SW6010	SILVER	MGKG	0.240U	0.230U	0.240U	0.240U	0.230U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	ALDRIN	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	DIELDRIN	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	ENDRIN	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.100U	3.100U	3.100U	3.100U	3.000U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	GAMMA-HEXOCHLOROCYHEXANE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	HEPTACHLOR	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.600U	1.600U	1.600U	1.600U	1.600U
SW8080	METHOXYCHLOR	UGKG	16.000U	16.000U	16.000U	16.000U	16.000U	16.000U
SW8080	PCB 1016	UGKG	41.000U	41.000U	41.000U	41.000U	40.000U	40.000U
SW8080	PCB 1221	UGKG	41.000U	41.000U	41.000U	41.000U	40.000U	40.000U
SW8080	PCB 1232	UGKG	41.000U	41.000U	41.000U	41.000U	40.000U	40.000U
SW8080	PCB 1242	UGKG	41.000U	41.000U	41.000U	41.000U	40.000U	40.000U
SW8080	PCB 1248	UGKG	41.000U	41.000U	41.000U	41.000U	40.000U	40.000U
SW8080	PCB 1254	UGKG	84.000U	83.000U	83.000U	84.000U	82.000U	82.000U
SW8080	PCB 1260	UGKG	84.000U	83.000U	83.000U	84.000U	82.000U	82.000U
SW8080	TOXAPHENE	UGKG	100.000U	100.000U	100.000U	100.000U	100.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	20.000U	20.000U	20.000U	20.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	125.000U	123.000U	123.000U	125.000U	122.000U	123.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	78.000U	77.000U	77.000U	78.000U	76.000U	77.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	46.000U	46.000U	46.000U	46.000U	45.000U	46.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	66.000U	65.000U	65.000U	66.000U	65.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	29.000U	28.000U	28.000U	29.000U	28.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	18.000U	17.000U	17.000U	18.000U	17.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1750.000U	1730.000U	1730.000U	1750.000U	1710.000U	1730.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3750.000U	3700.000U	3700.000U	3750.000U	3660.000U	3700.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA2303	GPTS1BA2310	GPTS1BA2403	GPTS1BA2409	GPTS1BA2502	GPTS1BA2509
			12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	6250.000U	6170.000U	6200.000U	6250.000U	6100.000U	6170.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	12.000U	62.000U	5.000J	12.000U	2.000J
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	94.000B	18.000B	390.000B	66.000B	20.000B	23.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	62.000U	12.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	1.000J	31.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	31.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	ISOPHORONE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U

Gulfpo. 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA2303	GPTS1BA2310	GPTS1BA2403	GPTS1BA2409	GPTS1BA2502	GPTS1BA2509
			12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8270	1,4-DICHLOROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	2-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	820.000U	810.000U	810.000U	820.000U	800.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	3-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	4-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U	2000.000U
SW8270	CARBAZOLE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	FLUORENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	ANTHRACENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	PYRENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BENZO[GH]PERYLENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BENZOIC ACID	UGKG	2000.000U	2000.000U	2000.000U	54.000J	46.000J	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	64.000J	410.000U	410.000U	59.000J	400.000U	390.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	CHRYSENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	410.000U	410.000U	410.000U	410.000U	400.000U	400.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA2303	GPTS1BA2310	GPTS1BA2403	GPTS1BA2409	GPTS1BA2502	GPTS1BA2509
			12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/16/96
SW8270	NITROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	FLUORANTHENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	HEXACHLOROBENZENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	HEXACHLOROETHANE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	PENTACHLOROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	2000.000U	2000.00U	2000.00U
SW8270	PHENANTHRENE	UGKG	410.000U	410.000U	410.000U	410.000U	400.00U	400000U
SW8270	PHENOL	UGKG	220.000J	410.000U	420.000	710.000	440.00	570000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.276U	0.202U	0.286U	0.252U	0.341J	0.317U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	6.500	6.680	4.390	21.600	30.80	2.2'0
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.180U	0.177U	0.254U	0.147U	0.390J	0.119U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.185U	2.160	0.160U	1.320	9.360	0.119U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.172U	0.193U	0.110U	0.139U	0.288J	0.115U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	64.400	33.900	26.600	122.000	156.00	12'00
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.266U	0.725U	0.395U	0.411U	0.871J	0.388U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.248U	0.342U	0.263U	0.266U	0.347J	0.171U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.281U	0.561U	0.566U	0.594U	0.569J	0.413U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.241U	0.342U	0.435U	0.341U	0.375J	0.317U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	2.320	2.420	1.820	8.180	12.30	1.40
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.180U	0.177U	0.254U	0.147U	0.390J	0.119U
SW8290	1,2,3,4,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.215U	0.212U	0.303U	0.175U	0.467J	0.288U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.288U	0.503U	0.248U	0.237U	0.710J	0.23U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.219U	0.246U	0.140U	0.178U	0.357J	0.198U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.185U	0.324U	0.160U	0.152U	0.457J	0.189U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.172U	0.193U	0.110U	0.139U	0.288J	0.155U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.202U	0.353U	0.174U	0.166U	1.160	0.255U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.248U	0.279U	0.158U	0.201U	0.416J	0.224U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.266U	0.725U	0.395U	0.411U	0.871J	0.388U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.247U	0.341U	0.262U	0.285U	0.340J	0.170U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.224U	0.252U	0.143U	0.182U	0.370J	0.203U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.248U	0.342U	0.263U	0.286U	0.347J	0.171U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.241U	0.342U	0.435U	0.341U	0.375J	0.317U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.281U	0.561U	0.566U	0.594U	0.560U	0.43U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3103	GPTS1BA3110	GPTS1BA3203	GPTS1BA3211	GPTS1BA3303	GPTS1BA3310
			12/16/96	12/16/96	12/16/96	12/16/96	12/15/96	12/15/96
SW6010	ARSENIC	MGKG	0.360U	1.500	0.410U	0.980B	0.390U	1.300
SW6010	BARIUM	MGKG	6.600	0.520B	0.820B	0.530B	0.770B	0.500B
SW6010	CADMIUM	MGKG	0.040U	0.050U	0.050U	0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	2.800	1.200B	2.400	0.540B	2.700	0.900B
SW6010	LEAD	MGKG	1.900	1.300	1.100	0.640	1.600	0.600
SW6010	SELENIUM	MGKG	0.330U	0.370U	0.370U	0.360U	0.400B	0.370U
SW6010	SILVER	MGKG	0.210U	0.230U	0.230U	0.230U	0.230U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	ALDRIN	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	DIELDRIN	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	ENDOSULFAN SULFATE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	ENDRIN	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	ENDRIN ALDEHYDE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	ENDRIN KETONE	UGKG	2.700U	3.000U	3.100U	3.000U	3.000U	3.100U
SW8080	GAMMA-CHLORDANE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.400U	1.600U	1.600U	1.600U	1.500U	1.600U
SW8080	METHOXYCHLOR	UGKG	14.000U	16.000U	16.000U	16.000U	15.000U	16.000U
SW8080	PCB 1016	UGKG	36.000U	40.000U	41.000U	40.000U	39.000U	41.000U
SW8080	PCB 1221	UGKG	36.000U	40.000U	41.000U	40.000U	39.000U	41.000U
SW8080	PCB 1232	UGKG	36.000U	40.000U	41.000U	40.000U	39.000U	41.000U
SW8080	PCB 1242	UGKG	36.000U	40.000U	41.000U	40.000U	39.000U	41.000U
SW8080	PCB 1248	UGKG	36.000U	40.000U	41.000U	40.000U	39.000U	41.000U
SW8080	PCB 1254	UGKG	74.000U	82.000U	83.000U	81.000U	80.000U	83.000U
SW8080	PCB 1260	UGKG	74.000U	82.000U	83.000U	81.000U	80.000U	83.000U
SW8080	TOXAPHENE	UGKG	91.000U	100.000U	100.000U	100.000U	99.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	18.000U	20.000U	20.000U	19.000U	18.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	110.000U	122.000U	123.000U	120.000U	112.000U	123.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	68.000U	155.000	77.000U	75.000U	70.000U	77.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	41.000U	232.000	46.000U	45.000U	42.000U	46.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	58.000U	162.000	65.000U	64.000U	60.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	25.000U	105.000	28.000U	28.000U	26.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	15.000U	17.000U	17.000U	17.000U	16.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1540.000U	1710.000U	1730.000U	1690.000U	1570.000U	1730.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3300.000U	3660.000U	3700.000U	3610.000U	3370.000U	3700.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3103	GPTS1BA3110	GPTS1BA3203	GPTS1BA3211	GPTS1BA3303	GPTS1BA3310
			12/16/96	12/16/96	12/16/96	12/16/96	12/16/96	12/15/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5500.000U	11500.000	6170.000U	6020.000U	5620.000U	6180.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	4.000J
SW8240	1,1,1-TRICHLOROETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	110.000B	28.000B	70.000B	43.000B	72.000B	78.000B
SW8240	BENZENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	2.000J
SW8240	BROMODICHLOROMETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	11.000U	12.000U	12.000U	12.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	5.000U	6.000U	6.000U	6.000U	6.000U	5.000J
SW8240	TRICHLOROETHYLENE	UGKG	5.000U	6.000U	6.000U	1.000J	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	ISOPHORONE	UGKG	840.000	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U

Gulpo 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3103	GPTS1BA3110	GPTS1BA3203	GPTS1BA3211	GPTS1BA3303	GPTS1BA3310
			12/16/96	12/16/96	12/16/96	12/16/96	12/15/96	12/15/96
SW8270	1,4-DICHLOROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2,6-DINITROTOLUENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2-CHLOROPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2-METHYLPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	720.000U	800.000U	810.000U	800.000U	780.000U	810.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	4-METHYLPHENOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	4-NITROANILINE	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	CARBAZOLE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	FLUORENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	ACENAPHTHENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	ACENAPHTHYLENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	ANTHRACENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BENZO[A]PYRENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	PYRENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BENZOIC ACID	UGKG	1800.000U	100.000J	2000.000U	1900.000U	160.000J	45.000J
SW8270	BENZYL ALCOHOL	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	2100.000	140.000J	410.000U	460.000	390.000U	60.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	CHRYSENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DIBENZOFURAN	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DIETHYL PHTHALATE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	DIMETHYL PHTHALATE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA3103	GPTS1BA3110	GPTS1BA3203	GPTS1BA3211	GPTS1BA3303	GPTS1BA3310
			12/16/86	12/16/86	12/16/96	12/16/96	12/15/96	12/15/96
SW8270	NITROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	FLUORANTHENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	HEXACHLOROBENZENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	HEXACHLOROETHANE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	PENTACHLOROPHENOL	UGKG	1800.000U	2000.000U	2000.000U	1900.000U	1900.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	360.000U	400.000U	410.000U	400.000U	390.000U	410.000U
SW8270	PHENOL	UGKG	1200.000	2800.000	140.000J	1200.000	230.000J	78.000J
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.359U	1.990	0.416U	0.444U	0.362U	0.305U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	6.590	0.497U	9.590	0.321U	5.530	0.318U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.321U	0.309U	0.328U	0.278U	0.200U	0.192U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	2.880	0.260U	2.340	0.181U	1.210	0.253U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.264U	0.657	0.209U	0.141U	0.195U	0.164U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	27.800	109.000	58.400	0.937	48.000	1.050
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.380U	0.406U	0.460U	0.318U	0.277U	0.356U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.201U	0.286U	0.332U	0.202U	0.212U	0.197U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.284U	0.290U	0.412U	0.403U	0.211U	0.227U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.287U	0.221U	0.292U	0.286U	0.203U	0.191U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	2.240	0.904X	1.920	0.321U	1.520	0.318U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.321U	1.130X	0.328U	0.278U	0.200U	0.192U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.384U	0.370U	0.392U	0.333U	0.239U	0.229U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.509U	0.404U	0.573U	0.281U	0.337U	0.393U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.336U	0.261U	0.267U	0.179U	0.248U	0.209U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.328U	0.604X	0.369U	0.181U	0.217U	0.253U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.264U	0.657	0.209U	0.141U	0.195U	0.164U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.357U	0.283U	0.402U	0.197U	0.236U	0.276U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.381U	0.295U	0.302U	0.203U	0.281U	0.237U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.380U	0.406U	0.460U	0.318U	0.277U	0.356U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.201U	0.286U	0.332U	0.202U	0.212U	0.196U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.345U	0.267U	0.273U	0.184U	0.254U	0.214U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.201U	0.286U	0.332U	0.202U	0.212U	0.197U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.287U	0.221U	0.292U	0.286U	0.203U	0.191U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.284U	0.290U	0.412U	0.403U	0.211U	0.227U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3403	GPTS1BA3410	GPTS1BA3503	GPTS1BA3510	GPTS1BA3603	GPTS1BA3610
			12/16/96	12/16/96	12/16/96	12/16/96	12/14/96	12/14/96
SW6010	ARSENIC	MGKG	0.390B	3.700	1.200	1.400	0.370U	1.700
SW6010	BARIUM	MGKG	19.300	0.920	12.300	0.720B	9.600	0.440B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	0.040U	0.050U
SW6010	CHROMIUM	MGKG	1.900	0.800B	3.500	0.740B	2.700	0.970B
SW6010	LEAD	MGKG	1.600	0.990	2.800	0.740	2.800	0.830
SW6010	SELENIUM	MGKG	0.340U	0.390U	0.360U	0.360U	0.340U	0.370U
SW6010	SILVER	MGKG	0.210U	0.250U	0.230U	0.230U	0.210U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	DIELDRIN	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	ENDRIN	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	ENDRIN KETONE	UGKG	2.800U	3.300U	3.000U	3.000U	2.800U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	HEPTACHLOR	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.700U	1.500U	1.500U	1.500U	1.600U
SW8080	METHOXYCHLOR	UGKG	15.000U	17.000U	15.000U	15.000U	15.000U	16.000U
SW8080	PCB 1016	UGKG	37.000U	43.000U	39.000U	39.000U	37.000U	39.000U
SW8080	PCB 1221	UGKG	37.000U	43.000U	39.000U	39.000U	37.000U	39.000U
SW8080	PCB 1232	UGKG	37.000U	43.000U	39.000U	39.000U	37.000U	39.000U
SW8080	PCB 1242	UGKG	37.000U	43.000U	39.000U	39.000U	37.000U	39.000U
SW8080	PCB 1248	UGKG	37.000U	43.000U	39.000U	39.000U	37.000U	39.000U
SW8080	PCB 1254	UGKG	75.000U	88.000U	80.000U	80.000U	75.000U	79.000U
SW8080	PCB 1260	UGKG	75.000U	88.000U	80.000U	80.000U	75.000U	79.000U
SW8080	TOXAPHENE	UGKG	93.000U	110.000U	99.000U	99.000U	93.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	18.000U	21.000U	19.000U	19.000U	18.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	112.000U	132.000U	119.000U	120.000U	112.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	70.000U	82.000U	74.000U	75.000U	70.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	42.000U	49.000U	44.000U	45.000U	42.000U	284.000
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	60.000U	70.000U	63.000U	64.000U	60.000U	192.000
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	26.000U	30.000U	27.000U	28.000U	26.000U	105.000
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	18.000U	17.000U	17.000U	16.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1570.000U	1840.000U	1670.000U	1690.000U	1570.000U	111.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3370.000U	3950.000U	3590.000U	3610.000U	3370.000U	3660.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA3403	GPTS1BA3410	GPTS1BA3503	GPTS1BA3510	GPTS1BA3603	GPTS1BA3610
			12/16/96	12/16/96	12/16/96	12/16/96	12/14/96	12/14/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5620.000U	6580.000U	5950.000U	6020.000U	5620.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	1.000J	13.000	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	2.000J
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	2-HEXANONE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	VINYL ACETATE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	ACETONE	UGKG	45.000B	44.000B	19.000B	94.000B	62.000B	20.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	22.000	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	2.000J	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	11.000U	13.000U	12.000U	12.000U	11.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	1.000J	19.000	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	ISOPHORONE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3403	GPTS1BA3410	GPTS1BA3503	GPTS1BA3510	GPTS1BA3603	GPTS1BA3610
			12/16/96	12/16/96	12/16/96	12/16/96	12/14/96	12/14/96
SW8270	1,4-DICHLOROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	740.000U	870.000U	780.000U	780.000U	740.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	4-NITROANILINE	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	CARBAZOLE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	FLUORENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	ANTHRACENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	PYRENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BENZOIC ACID	UGKG	1800.000U	67.000J	90.000J	72.000J	330.000J	150.000J
SW8270	BENZYL ALCOHOL	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	49.000J	320.000J	100.000J	110.000J	63.000J	100.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	CHRYSENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA3403	GPTS1BA3410	GPTS1BA3603	GPTS1BA3510	GPTS1BA3603	GPTS1BA3610
			12/16/96	12/16/96	12/16/96	12/16/96	12/14/96	12/14/96
SW8270	NITROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	FLUORANTHENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	1800.000U	2100.000U	1900.000U	1900.000U	1800.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	370.000U	430.000U	390.000U	390.000U	370.000U	400.000U
SW8270	PHENOL	UGKG	2100.000	3200.000	3500.000	4200.000	2500.000	5000.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.408U	0.853U	0.611U	0.327U	0.944U	0.246U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.211U	0.863U	3.980	0.446U	10.500	0.268U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.212U	0.368U	0.244U	0.306U	0.481U	0.178U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.229U	0.388U	3.710	0.253U	7.700	0.220U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.138U	0.227U	0.164U	0.180U	0.184U	0.134U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	1.020	1.410	23.200	1.270	53.500	1.180
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.408U	0.479U	0.602U	0.417U	1.470	0.351U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.235U	0.253U	0.353U	0.208U	0.332U	0.178U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.350U	0.557U	0.383U	0.301U	1.270	0.422U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.241U	0.263U	0.248U	0.201U	0.223U	0.266U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.211U	0.863U	0.481U	0.446U	3.980X	0.268U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.212U	0.368U	0.244U	0.306U	0.481U	0.178U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.253U	0.440U	0.291U	0.366U	0.574U	0.212U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.356U	0.602U	0.528U	0.393U	0.520U	0.342U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.177U	0.290U	0.209U	0.230U	0.235U	0.170U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.229U	0.388U	0.340U	0.253U	0.335U	0.220U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.138U	0.227U	0.164U	0.180U	0.184U	0.134U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.250U	0.422U	0.370U	0.275U	0.365U	0.240U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.200U	0.329U	0.237U	0.260U	0.267U	0.193U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.408U	0.479U	0.602U	0.417U	0.454U	0.351U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.235U	0.252U	0.352U	0.207U	0.331U	0.177U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.181U	0.297U	0.214U	0.235U	0.241U	0.175U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.235U	0.253U	0.353U	0.208U	0.332U	0.178U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.241U	0.263U	0.248U	0.201U	0.223U	0.266U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.350U	0.557U	0.383U	0.301U	0.323U	0.422U

Gulfport 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3702	GPTS1BA3710	GPTS1BA3802	GPTS1BA3809	GPTS1BA3902	GPTS1BA3909
			12/14/96	12/14/96	12/14/96	12/14/96	12/14/96	12/14/96
SW6010	ARSENIC	MGKG	0.400U	3.900	0.720B	3.000	455.000	1.200B
SW6010	BARIUM	MGKG	2.100	0.910	17.400	2.400	177.000	0.500B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.050U	3.000	0.050U
SW6010	CHROMIUM	MGKG	3.200	2.900	4.700	2.700	89.200	0.890B
SW6010	LEAD	MGKG	2.200	1.000	1.500	1.200	63.800	0.570
SW6010	SELENIUM	MGKG	0.370U	0.380U	0.360U	0.360U	14.200	0.370U
SW6010	SILVER	MGKG	0.230U	0.240U	0.230U	0.230U	0.640B	0.240U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.050	0.040U	0.060U	0.040U
SW8080	2,2-BIS(PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3.200U	3.000U	3.000U	5.000P	3.100U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	ALDRIN	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	DIELDRIN	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	ENDRIN	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.200U	3.000U	3.000U	4.700U	3.100U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	HEPTACHLOR	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.600U	1.600U	1.600U	2.400U	1.600U
SW8080	METHOXYCHLOR	UGKG	16.000U	16.000U	16.000U	16.000U	24.000U	16.000U
SW8080	PCB 1016	UGKG	40.000U	42.000U	40.000U	40.000U	62.000U	41.000U
SW8080	PCB 1221	UGKG	40.000U	42.000U	40.000U	40.000U	62.000U	41.000U
SW8080	PCB 1232	UGKG	40.000U	42.000U	40.000U	40.000U	62.000U	41.000U
SW8080	PCB 1242	UGKG	40.000U	42.000U	40.000U	40.000U	62.000U	41.000U
SW8080	PCB 1248	UGKG	40.000U	42.000U	40.000U	40.000U	62.000U	41.000U
SW8080	PCB 1254	UGKG	82.000U	85.000U	82.000U	81.000U	130.000U	84.000U
SW8080	PCB 1260	UGKG	82.000U	85.000U	82.000U	81.000U	130.000U	84.000U
SW8080	TOXAPHENE	UGKG	100.000U	100.000U	100.000U	100.000U	160.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	20.000U	20.000U	19.000U	30.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	122.000U	127.000U	122.000U	120.000U	189.000U	125.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	76.000U	78.000U	76.000U	75.000U	117.000U	78.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	45.000U	47.000U	45.000U	45.000U	70.000U	46.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	65.000U	67.000U	65.000U	64.000U	100.000U	66.000U
SW8150	2-METHOXY-3,6-DICHLOROENZOIC ACID	UGKG	28.000U	29.000U	28.000U	28.000U	43.000U	29.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	18.000U	17.000U	17.000U	26.000U	18.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1710.000U	1770.000U	1710.000U	1690.000U	2640.000U	1750.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3660.000U	3800.000U	3660.000U	3610.000U	5660.000U	3750.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA3702	GPTS1BA3710	GPTS1BA3802	GPTS1BA3809	GPTS1BA3902	GPTS1BA3909
			12/14/96	12/14/96	12/14/96	12/14/96	12/14/96	12/14/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	6100.000U	6330.000U	6100.000U	6020.000U	9430.000U	6250.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	ACETONE	UGKG	76.000B	54.000B	91.000B	11.000JB	110.000B	56.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	13.000U	12.000U	12.000U	19.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	9.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	ISOPHORONE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	1,2,3,4-TETRACHLOROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA3702	GPTS1BA3710	GPTS1BA3802	GPTS1BA3809	GPTS1BA3902	GPTS1BA3909
			12/14/96	12/14/96	12/14/96	12/14/96	12/14/96	12/14/96
SW8270	1,4-DICHLOROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2,4-DINITROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2,6-DINITROTOLUENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2-CHLOROPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2-METHYLPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	2-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	800.000U	840.000U	800.000U	800.000U	1200.000U	820.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	3-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	4-METHYLPHENOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	4-NITROANILINE	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	CARBAZOLE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	FLUORENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	ACENAPHTHENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	ACENAPHTHYLENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	ANTHRACENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BENZO[A]PYRENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	PYRENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BENZOIC ACID	UGKG	140.000J	2000.000U	110.000J	66.000J	520.000J	130.000J
SW8270	BENZYL ALCOHOL	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	92.000J	120.000J	65.000J	240.000J	160.000J	210.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	CHRYSENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DIBENZOFURAN	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DIETHYL PHTHALATE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	DIMETHYL PHTHALATE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA3702	GPTS1BA3710	GPTS1BA3802	GPTS1BA3809	GPTS1BA3902	GPTS1BA3909
			12/14/96	12/14/96	12/14/96	12/14/96	12/14/96	12/14/96
SW8270	NITROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	FLUORANTHENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	HEXACHLOROBENZENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	HEXACHLOROETHANE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	400.000U	420.000U	400.000U	400.000U	620.000U	410.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	400.000U	420.000U	400.000U	400.000U	81.000J	410.000U
SW8270	PENTACHLOROPHENOL	UGKG	2000.000U	2000.000U	2000.000U	1900.000U	3000.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	400.000U	420.000U	400.000U	400.000U	130.000J	410.000U
SW8270	PHENOL	UGKG	520.000	490.000	1200.000	1800.000	7800.000	2500.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.328U	1.130X	0.325U	0.428U	0.898X	0.287U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	1.330	3.730	106.000	0.534U	6.750	0.372U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.218U	0.907	0.250U	0.362U	1.250	0.191U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.708	0.315U	41.900	0.360U	1.470	0.429U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.182U	0.218U	0.164U	0.234U	0.552U	0.211U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	17.600B	12.300	430.000B	0.911	31.700	1.530
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.400U	0.494U	1.930	0.902U	1.150U	0.523U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.314U	0.311U	0.212U	0.425U	0.552U	0.251U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.264U	0.429U	0.397U	1.750	0.471U	0.447U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.305U	0.355U	0.201U	0.375U	0.888U	0.383U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.110X	1.880	24.600	0.534U	4.920X	0.372U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.218U	0.939X	0.250U	0.362U	1.100X	0.308X
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.260U	0.341U	0.299U	0.432U	0.589U	0.228U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.492U	0.489U	0.332U	0.559U	0.816U	0.666U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.233U	0.278U	0.209U	0.298U	0.704U	0.269U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.317U	0.315U	0.214U	0.360U	0.525U	0.429U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.182U	0.218U	0.164U	0.234U	0.552U	0.211U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.345U	0.343U	1.180X	0.392U	0.572U	0.467U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.264U	0.316U	0.236U	0.338U	0.798U	0.305U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.400U	0.494U	0.368U	0.902U	1.150U	0.523U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.313U	0.311U	0.212U	0.424U	0.550U	0.250U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.238U	0.285U	0.214U	0.305U	0.721U	0.276U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.314U	0.311U	0.212U	0.425U	0.552U	0.251U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.305U	0.355U	0.201U	0.375U	0.888U	0.383U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.264U	0.429U	0.397U	0.378U	0.471U	0.447U

Gulfpo 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4103	GPTS1BA4203	GPTS1BA4210	GPTS1BA4303	GPTS1BA4313	GPTS1BA4403
			12/7/96	12/8/96	12/8/96	12/8/96	12/8/96	12/8/96
SW6010	ARSENIC	MGKG	1.200B	0.640B	0.830B	0.370U	0.770B	0.380U
SW6010	BARIUM	MGKG	21.400	7.000 *	0.820B	25.400	0.550B	6.800
SW6010	CADMIUM	MGKG	0.080B	0.040U	0.050U	0.040U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	5.300	4.200 *	0.950B	4.500	0.630B	1.100B
SW6010	LEAD	MGKG	5.200	2.200 *	0.770	3.600	0.670	1.500
SW6010	SELENIUM	MGKG	0.380U	0.300U	0.360U	0.330U	0.370U	0.340U
SW6010	SILVER	MGKG	0.240U	0.190U	0.230U	0.210U	0.230U	0.220U
SW7471	MERCURY	MGKG	0.040U	0.030U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	ALDRIN	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	DIELDRIN	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	ENDOSULFAN SULFATE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	ENDRIN	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	ENDRIN ALDEHYDE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	ENDRIN KETONE	UGKG	3.200U	2.900U	3.000U	2.800U	3.000U	2.800U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	HEPTACHLOR	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.500U	1.600U	1.400U	1.600U	1.500U
SW8080	METHOXYCHLOR	UGKG	16.000U	15.000U	16.000U	14.000U	16.000U	15.000U
SW8080	PCB 1016	UGKG	42.000U	39.000U	40.000U	37.000U	40.000U	38.000U
SW8080	PCB 1221	UGKG	42.000U	39.000U	40.000U	37.000U	40.000U	38.000U
SW8080	PCB 1232	UGKG	42.000U	39.000U	40.000U	37.000U	40.000U	38.000U
SW8080	PCB 1242	UGKG	42.000U	39.000U	40.000U	37.000U	40.000U	38.000U
SW8080	PCB 1248	UGKG	42.000U	39.000U	40.000U	37.000U	40.000U	38.000U
SW8080	PCB 1254	UGKG	85.000U	79.000U	82.000U	74.000U	82.000U	76.000U
SW8080	PCB 1260	UGKG	85.000U	79.000U	82.000U	74.000U	82.000U	76.000U
SW8080	TOXAPHENE	UGKG	100.000U	98.000U	100.000U	92.000U	100.000U	94.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	19.000U	19.000U	18.000U	20.000U	18.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	127.000U	118.000U	119.000U	111.000U	122.000U	114.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	78.000U	73.000U	74.000U	69.000U	76.000U	70.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	47.000U	44.000U	44.000U	41.000U	45.000U	42.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	67.000U	62.000U	63.000U	59.000U	65.000U	60.000U
SW8150	2-METHOXY-3,6-DICHLORO BENZOIC ACID	UGKG	29.000U	27.000U	27.000U	26.000U	28.000U	26.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	18.000U	16.000U	17.000U	16.000U	17.000U	16.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1770.000U	1650.000U	1670.000U	1560.000U	1710.000U	1600.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3800.000U	3530.000U	3570.000U	3330.000U	3660.000U	3410.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4103	GPTS1BA4203	GPTS1BA4210	GPTS1BA4303	GPTS1BA4313	GPTS1BA4403
			12/7/96	12/8/96	12/8/96	12/8/96	12/8/96	12/8/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	6330.000U	5880.000U	5950.000U	5560.000U	6100.000U	5700.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	14.000	6.000U	6.000U	6.000	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	1.000J
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	2-HEXANONE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	VINYL ACETATE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	ACETONE	UGKG	43.000B	160.000B	12.000B	27.000B	18.000B	19.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	VINYL CHLORIDE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	4.000J	4.000J	6.000U	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	13.000U	12.000U	12.000U	11.000U	12.000U	11.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	2.000J
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	13.000B	6.000U	6.000U	6.000U	6.000U	7.000B
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	4-CHLORO-3-CRESOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	ISOPHORONE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	1,2-DICHLOROBENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	1,3-DICHLOROBENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4103	GPTS1BA4203	GPTS1BA4210	GPTS1BA4303	GPTS1BA4313	GPTS1BA4403
			12/7/96	12/8/96	12/8/96	12/8/96	12/8/96	12/8/96
SW8270	1,4-DICHLOROBENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2,4-DICHLOROPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2,4-DINITROPHENOL	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2,4-DINITROTOLUENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2,6-DINITROTOLUENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2-CHLORONAPHTHALENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2-CHLOROPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2-METHYLNAPHTHALENE	UGKG		390.000U	400.000U	370.000U	400.000U	1100.000
SW8270	2-METHYLPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	2-NITROANILINE	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2-NITROPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG		780.000U	800.000U	730.000U	800.000U	750.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	3-NITROANILINE	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	4-CHLOROANILINE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	4-METHYLPHENOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	4-NITROANILINE	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	4-NITROPHENOL	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	CARBAZOLE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	FLUORENE	UGKG		390.000U	400.000U	370.000U	400.000U	150.000J
SW8270	ACENAPHTHENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	ACENAPHTHYLENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	ANTHRACENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BENZO[A]ANTHRACENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BENZO[A]PYRENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	PYRENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BENZO[GHI]PERYLENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BENZOIC ACID	UGKG		1900.000U	71.000J	48.000J	59.000J	1800.000U
SW8270	BENZYL ALCOHOL	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG		51.000J	160.000J	370.000U	400.000U	48.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	CHRYSENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DIBENZOFURAN	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DIETHYL PHTHALATE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	DIMETHYL PHTHALATE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA4103	GPTS1BA4203	GPTS1BA4210	GPTS1BA4303	GPTS1BA4313	GPTS1BA4403
			12/7/96	12/8/96	12/8/96	12/8/96	12/8/96	12/8/96
SW8270	NITROBENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	FLUORANTHENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	HEXACHLORO BENZENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	HEXACHLOROETHANE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG		390.000U	400.000U	370.000U	400.000U	310.000J
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG		390.000U	400.000U	370.000U	400.000U	81.000J
SW8270	PENTACHLOROPHENOL	UGKG		1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	PHENANTHRENE	UGKG		390.000U	400.000U	370.000U	400.000U	380.000U
SW8270	PHENOL	UGKG		890.000	910.000	620.000	580.000	230.000J
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	1450.000	0.256U	0.272U	0.332U	0.734	0.266U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	4170.000	1.980	0.215U	1.260	0.398	3.950
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	292.000	0.291	0.136U	0.272U	0.613U	0.647
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	223.000	0.150U	0.202U	0.226U	0.167U	1.230
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	58.900	0.096U	0.124U	0.105U	0.129U	0.135U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	13000.000B	24.100B	2.210B	4.930B	2.110B	20.900B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	1.370	0.319U	0.414U	0.364U	0.348U	0.349U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	4.180	0.127U	0.224U	0.239U	0.175U	0.182U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.305U	0.216U	0.275U	0.384U	0.275U	0.163U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	1.650	0.176U	0.227U	0.213U	0.169U	0.147U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1050.000	0.836	0.215U	0.728	0.325X	1.720
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	284.000	0.268	0.193X	0.272U	0.543	0.183U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	9.010	0.109U	0.162U	0.325U	0.171U	0.219U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	4.740	0.233U	0.314U	0.351U	0.260U	0.270U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	52.100I	0.122U	0.159U	0.134U	0.165U	0.172U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	32.400	0.150U	0.202U	0.226U	0.167U	0.174U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.493U	0.096U	0.124U	0.105U	0.129U	0.135U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	3.460	0.163U	0.220U	0.246U	0.182U	0.402
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.713U	0.139U	0.180U	0.151U	0.187U	0.195U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.414U	0.319U	0.414U	0.364U	0.348U	0.349U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	2.070I	0.127U	0.223U	0.238U	0.175U	0.181U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.645U	0.125U	0.163U	0.137U	0.169U	0.176U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.259U	0.127U	0.224U	0.239U	0.175U	0.182U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.196U	0.176U	0.227U	0.213U	0.169U	0.147U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.305U	0.216U	0.275U	0.384U	0.275U	0.163U

Gulf Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4413	GPTS1BA5102	GPTS1BA5109	GPTS1BA5109DUP	GPTS1BA5205	GPTS1BB1103
			12/8/96	12/8/96	12/7/96	12/7/96	12/12/96	12/8/96
SW6010	ARSENIC	MGKG	1.500	0.460B	3.500		0.890B*	0.730B
SW6010	BARIUM	MGKG	0.470B*	26.700	2.100 *		0.900	1.200
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U		0.050U	0.050U
SW6010	CHROMIUM	MGKG	0.540B*	7.000	4.200 *		3.600 *	2.600
SW6010	LEAD	MGKG	1.000 *	4.600	1.000 *		2.000 *	1.500
SW6010	SELENIUM	MGKG	0.360U	0.360U	0.360U		0.380U	0.500B
SW6010	SILVER	MGKG	0.230U	0.230U	0.230U		0.240U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U		0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	DIELDRIN	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	ENDRIN	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.000U	3.000U	3.000U	3.200U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	HEPTACHLOR	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.500U	1.500U	1.500U	1.600U	1.600U
SW8080	METHOXYCHLOR	UGKG	15.000U	15.000U	15.000U	15.000U	16.000U	16.000U
SW8080	PCB 1016	UGKG	39.000U	39.000U	39.000U	39.000U	42.000U	40.000U
SW8080	PCB 1221	UGKG	39.000U	39.000U	39.000U	39.000U	42.000U	40.000U
SW8080	PCB 1232	UGKG	39.000U	39.000U	39.000U	39.000U	42.000U	40.000U
SW8080	PCB 1242	UGKG	39.000U	39.000U	39.000U	39.000U	42.000U	40.000U
SW8080	PCB 1248	UGKG	39.000U	39.000U	39.000U	39.000U	42.000U	40.000U
SW8080	PCB 1254	UGKG	80.000U	80.000U	80.000U	80.000U	85.000U	81.000U
SW8080	PCB 1260	UGKG	80.000U	80.000U	80.000U	80.000U	85.000U	81.000U
SW8080	TOXAPHENE	UGKG	99.000U	99.000U	99.000U	99.000U	100.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	19.000U	19.000U	19.000U	20.000U	19.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	119.000U	119.000U	120.000U	118.000U	127.000U	120.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	74.000U	74.000U	75.000U	73.000U	78.000U	75.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	44.000U	44.000U	45.000U	44.000U	47.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	63.000U	63.000U	64.000U	62.000U	67.000U	64.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	27.000U	27.000U	28.000U	27.000U	29.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	17.000U	17.000U	16.000U	18.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1670.000U	1670.000U	1690.000U	1650.000U	1770.000U	1690.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3570.000U	3570.000U	3610.000U	3530.000U	3800.000U	3610.000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BA4413	GPTS1BA5102	GPTS1BA5109	GPTS1BA5109DUP	GPTS1BA5205	GPTS1BB1103
			12/8/96	12/8/96	12/7/96	12/7/96	12/12/96	12/8/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5950.000U	5950.000U	6020.000U	5880.000U	6330.000U	6020.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	4.000J
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	3.000J
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	ACETONE	UGKG	13.000B	160.000B	79.000	100.000	78.000	20.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	13.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	4.000J	6.000U	2.000J	2.000J	3.000J	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	10.000U	10.000U	13.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	15.000B
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	ISOPHORONE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW827C	DIBENZ(AH)ANTHRACENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U

Gulfport 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4413	GPTS1BA5102	GPTS1BA5109	GPTS1BA5109DUP	GPTS1BA5205	GPTS1BB1103
			12/8/96	12/8/96	12/7/96	12/7/96	12/12/96	12/8/96
SW8270	1,4-DICHLOROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	2,4-DINITROTOLUENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	2-NITROPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	780.000U	780.000U	800.000U	800.000U	840.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	4-CHLOROANILINE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	CARBAZOLE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	FLUORENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	ANTHRACENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	PYRENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BENZOIC ACID	UGKG	1900.000U	1900.000U	48.000J	1900.000U	62.000J	51.000J
SW8270	BENZYL ALCOHOL	UGKG	390.000U	390.000U	400.000U	400.000U	66.000J	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	110.000J	58.000J	120.000J	120.000J	120.000J	43.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	CHRYSENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BA4413	GPTS1BA5102	GPTS1BA5109	GPTS1BA5109DUP	GPTS1BA5205	GPTS1BB1103
			12/8/96	12/8/96	12/7/96	12/7/96	12/12/96	12/8/96
SW8270	NITROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	FLUORANTHENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	1900.000U	2000.000U	1900.000U
SW8270	PHENANTHRENE	UGKG	390.000U	390.000U	400.000U	400.000U	420.000U	400.000U
SW8270	PHENOL	UGKG	810.000	320.000J	1300.000	440.000	2600.000	1100.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	2.410	43.800	0.149U	0.242U	0.159U	0.341U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	4.720	12.500	1.110	1.339	12.900	29.300
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	2.510	36.600	0.207	0.146U	0.145U	0.249U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.653	5.090	0.137U	0.209U	0.290U	14.500
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.058U	3.880	0.083U	0.157U	0.176U	0.228U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	18.700B	35.000B	2.890B	2.524B	313.000B	131.000B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.140U	0.226U	0.191U	0.328U	0.319U	4.350
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.101U	0.169U	0.109U	0.187U	0.194U	0.164U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.110U	0.221U	0.556	0.935	0.408U	15.300
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.097U	0.156U	0.110U	0.204U	0.543U	0.204U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.440X	4.130	0.529	0.555	4.550	7.850
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.864	36.600	0.207	0.146U	0.220XB	0.249U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.186U	0.512U	0.070U	0.175U	0.173U	0.298U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.185U	0.209U	0.212U	0.325U	0.451U	0.428U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.074U	0.720	0.106U	0.201U	0.224U	0.290U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.119U	0.370X	0.137U	0.209U	0.290U	0.275U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.058U	0.553X	0.083U	0.157U	0.176U	0.228U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.130U	0.562	0.149U	0.228U	0.316U	0.300U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.084U	0.221U	0.120U	0.228U	0.254U	0.329U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.140U	0.226U	0.191U	0.328U	0.319U	0.264U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.101U	0.169U	0.108U	0.186U	0.194U	0.164U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.076U	0.635	0.109U	0.206U	0.230U	0.298U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.101U	0.169U	0.109U	0.187U	0.194U	0.164U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.097U	0.156U	0.110U	0.204U	0.543U	0.204U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.110U	0.221U	0.162U	0.269U	0.408U	0.247U

Gulfport 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BB110	GPTS1BB1206	GPTS1BB1303	GPTS1BB1310	GPTS1BB4109
			12/8/96	12/8/96	12/8/96	12/8/96	12/7/96
SW6010	ARSENIC	MGKG	0.390U	7.300	3.200	1.500	4 900
SW6010	BARIUM	MGKG	0.700B*	14.100	5.600 *	0.510B*	2.700 *
SW6010	CADMIUM	MGKG	0.050U	0.050B	0.060B	0.050U	0.060U
SW6010	CHROMIUM	MGKG	0.770B*	10.100	9.900 *	0.420B*	4.700 *
SW6010	LEAD	MGKG	0.840 *	7.000	11.500 *	1.000 *	2 600 *
SW6010	SELENIUM	MGKG	0.360U	0.580B	0.480B	0.360U	0.410U
SW6010	SILVER	MGKG	0.230U	0.240U	0 250U	0.230U	0.260U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.050U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	UGKG	3.000U	3.100U	3.300U	3.000U	3.500U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3 100U	3.300U	3.000U	3.500U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3 100U	3.300U	3.000U	3.500U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.700U	1.600U	1 800U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.100U	3.300U	3.000U	3.500U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	DIELDRIN	UGKG	3.000U	3.100U	3.300U	3.000U	3.500U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.100U	3.300U	3.000U	3.500U
SW8080	ENDRIN	UGKG	3.000U	3.100U	3.300U	3.000U	3.500U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.100U	3.300U	3.000U	3 500U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.100U	3.300U	3.000U	3 500U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.700U	1.600U	1 800U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.700U	1.600U	1.800U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	17.000U	16.000U	18 000U
SW8080	PCB 1016	UGKG	39.000U	41.000U	43.000U	40.000U	46.000U
SW8080	PCB 1221	UGKG	39.000U	41.000U	43 000U	40.000U	46 000U
SW8080	PCB 1232	UGKG	39.000U	41.000U	43.000U	40.000U	46.000U
SW8080	PCB 1242	UGKG	39.000U	41.000U	43.000U	40.000U	46.000U
SW8080	PCB 1248	UGKG	39.000U	41.000U	43.000U	40.000U	46 000U
SW8080	PCB 1254	UGKG	80.000U	83.000U	88.000U	81.000U	93.000U
SW8080	PCB 1260	UGKG	80.000U	83.000U	88.000U	81.000U	93 000U
SW8080	TOXAPHENE	UGKG	99.000U	100.000U	110.000U	100.000U	120 000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	20.000U	21.000U	19.000U	22.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	119.000U	123.000U	132.000U	120.000U	139.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	74.000U	77.000U	82.000U	75.000U	86.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	44.000U	46.000U	49.000U	45.000U	51.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	63.000U	65.000U	70.000U	64.000U	74.000U
SW8150	2-METHOXY-3,6-DICHLOROENZOIC ACID	UGKG	27.000U	28.000U	30.000U	28.000 J	32.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	17.000U	18.000U	17.000U	19 000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1670.000U	1730.000U	1840.000U	1690.000U	1940.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3570.000U	3700.000U	3950.000U	3610.000U	4170 000U

**Gulfport Site 1
Analytical Sampling Results**

Method	Compound	Units	GPTS1BB1110	GPTS1BB1206	GPTS1BB1303	GPTS1BB1310	GPTS1BB4109
			12/8/96	12/8/96	12/8/96	12/8/96	12/7/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC ACID	UGKG	5950.000U	6170.000U	6580.000U	6020.000U	6940.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	2.000J	6.000U	6.000U	7.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	2-BUTANONE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	ACETONE	UGKG	38.000B	18.000B	140.000B	10.000JB	100.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	METHYLENE CHLORIDE	UGKG	5.000J	1.000J	5.000J	4.000J	6.000J
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	13.000U	12.000U	14.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	7.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	ISOPHORONE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	CHLOROENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U

Gulfp te 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BB1110	GPTS1BB1206	GPTS1BB1303	GPTS1BB1310	GPTS1BB4109
			12/8/96	12/8/96	12/8/96	12/8/96	12/7/96
SW8270	1,4-DICHLOROBENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	2,4-DINITROTOLUENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2,6-DINITROTOLUENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2-CHLOROPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2-METHYLPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	2-NITROPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	780.000U	810.000U	870.000U	800.000U	920.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	4-CHLOROANILINE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	4-METHYLPHENOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	CARBAZOLE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	FLUORENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	ACENAPHTHENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	ACENAPHTHYLENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	ANTHRACENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BENZO[A]PYRENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	PYRENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BENZOIC ACID	UGKG	1900.000U	47.000J	2100.000U	1900.000U	55.000J
SW8270	BENZYL ALCOHOL	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	140.000J	68.000J	48.000J	400.000U	74.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	CHRYSENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DIBENZOFURAN	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DIETHYL PHTHALATE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	DIMETHYL PHTHALATE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U

Gulfport Site 1
Analytical Sampling Results

Method	Compound	Units	GPTS1BB1110	GPTS1BB1206	GPTS1BB1303	GPTS1BB1310	GPTS1BB4109
			12/8/96	12/8/96	12/8/96	12/8/96	12/7/96
SW8270	NITROBENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	FLUORANTHENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	HEXACHLOROBENZENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	HEXACHLORO-1,3-BUTADIENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	HEXACHLOROETHANE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	NAPHTHALENE / TAR CAMPHOR	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	2000.000U	2100.000U	1900.000U	2200.000U
SW8270	PHENANTHRENE	UGKG	390.000U	410.000U	430.000U	400.000U	460.000U
SW8270	PHENOL	UGKG	930.000	770.000	1300.000	1200.000	1900.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.159U	0.315U	0.197U	0.125U	0.541X
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.302	0.237U	0.213U	0.171U	1.110
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.116U	0.127U	0.164U	0.285	0.899
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.158U	0.855U	0.953	0.106U	0.107U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.095U	0.159U	0.102U	0.059U	0.095U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	0.898XB	4.670B	12.900B	1.060B	2.050B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.260U	0.418U	0.197U	0.257U	0.199U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.149U	0.230U	0.104U	0.168U	0.148U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.161U	0.414U	0.242U	0.208U	0.218U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.180U	0.289U	0.183U	0.139U	0.106U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.302	0.357X	0.911X	0.285X	0.709
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.116U	0.127U	0.164U	0.190	0.825
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.138U	0.151U	0.195U	0.119U	0.131U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.245U	0.424U	0.197U	0.164U	0.166U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.122U	0.203U	0.130U	0.075U	0.121U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.158U	0.273U	0.127U	0.106U	0.107U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.095U	0.159U	0.102U	0.059U	0.095U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.172U	0.297U	0.138U	0.115U	0.116U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.138U	0.230U	0.147U	0.085U	0.137U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.260U	0.418U	0.197U	0.257U	0.199U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.149U	0.229U	0.103U	0.168U	0.148U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.125U	0.208U	0.133U	0.077U	0.124U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.149U	0.230U	0.104U	0.168U	0.148U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.180U	0.289U	0.183U	0.139U	0.106U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.161U	0.414U	0.242U	0.208U	0.218U

Gulf Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA10106	GPTS5BA10113	GPTS5BA10206	GPTS5BA10206DUP	GPTS5BA10213	GPTS5bA1106	GPTS5bA1113
			12/9/96	12/9/96	12/9/96	12/9/96	12/9/96	12/6/96	12/6/96
SW6010	ARSENIC	MGKG	0.510B	1.300	1.500		1.700	0.390U	1.500
SW6010	BARIUM	MGKG	16.800 *	1.700 *	18.400 *		1.500 *	0.590B	0.700B
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U		0.050U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	3.200 *	2.500 *	5.900 *		2.200 *	0.840B	1.600
SW6010	LEAD	MGKG	3.500 *	1.400 *	4.900 *		1.900 *	0.640	0.890
SW6010	SELENIUM	MGKG	0.340U	0.370U	0.350U		0.400U	0.350U	0.340U
SW6010	SILVER	MGKG	0.220U	0.240U	0.220U		0.250U	0.220U	0.210U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U		0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	ALPHA-BENZEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	BETA-BENZEHEXACHLORIDE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	DELTA-BENZEHEXACHLORIDE	UGKG	1.800P	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	DIELDRIN	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	ENDOSULFAN SULFATE	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	ENDRIN	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	ENDRIN ALDEHYDE	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	ENDRIN KETONE	UGKG	2.800U	3.100U	2.900U	2.900U	3.300U	2.900U	2.800U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.500U	1.500U	1.700U	1.500U	1.500U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	15.000U	15.000U	17.000U	15.000U	15.000U
SW8080	PCB 1016	UGKG	38.000U	41.000U	38.000U	38.000U	44.000U	39.000U	37.000U
SW8080	PCB 1221	UGKG	38.000U	41.000U	38.000U	38.000U	44.000U	39.000U	37.000U
SW8080	PCB 1232	UGKG	38.000U	41.000U	38.000U	38.000U	44.000U	39.000U	37.000U
SW8080	PCB 1242	UGKG	38.000U	41.000U	38.000U	38.000U	44.000U	39.000U	37.000U
SW8080	PCB 1248	UGKG	38.000U	41.000U	38.000U	38.000U	44.000U	39.000U	37.000U
SW8080	PCB 1254	UGKG	76.000U	83.000U	78.000U	78.000U	89.000U	79.000U	75.000U
SW8080	PCB 1260	UGKG	76.000U	83.000U	78.000U	78.000U	89.000U	79.000U	75.000U
SW8080	TOXAPHENE	UGKG	94.000U	100.000U	96.000U	96.000U	110.000U	98.000U	93.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	18.000U	20.000U	19.000U	19.000U	21.000U	19.000U	18.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	114.000U	123.000U	116.000U	116.000U	133.000U	118.000U	112.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	70.000U	77.000U	72.000U	72.000U	83.000U	73.000U	70.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	42.000U	46.000U	43.000U	43.000U	49.000U	44.000U	42.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	60.000U	65.000U	62.000U	62.000U	71.000U	62.000U	60.000U
SW8150	2-METHOXY-3,6-DICHLOROENZOIC ACID	UGKG	26.000U	28.000U	27.000U	27.000U	31.000U	27.000U	26.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	17.000U	16.000U	16.000U	19.000U	16.000U	16.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1590.000U	1730.000U	1630.000U	1630.000U	1870.000U	1650.000U	1570.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3410.000U	3700.000U	3490.000U	3490.000U	4000.000U	3530.000U	3370.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA10106	GPTS5BA10113	GPTS5BA10206	GPTS5BA10206DUP	GPTS5BA10213	GPTS5bA1106	GPTS5bA1113
			12/9/96	12/9/96	12/9/96	12/9/96	12/9/96	12/6/96	12/6/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	5680.000U	6170.000U	5810.000U	5810.000U	6670.000U	5900.000U	5620.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	2-HEXANONE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	VINYL ACETATE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	ACETONE	UGKG	390.000	72.000B	5600.000	6500.000	43.000	49.000B	15.000B
SW8240	BENZENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	CARBON DISULFIDE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	CHLOROETHENE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	VINYL CHLORIDE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	CHLOROFORM	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	28.000U	5.000J	720.000U	720.000U	3.000J	6.000U	1.000J
SW8240	ETHYLBENZENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	57.000U	12.000U	1400.000U	1400.000U	13.000U	12.000U	11.000U
SW8240	STYRENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	28.000U	6.000U	720.000U	720.000U	7.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	ISOPHORONE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U

Gulf Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA10106	GPTS5BA10113	GPTS5BA10206	GPTS5BA10206DUP	GPTS5BA10213	GPTS5BA1106	GPTS5BA1113
			12/9/96	12/9/96	12/9/96	12/9/96	12/9/96	12/6/96	12/6/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	750.000U	810.000U	770.000U	770.000U	880.000U	780.000U	740.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	4-NITROANILINE	UG/KG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	CARBAZOLE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	FLUORENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U*	390.000U	370.000U
SW8270	ANTHRACENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	PYRENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BENZO[GH]PERYLENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BENZOIC ACID	UGKG	50.000J	2000.000U	51.000J	1900.000U	2100.000U	110.000J	89.000J
SW8270	BENZYL ALCOHOL	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	620.000	410.000U	47.000J	120.000J	440.000U	52.000J	65.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	CHRYSENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA10106	GPTS5BA10113	GPTS5BA10206	GPTS5BA10206DUP	GPTS5BA10213	GPTS5BA1106	GPTS5BA1113
			12/9/96	12/9/96	12/9/96	12/9/96	12/9/96	12/6/96	12/6/96
SW8270	NITROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	FLUORANTHENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	HEXACHLOROBENZENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	HEXACHLORCETHANE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	NDENO[1,2,3-D]PYRENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	N-NITROSDIPHENYLAMINE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	NAPHTHALENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	PENTACHLOROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	1900.000U	2100.000U	1900.000U	1800.000U
SW8270	PHENANTHRENE	UGKG	380.000U	410.000U	380.000U	380.000U	440.000U	390.000U	370.000U
SW8270	PHENOL	UGKG	490.000	840.000	900.000	70.000J	560.000	550.000	530.000
SW8290	OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.186U	0.187U	0.287U	1.371	0.300U	0.225U	0.289U
SW8290	TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	3.290U	0.922	0.184U	0.367	0.927	14.600	0.737
SW8290	TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.253	0.221	0.155U	1.468	0.185U	0.189U	0.111U
SW8290	TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.142U	0.436	0.162U	0.167U	0.936	11.600	0.555
SW8290	TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.070U	0.113U	0.081U	0.135U	0.123U	0.083U	0.121U
SW8290	TOTAL OCTACHLORODIBENZO-P-DIOXINS	NGKG	57.800B	3.350B	2.200B	3.479B	3.150B	40.100B	4.420B
SW8290	TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.233U	0.218U	0.231U	0.288U	0.283U	2.250	0.234U
SW8290	TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.156U	0.114U	0.152U	0.160U	0.144U	0.109U	0.300U
SW8290	TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.204U	0.166U	0.257U	0.290U	0.297U	1.420	0.253U
SW8290	TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.164U	0.126U	0.130U	0.182U	0.240U	0.167U	0.206U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.350X	0.539	0.184U	0.260U	0.477X	7.27C	0.393X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.232	0.221	0.155U	1.468	0.185U	0.163XB	0.111U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.130U	0.103U	0.185U	0.171U	0.221U	0.225U	0.133U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.220U	0.277U	0.251U	0.260U	0.247U	0.393U	0.278U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.089U	0.144U	0.103U	0.286X	0.157U	0.106U	0.155U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.142U	0.179U	0.162U	0.167U	0.159U	0.253U	0.179U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.070U	0.113U	0.081U	0.135U	0.123U	0.083U	0.121U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.155U	0.195U	0.176U	0.182U	0.173U	1.670	0.195U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.101U	0.164U	0.117U	0.195U	0.178U	0.121U	0.175U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.233U	0.218U	0.231U	0.288U	0.283U	0.220U	0.234U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.156U	0.114U	0.152U	0.160U	0.143U	0.108U	0.299U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.092U	0.148U	0.106U	0.176U	0.161U	0.109U	0.159U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.156U	0.114U	0.152U	0.160U	0.144U	0.109U	0.300U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.164U	0.126U	0.130U	0.182U	0.240U	0.167U	0.206U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.204U	0.166U	0.257U	0.290U	0.297U	0.323U	0.253U

Gulfp Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA1206	GPTS5bA1212	GPTS5bA1306	GPTS5bA1313	GPTS5bA2106	GPTS5bA2113	GPTS5bA2207
			12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96
SW6010	ARSENIC	MGKG	0.500U	1.800	0.390U	0.400U	0.370U	0.540B	1.200B
SW6010	BARIUM	MGKG	20.000	0.760B	2.000	0.720B	18.300	1.200	2.800
SW6010	CADMIUM	MGKG	0.060U	0.050U	0.050U	0.050U	0.040U	0.050U	0.340B
SW6010	CHROMIUM	MGKG	11.900	2.200	3.700	1.100B	3.800	1.600	4.600
SW6010	LEAD	MGKG	3.400	1.100	0.610	0.690	2.600	1.100	4.600
SW6010	SELENIUM	MGKG	0.460U	0.370U	0.540B	0.360U	0.340U	0.360U	2.600
SW6010	SILVER	MGKG	0.290U	0.230U	0.220U	0.230U	0.210U	0.230U	0.230U
SW7471	MERCURY	MGKG	0.280	0.040U	0.100	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	ALDRIN	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	2.000U	1.900P	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	DIELDRIN	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.800U	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN KETONE	UGKG	26.000P	3.100U	2.900U	3.000U	2.800U	3.000U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	HEPTACHLOR	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	2.000U	1.600U	1.500U	1.600U	1.500U	1.600U	1.600U
SW8080	METHOXYCHLOR	UGKG	20.000U	16.000U	15.000U	16.000U	15.000U	16.000U	16.000U
SW8080	PCB 1016	UGKG	50.000U	41.000U	39.000U	40.000U	37.000U	40.000U	40.000U
SW8080	PCB 1221	UGKG	50.000U	41.000U	39.000U	40.000U	37.000U	40.000U	40.000U
SW8080	PCB 1232	UGKG	50.000U	41.000U	39.000U	40.000U	37.000U	40.000U	40.000U
SW8080	PCB 1242	UGKG	50.000U	41.000U	39.000U	40.000U	37.000U	40.000U	40.000U
SW8080	PCB 1248	UGKG	50.000U	41.000U	39.000U	40.000U	37.000U	40.000U	40.000U
SW8080	PCB 1254	UGKG	100.000U	83.000U	79.000U	81.000U	75.000U	81.000U	82.000U
SW8080	PCB 1260	UGKG	100.000U	83.000U	79.000U	81.000U	75.000U	81.000U	82.000U
SW8080	TOXAPHENE	UGKG	120.000U	100.000U	98.000U	100.000U	93.000U	100.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	24.000U	20.000U	19.000U	19.000U	18.000U	19.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	152.000U	123.000U	118.000U	120.000U	112.000U	120.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	94.000U	77.000U	73.000U	75.000U	70.000U	75.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	56.000U	46.000U	44.000U	45.000U	42.000U	45.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	80.000U	65.000U	62.000U	64.000U	60.000U	64.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	35.000U	28.000U	27.000U	28.000U	26.000U	28.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	21.000U	17.000U	16.000U	17.000U	16.000U	17.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	2120.000U	1730.000U	1650.000U	1690.000U	1570.000U	1690.000U	1710.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	4540.000U	3700.000U	3530.000U	3610.000U	3370.000U	3610.000U	3660.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA1206	GPTS5bA1212	GPTS5bA1306	GPTS5bA1313	GPTS5bA2106	GPTS5bA2113	GPTS5bA2207
			12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	7580.000U	6170.000U	5880.000U	6020.000U	5620.000U	6020.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	*XYLENES	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,1-DICHLOROETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,1-DICHLOROETHENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,2-DICHLOROETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	2-BUTANONE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	2-HEXANONE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	VINYL ACETATE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	ACETONE	UGKG	60.000B	43.000B	28.000B	11.000JB	79.000B	38.000B	990.000B
SW8240	BENZENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	BROMODICHLOROMETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	BROMOFORM	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	BROMOMETHANE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	CARBON DISULFIDE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	CARBON TETRACHLORIDE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	CHLOROBENZENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	CHLOROETHANE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	VINYL CHLORIDE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	CHLOROFORM	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	CHLOROMETHANE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	METHYLENE CHLORIDE	UGKG	8.000U	4.000J	2.000J	3.000J	2.000J	2.000J	57.000
SW8240	ETHYLBENZENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	15.000U	12.000U	12.000U	12.000U	11.000U	12.000U	61.000U
SW8240	STYRENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	TETRACHLOROETHYLENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8240	TOLUENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	1.000J	30.000U
SW8240	TRICHLOROETHYLENE	UGKG	8.000U	6.000U	6.000U	6.000U	6.000U	6.000U	30.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	ISOPHORONE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	1,2,4-TRICHLOROENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	1,2-DICHLOROENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	1-CHLOROENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA1206	GPTS5bA1212	GPTS5bA1306	GPTS5bA1313	GPTS5bA2106	GPTS5bA2113	GPTS5bA2207
			12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96
SW8270	1,4-DICHLOROBENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	2-NITROANILINE	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	1000.000U	810.000U	780.000U	780.000U	740.000U	800.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	3-NITROANILINE	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	4-NITROANILINE	UG/KG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	CARBAZOLE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	FLUORENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	ANTHRACENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	PYRENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BENZOIC ACID	UGKG	1000.000J	120.000J	69.000J	95.000J	1800.000U	1900.000U	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	120.000J	410.000U	390.000U	390.000U	56.000J	160.000J	110.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	CHRYSENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	500.000U	410.000U	390.000U	49.000J	370.000U	400.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA1206	GPTS5bA1212	GPTS5bA1306	GPTS5bA1313	GPTS5bA2106	GPTS5bA2113	GPTS5bA2207
			12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96	12/6/96
SW8270	NITROBENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	FLUORANTHENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	NAPHTHALENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	2400.000U	2000.000U	1900.000U	1900.000U	1800.000U	1900.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	500.000U	410.000U	390.000U	390.000U	370.000U	400.000U	400.000U
SW8270	PHENOL	UGKG	1000.000	1100.000	320.000J	700.000	620.000	290.000J	440.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.254U	0.380U	0.395U	0.260U	0.146U	0.296U	0.239U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	239.000	5.550	0.208U	0.270U	1.860	0.219U	0.610
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.232U	0.371U	0.144U	0.133U	0.226U	0.176U	0.111U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	99.800	1.370	0.267U	2.770	0.156U	0.137U	0.116U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.165U	0.123U	0.137U	0.117U	0.117U	0.125U	0.090U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	811.000B	26.000B	5.240B	4.950B	6.770B	2.400B	2.340B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	7.560	0.434U	0.300U	0.356U	0.305U	0.254U	0.270U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.168U	0.241U	0.204U	0.266U	0.200U	0.218U	0.191U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	3.410	0.442U	0.365U	0.363U	0.265U	0.281U	0.361U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.310U	0.271U	0.201U	0.218U	0.248U	0.211U	0.193U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	89.900	2.290	0.741X	0.694X	0.655	0.219U	0.610
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.232U	0.371U	0.144U	0.133U	0.226U	0.218B	0.111U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.277U	0.443U	0.173U	0.159U	0.270U	0.210U	0.132U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	1.010U	0.376U	0.415U	0.462U	0.242U	0.213U	0.180U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.211U	0.156U	0.175U	0.150U	0.149U	0.159U	0.114U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.649U	0.242U	0.267U	0.298U	0.156U	0.137U	0.116U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.165U	0.123U	0.137U	0.117U	0.117U	0.125U	0.090U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	16.900	0.263U	0.291U	0.324U	0.170U	0.150U	0.126U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.239U	0.177U	0.198U	0.170U	0.169U	0.180U	0.130U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.397U	0.434U	0.300U	0.356U	0.305U	0.254U	0.270U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.168U	0.240U	0.204U	0.265U	0.199U	0.218U	0.190U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.216U	0.160U	0.179U	0.154U	0.153U	0.163U	0.117U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.168U	0.241U	0.204U	0.266U	0.200U	0.218U	0.191U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.310U	0.271U	0.201U	0.218U	0.248U	0.211U	0.193U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.367U	0.422U	0.365U	0.363U	0.265U	0.281U	0.361U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA2214	GPTS5bA2307	GPTS5bA2314	GPTS5BA3105	GPTS5BA3112	GPTS5BA3206	GPTS5BA3213
			12/6/96	12/6/96	12/6/96	12/6/96	12/5/96	12/5/96	12/5/96
SW6010	ARSENIC	MGKG	0.510B	0.390U	1.000B	2.600	1.200B	0.490B	2.200
SW6010	BARIUM	MGKG	0.750B	1.300	0.900	10.300	2.500	12.600	1.100
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U	0.190B	0.130B	0.040U	0.870
SW6010	CHROMIUM	MGKG	0.840B	3.200	1.400	26.500	37.700	3.100	3.000
SW6010	LEAD	MGKG	0.910	0.940	0.650	11.900	1.800	2.400	2.300
SW6010	SELENIUM	MGKG	0.360U	0.360U	0.370U	0.940	1.300	0.420B	1.900
SW6010	SILVER	MGKG	0.230U	0.230U	0.230U	0.210U	0.230U	0.210U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.050	0.040U	0.040U	0.040U
SW8080	2,2-BIS(PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	DIELDRIN	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	ENDRIN	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.000U	3.100U	2.800U	3.000U	2.800U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U	1.600U
SW8080	METHOXYCHLOR	UGKG	15.000U	15.000U	16.000U	15.000U	16.000U	15.000U	16.000U
SW8080	PCB 1016	UGKG	39.000U	39.000U	41.000U	37.000U	40.000U	37.000U	40.000U
SW8080	PCB 1221	UGKG	39.000U	39.000U	41.000U	37.000U	40.000U	37.000U	40.000U
SW8080	PCB 1232	UGKG	39.000U	39.000U	41.000U	37.000U	40.000U	37.000U	40.000U
SW8080	PCB 1242	UGKG	39.000U	39.000U	41.000U	37.000U	40.000U	37.000U	40.000U
SW8080	PCB 1248	UGKG	39.000U	39.000U	41.000U	37.000U	40.000U	37.000U	40.000U
SW8080	PCB 1254	UGKG	80.000U	80.000U	83.000U	75.000U	82.000U	75.000U	82.000U
SW8080	PCB 1260	UGKG	80.000U	80.000U	83.000U	75.000U	82.000U	75.000U	82.000U
SW8080	TOXAPHENE	UGKG	99.000U	99.000U	100.000U	93.000U	100.000U	93.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	JGKG	19.000U	19.000U	20.000U	18.000U	20.000U	18.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	119.000U	119.000U	123.000U	112.000U	122.000U	112.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	74.000U	74.000U	77.000U	70.000U	76.000U	70.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	44.000U	44.000U	46.000U	42.000U	45.000U	42.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	63.000U	63.000U	65.000U	60.000U	65.000U	60.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	27.000U	27.000U	28.000U	26.000U	28.000U	26.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	17.000U	17.000U	16.000U	17.000U	16.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1670.000U	1670.000U	1730.000U	1570.000U	1710.000U	1570.000U	1710.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3570.000U	3570.000U	3700.000U	3370.000U	3660.000U	3370.000U	3660.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA2214	GPTS5bA2307	GPTS5bA2314	GPTS5BA3105	GPTS5BA3112	GPTS5BA3206	GPTS5BA3213
			12/6/96	12/6/96	12/6/96	12/5/96	12/5/96	12/5/96	12/5/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	5950.000U	5950.000U	6170.000U	5620.000U	6100.000U	5620.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	6.000U	4.000J	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	ACETONE	UGKG	33.000B	33.000B	12.000B	17.000	7.000J	63.000	6.000J
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U						
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	2.000J	6.000U	2.000J	2.000J	2.000J	2.000J	1.000J
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	12.000U	11.000U	12.000U	11.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	ISOPHORONE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	1-CHLOROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U

Gulf Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA2214	GPTS5bA2307	GPTS5bA2314	GPTS5BA3105	GPTS5BA3112	GPTS5BA3206	GPTS5BA3213
			12/6/96	12/6/96	12/6/96	12/5/96	12/5/96	12/5/96	12/5/96
SW8270	1,4-DICHLOROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	780.000U	780.000U	810.000U	740.000U	800.000U	740.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	4-NITROANILINE	UG/KG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	CARBAZOLE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	FLUORENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	ANTHRACENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	PYRENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BENZOIC ACID	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	390.000U	100.000J	58.000J	49.000J	44.000J	370.000U	97.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	CHRYSENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5bA2214	GPTS5bA2307	GPTS5bA2314	GPTS5BA3105	GPTS5BA3112	GPTS5BA3206	GPTS5BA3213
			12/6/96	12/6/96	12/6/96	12/5/96	12/5/96	12/5/96	12/5/96
SW8270	NITROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	FLUORANTHENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	NAPHTHALENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	390.000U	390.000U	410.000U	370.000U	400.000U	370.000U	400.000U
SW8270	PHENOL	UGKG	820.000	340.000J	580.000	170.000J	240.000J	370.000U	460.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.573	0.286U	0.173U	0.706	0.212U	0.218U	0.322
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	2.730	2.260	0.202U	5.920	1.720	40.700	1.740
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	1.320	0.119U	0.109U	0.569	0.409	0.500	0.435
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.171U	0.170U	0.232U	2.000	2.080	4.780	0.628
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.091U	0.111U	0.101U	0.102U	0.147U	0.088U	0.091U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	13.400B	8.000B	3.330B	26.700B	4.760U	267.000B	13.500B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.275U	0.237U	0.280U	0.228U	0.447U	0.343U	0.223U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.212U	0.173U	0.222U	0.126U	0.223U	0.169U	0.122U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.218U	0.337U	0.553U	0.192U	0.400U	0.291U	0.218U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.163U	0.284U	0.372U	0.193U	0.292U	0.207U	0.144U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.350	0.831	0.430X	1.850	0.555U	17.500	0.786X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.446B	0.119U	0.109U	0.505	0.376U	0.500B	0.435B
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.156U	0.142U	0.130U	0.097U	0.207U	0.090U	0.126U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.266U	0.265U	0.360U	0.283U	0.319U	0.299U	0.219U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.117U	0.142U	0.129U	0.130U	0.187U	0.112U	0.116U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.171U	0.170U	0.232U	0.182U	0.205U	0.193U	0.141U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.091U	0.111U	0.101U	0.102U	0.147U	0.088U	0.091U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.187U	0.185U	0.253U	0.199U	0.224U	1.160	0.154U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.132U	0.161U	0.146U	0.147U	0.212U	0.127U	0.131U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.275U	0.237U	0.280U	0.228U	0.447U	0.343U	0.223U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.211U	0.172U	0.221U	0.126U	0.223U	0.168U	0.122U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.120U	0.145U	0.132U	0.133U	0.192U	0.115U	0.119U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.212U	0.173U	0.222U	0.126U	0.223U	0.169U	0.122U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.163U	0.284U	0.372U	0.193U	0.292U	0.207U	0.144U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.218U	0.337U	0.553U	0.192U	0.400U	0.291U	0.218U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA3306	GPTS5BA3311	GPTS5bA5108	GPTS5bA5115	GPTS5bA5206	GPTS5bA5213	GPTS5BA5306
			12/5/96	12/5/96	12/4/96	12/4/96	12/4/96	12/4/96	12/5/96
SW6010	ARSENIC	MGKG	0.370U	1.300	0.400U	0.400U	0.560B	1.300	0.500B
SW6010	BARIUM	MGKG	1.500	1.200	0.570B	0.420B	6.300	0.590B	3.900
SW6010	CADMIUM	MGKG	0.050U	0.120B	0.050U	0.050U	0.040U	0.050U	0.050U
SW6010	CHROMIUM	MGKG	0.920B	1.500	1.700	2.400	3.100	1.700	2.400
SW6010	LEAD	MGKG	0.940	1.800	0.810	0.550	2.500	0.600	1.300
SW6010	SELENIUM	MGKG	0.340U	0.430B	0.360U	0.370U	0.330U	0.370U	0.360U
SW6010	SILVER	MGKG	0.220U	0.230U	0.230U	0.230U	0.210U	0.230U	0.220U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	ALDRIN	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	DIELDRIN	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	ENDRIN KETONE	UGKG	2.800U	3.000U	3.000U	3.000U	2.800U	3.000U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	GAMMA-HEXOCHLOROCYHEXANE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	HEPTACHLOR	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.600U	1.600U	1.600U	1.400U	1.600U	1.500U
SW8080	METHOXYCHLOR	UGKG	15.000U	16.000U	16.000U	16.000U	14.000U	16.000U	15.000U
SW8080	PCB 1016	UGKG	38.000U	40.000U	40.000U	40.000U	37.000U	40.000U	39.000U
SW8080	PCB 1221	UGKG	38.000U	40.000U	40.000U	40.000U	37.000U	40.000U	39.000U
SW8080	PCB 1232	UGKG	38.000U	40.000U	40.000U	40.000U	37.000U	40.000U	39.000U
SW8080	PCB 1242	UGKG	38.000U	40.000U	40.000U	40.000U	37.000U	40.000U	39.000U
SW8080	PCB 1248	UGKG	38.000U	40.000U	40.000U	40.000U	37.000U	40.000U	39.000U
SW8080	PCB 1254	UGKG	76.000U	82.000U	81.000U	82.000U	74.000U	82.000U	80.000U
SW8080	PCB 1260	UGKG	76.000U	82.000U	81.000U	82.000U	74.000U	82.000U	80.000U
SW8080	TOXAPHENE	UGKG	94.000U	100.000U	100.000U	100.000U	92.000U	100.000U	99.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	20.000U	19.000U	20.000U	6.000U	20.000U	19.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	122.000U	122.000U	120.000U	122.000U	39.000U	122.000U	119.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	76.000U	76.000U	75.000U	76.000U	24.000U	76.000U	74.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	45.000U	45.000U	45.000U	45.000U	14.000U	45.000U	44.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	65.000U	65.000U	64.000U	65.000U	21.000U	65.000U	63.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	28.000U	28.000U	28.000U	28.000U	9.000U	28.000U	27.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	17.000U	17.000U	17.000U	5.000U	17.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1710.000U	1710.000U	1690.000U	1710.000U	545.000U	1710.000U	1670.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3660.000U	3660.000U	3610.000U	3660.000U	1170.000U	3660.000U	3570.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA3306	GPTS5BA3311	GPTS5bA5108	GPTS5bA5115	GPTS5bA5206	GPTS5bA5213	GPTS5BA5306
			12/5/96	12/5/96	12/4/96	12/4/96	12/4/96	12/4/96	12/5/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	6100.000U	6100.000U	6020.000U	6100.000U	1950.000U	6100.000U	5950.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	6.000J	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	14.000	16.000	22.000B	7.000JB	80.000B	26.000B	28.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U						
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	2.000J	6.000U	6.000U	6.000U	1.000J	2.000J
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	11.000U	12.000U	12.000U	12.000U	11.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	ISOPHORONE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA3306	GPTS5BA3311	GPTS5bA5108	GPTS5bA5115	GPTS5bA5206	GPTS5bA5213	GPTS5BA5306
			12/5/96	12/5/96	12/4/96	12/4/96	12/4/96	12/4/96	12/5/96
SW8270	1,4-DICHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2,4-DINITROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	2,4-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2,6-DINITROTOLUENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2-CHLOROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	2-NITROANILINE	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	2-NITROPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	750.000U	800.000U	800.000U	800.000U	730.000U	800.000U	780.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	3-NITROANILINE	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	4-CHLOROANILINE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	4-METHYLPHENOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	4-NITROANILINE	UG/KG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	4-NITROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	CARBAZOLE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	FLUORENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	ACENAPHTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	ACENAPHTHYLENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BENZO[A]PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BENZOIC ACID	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	BENZYL ALCOHOL	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	440.000	50.000J	44.000J	140.000J	860.000	51.000J	390.000U
SW8270	BUTYLBENZYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	CHRYSENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DIBENZOFURAN	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DIETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	DIMETHYL PHTHALATE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA3306	GPTS5BA3311	GPTS5bA5108	GPTS5bA5115	GPTS5bA5206	GPTS5bA5213	GPTS5BA5306
			12/5/96	12/5/96	12/4/96	12/4/96	12/4/96	12/4/96	12/5/96
SW8270	NITROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	FLUORANTHENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	HEXACHLOROBENZENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	HEXACHLOROETHANE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	NAPHTHALENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	PENTACHLOROPHENOL	UGKG	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U	2000.000U	1900.000U
SW8270	PHENANTHRENE	UGKG	380.000U	400.000U	400.000U	400.000U	370.000U	400.000U	390.000U
SW8270	PHENOL	UGKG	76.000J	210.000J	1000.000	750.000	930.000	180.000J	910.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.472U	0.329U	0.218U	0.462U	28.300	0.958	9.920
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.973	0.312U	0.308U	0.695	93.400	2.850	46.500
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.242U	0.341	0.233U	0.159U	11.400	1.090	13.400
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.213U	0.201U	0.212U	0.200U	16.800	0.770	2.670
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.190U	0.113U	0.127U	0.141U	6.800	0.117U	3.120
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	3.710XB	0.683B	5.450B	2.750XB	417.000B	13.100B	281.000B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.310U	0.343U	0.346U	0.287U	0.271U	0.230U	0.269U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.210U	0.174U	0.228U	0.163U	1.580	0.155U	0.155U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.320U	0.243U	0.420U	0.297U	0.238U	0.260U	0.329U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.250U	0.192U	0.284U	0.232U	0.193U	0.135U	0.142U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.452	0.353X	0.308U	0.226U	49.100	1.430	21.000
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.242U	0.341B	0.233U	0.159U	11.400B	0.500B	3.600B
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.289U	0.377U	0.278U	0.191U	0.701U	0.290U	0.487U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.330U	0.313U	0.329U	0.311U	0.308U	0.252U	0.306U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.243U	0.144U	0.162U	0.180U	3.360I	0.149U	0.739I
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.213U	0.201U	0.212U	0.200U	1.650	0.162U	0.197U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.190U	0.113U	0.127U	0.141U	0.911U	0.117U	0.203U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.232U	0.219U	0.230U	0.218U	1.620	0.176U	0.214U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.275U	0.163U	0.183U	0.204U	1.320U	0.169U	0.294U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.310U	0.343U	0.346U	0.287U	0.271U	0.230U	0.269U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.209U	0.174U	0.228U	0.163U	0.185U	0.154U	0.155U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.249U	0.147U	0.166U	0.184U	0.191U	0.153U	0.266U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.210U	0.174U	0.228U	0.163U	0.185U	0.155U	0.155U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.205U	0.192U	0.284U	0.232U	0.193U	0.135U	0.142U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.320U	0.243U	0.420U	0.297U	0.238U	0.260U	0.329U

Gulfport 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA5313	GPTS5BA5406	GPTS5BA5406DUP	GPTS5BA5414	GPTS5BA5505	GPTS5BA5513	GPTS5BA6105
			12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/10/96
SW6010	ARSENIC	MGKG	2.000	0.790B		0.400U	0.940B	2.000	0.370U
SW6010	BARIUM	MGKG	0.980	8.300		2.200	9.500	3.800	7.500
SW6010	CADMIUM	MGKG	0.050U	0.050U		0.050U	0.060B	0.050U	0.050U
SW6010	CHROMIUM	MGKG	1.300	3.700		1.900	9.200	3.100	2.900
SW6010	LEAD	MGKG	1.400	3.100		1.300	4.900	1.900	2.200
SW6010	SELENIUM	MGKG	0.360U	0.360U		0.370U	0.340U	0.380U	0.340U
SW6010	SILVER	MGKG	0.230U	0.230U		0.230U	0.220U	0.240U	0.220U
SW7471	MERCURY	MGKG	0.040U	0.040U		0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	ALDRIN	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	DIELDRIN	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	ENDRIN	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.000U	3.000U	3.000U	2.900U	3.200U	2.800U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	HEPTACHLOR	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.500U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	METHOXYCHLOR	UGKG	16.000U	15.000U	15.000U	16.000U	15.000U	16.000U	15.000U
SW8080	PCB 1016	UGKG	40.000U	39.000U	39.000U	40.000U	38.000U	42.000U	37.000U
SW8080	PCB 1221	UGKG	40.000U	39.000U	39.000U	40.000U	38.000U	42.000U	37.000U
SW8080	PCB 1232	UGKG	40.000U	39.000U	39.000U	40.000U	38.000U	42.000U	37.000U
SW8080	PCB 1242	UGKG	40.000U	39.000U	39.000U	40.000U	38.000U	42.000U	37.000U
SW8080	PCB 1248	UGKG	40.000U	39.000U	39.000U	40.000U	38.000U	42.000U	37.000U
SW8080	PCB 1254	UGKG	81.000U	80.000U	80.000U	82.000U	77.000U	85.000U	76.000U
SW8080	PCB 1260	UGKG	81.000U	80.000U	80.000U	82.000U	77.000U	85.000U	76.000U
SW8080	TOXAPHENE	UGKG	100.000U	99.000U	99.000U	100.000U	95.000U	100.000U	94.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	19.000U	19.000U	20.000U	18.000U	20.000U	18.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	120.000U	119.000U	119.000U	122.000U	115.000U	127.000U	114.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	75.000U	74.000U	74.000U	76.000U	71.000U	78.000U	70.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	45.000U	44.000U	44.000U	45.000U	43.000U	47.000U	42.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	64.000U	63.000U	63.000U	65.000U	61.000U	67.000U	60.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	28.000U	27.000U	27.000U	28.000U	26.000U	29.000U	26.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	17.000U	17.000U	17.000U	16.000U	18.000U	16.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1690.000U	1670.000U	1670.000U	1710.000U	1610.000U	1770.000U	1590.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3620.000U	3570.000U	3570.000U	3660.000U	3450.000U	3800.000U	3410.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA5313	GPTS5BA5406	GPTS5BA5406DUP	GPTS5BA5414	GPTS5BA5505	GPTS5BA5513	GPTS5BA6105
			12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/10/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	6020.000U	5950.000U	5950.000U	6100.000U	5750.000U	6330.000U	5680.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	3.000J	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	2-HEXANONE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	VINYL ACETATE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	ACETONE	UGKG	5.000JB	10.000J	9.000J	130.000	28.000	12.000J	16.000
SW8240	BENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	2.000J	2.000J	1.000J	20.000	2.000J	2.000J	3.000JB
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	12.000U	12.000U	12.000U	11.000U	13.000U	11.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	6.000U	6.000U	6.000U	2.000J	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	ISOPHORONE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	2400.000
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U

Gulfp. Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA5313	GPTS5BA5406	GPTS5BA5406DUP	GPTS5BA5414	GPTS5BA5505	GPTS5BA5513	GPTS5BA6105
			12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/10/96
SW8270	1,4-DICHLOROBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2,4-DINITROTOLUENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2,6-DINITROTOLUENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2-CHLOROPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2-METHYLPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	2-NITROPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	800.000U	780.000U	780.000U	810.000U	760.000U	840.000U	750.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	4-CHLOROANILINE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	4-METHYLPHENOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	4-NITROANILINE	UG/KG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW8270	CARBAZOLE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	FLUORENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	ACENAPHTHENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	ACENAPHTHYLENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	ANTHRACENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BENZO[A]PYRENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	PYRENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BENZOIC ACID	UGKG	40.000J	1900.000U	1900.000U	100.000J	1800.000U	49.000J	1800.000U
SW8270	BENZYL ALCOHOL	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	400.000U	390.000U	390.000U	120.000J	51.000J	160.000J	380.000U
SW8270	BUTYLBENZYL PHTHALATE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	CHRYSENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	DIBENZOFURAN	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	DIETHYL PHTHALATE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW8270	DIMETHYL PHTHALATE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA5313	GPTS5BA5406	GPTS5BA5406DUP	GPTS5BA5414	GPTS5BA5505	GPTS5BA5513	GPTS5BA6105
			12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/5/96	12/10/96
SW827f	NITROBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	FLUORANTHENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	HEXACH.ORBENZENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	HEXACH.ORBUTADIENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	HEXACH.OROCYCLOPENTADIENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	HEXACH.OROETHANE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	INDENO[1,2,3-C,D]PYRENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	N-NITROSODIPHENYLAMINE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	NAPHTHALENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	PENTACHLOROPHENOL	UGKG	1900.000U	1900.000U	1900.000U	2000.000U	1800.000U	2000.000U	1800.000U
SW827f	PHENANTHRENE	UGKG	400.000U	390.000U	390.000U	410.000U	380.000U	420.000U	380.000U
SW827f	PHENOL	UGKG	860.000	64.000J	1000.000	1400.000	560.000	3300.000	1300.000
SW829D	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.830	0.269U	0.240U	0.191U	0.958X	0.241U	0.990
SW829D	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	1.380	0.740	0.637	0.314	3.730	0.612	1.130
SW829D	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	1.180	0.538	0.220U	0.191U	1.060	0.280	1.010
SW829D	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.189U	0.227U	0.203U	0.166U	0.163U	0.215U	0.208U
SW829D	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.134U	0.201U	0.119U	0.153U	0.167U	0.151U	0.096U
SW829D	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	13.000B	3.340B	3.434B	1.720B	16.400	2.100B	12.100XB
SW829D	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.339U	0.370U	0.403U	0.258U	0.236U	0.408U	0.254U
SW829D	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.241U	0.229U	0.282U	0.178U	0.160U	0.226U	0.112U
SW829D	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.323U	0.283U	0.469U	0.402U	0.305U	0.345U	0.187U
SW829D	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.222U	0.235U	0.297U	0.252U	0.223U	0.199U	0.143U
SW829D	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	1.010X	0.425X	0.441X	0.314	1.550	0.288U	1.590X
SW829D	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.777B	0.494B	0.491X	0.354U	0.372B	0.280B	0.478
SW829D	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.292U	0.227U	0.263U	0.228U	0.195U	0.188U	0.156U
SW829D	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.294U	0.353U	0.316U	0.258U	0.253U	0.334U	0.322U
SW829D	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.171U	0.256U	0.152U	0.195U	0.213U	0.193U	0.123U
SW829D	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.189U	0.227U	0.203U	0.166U	0.163U	0.215U	0.208U
SW829D	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.134U	0.201U	0.119U	0.153U	0.167U	0.151U	0.096U
SW829D	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.206U	0.247U	0.222U	0.181U	0.177U	0.234U	0.226U
SW829D	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.194U	0.290U	0.172U	0.221U	0.242U	0.218U	0.139U
SW829D	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.339U	0.370U	0.403U	0.258U	0.236U	0.408U	0.254U
SW829D	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.241U	0.229U	0.281U	0.178U	0.160U	0.226U	0.111U
SW829D	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.175U	0.262U	0.156U	0.200U	0.219U	0.197U	0.126U
SW829D	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.241U	0.229U	0.282U	0.178U	0.160U	0.226U	0.112U
SW829D	2,3,7,8-ETRACHLORODIBENZOFURAN	NGKG	0.222U	0.235U	0.297U	0.252U	0.223U	0.199U	0.143U
SW829D	2,3,7,8-ETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.323U	0.283U	0.469U	0.402U	0.305U	0.345U	0.187U

Gulfport 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6112	S5BA6205 12/1	GPTS5BA6213	GPTS5BA6305	GPTS5BA6312	GPTS5BA6405	GPTS5BA6412
			12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96
SW6010	ARSENIC	MGKG	1.400	0.600B	1.800	0.670B	1.500	0.390U	0.850B
SW6010	BARIUM	MGKG	1.600	9.400	2.300	6.600	1.300	8.500	1.000
SW6010	CADMIUM	MGKG	0.060B	0.060U	0.060U	0.050U	0.070B	0.050U	0.050U
SW6010	CHROMIUM	MGKG	3.900	6.500	2.000	2.500	3.100	2.700	1.400
SW6010	LEAD	MGKG	1.600	4.200	1.800	1.800	1.800	2.100	1.500
SW6010	SELENIUM	MGKG	0.360U	0.420U	0.420U	0.400B	0.380U	0.350U	0.420B
SW6010	SILVER	MGKG	0.230U	0.270U	0.270U	0.220U	0.240U	0.220U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.050U	0.050U	0.040U	0.040U	0.040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	ALDRIN	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	DIELDRIN	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	ENDRIN	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.000U	3.500U	3.500U	2.900U	3.100U	2.900U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.800U	1.800U	1.500U	1.600U	1.500U	1.600U
SW8080	METHOXYCHLOR	UGKG	16.000U	18.000U	18.000U	15.000U	16.000U	15.000U	16.000U
SW8080	PCB 1016	UGKG	40.000U	46.000U	46.000U	38.000U	41.000U	39.000U	40.000U
SW8080	PCB 1221	UGKG	40.000U	46.000U	46.000U	38.000U	41.000U	39.000U	40.000U
SW8080	PCB 1232	UGKG	40.000U	46.000U	46.000U	38.000U	41.000U	39.000U	40.000U
SW8080	PCB 1242	UGKG	40.000U	46.000U	46.000U	38.000U	41.000U	39.000U	40.000U
SW8080	PCB 1248	UGKG	40.000U	46.000U	46.000U	38.000U	41.000U	39.000U	40.000U
SW8080	PCB 1254	UGKG	81.000U	94.000U	94.000U	77.000U	84.000U	79.000U	82.000U
SW8080	PCB 1260	UGKG	81.000U	94.000U	94.000U	77.000U	84.000U	79.000U	82.000U
SW8080	TOXAPHENE	UGKG	100.000U	120.000U	120.000U	95.000U	100.000U	98.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	23.000U	23.000U	18.000U	20.000U	19.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	120.000U	141.000U	141.000U	115.000U	125.000U	118.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	75.000U	87.000U	87.000U	71.000U	78.000U	73.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	45.000U	52.000U	52.000U	43.000U	46.000U	44.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	64.000U	75.000U	75.000U	61.000U	66.000U	62.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	28.000U	32.000U	32.000U	26.000U	29.000U	27.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	20.000U	20.000U	16.000U	18.000U	16.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1690.000U	1970.000U	1970.000U	1610.000U	1750.000U	1650.000U	1710.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3610.000U	4220.000U	4230.000U	3450.000U	3750.000U	3530.000U	3660.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6112	S5BA6205 12/1	GPTS5BA6213	GPTS5BA6305	GPTS5BA6312	GPTS5BA6405	GPTS5BA6412
			12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	6020.000U	7040.000U	7040.000U	5750.000U	6250.000U	5880.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	2.000J	9.000J	14.000U	11.000U	2.000J	9.000J	4.000J
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	ACETONE	UGKG	15.000B	340.000E	24.000B	21.000B	16.000	36.000B	20.000B
SW8240	BENZENE	UGKG	6.000U	7.000U	7.000U	6.000U	2.000J	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROENZENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	3.000JB	7.000U	8.000B	7.000B	6.000U	4.000JB	4.000JB
SW8240	ETHYLBENZENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	14.000U	14.000U	11.000U	12.000U	12.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	7.000U	7.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	2.000J	7.000U	7.000U	6.000U	2.000J	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	ISOPHORONE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U

Gulfport 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6112	S5BA6205 12/1	GPTS5BA6213	GPTS5BA6305	GPTS5BA6312	GPTS5BA6405	GPTS5BA6412
			12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96
SW8270	1,4-DICHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	800.000U	930.000U	930.000U	760.000U	820.000U	780.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	CARBAZOLE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	FLUORENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	ANTHRACENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	PYRENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BENZOIC ACID	UGKG	61.000J	2200.000U	88.000J	73.000J	64.000J	85.000J	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	110.000J	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	94.000J	670.000	93.000J	41.000J	140.000J	380.000J	78.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	CHRYSENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6112	S5BA6205 12/1	GPTS5BA6213	GPTS5BA6305	GPTS5BA6312	GPTS5BA6405	GPTS5BA6412
			12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96	12/10/96
SW8270	NITROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	FLUORANTHENE	UGKG	400.000U	460.000U	460.000U	380.000U	340.000J	390.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	NAPHTHALENE	UGKG	400.000U	460.000U	460.000U	380.000U	410.000U	390.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	2200.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	400.000U	460.000U	460.000U	380.000U	92.000J	390.000U	400.000U
SW8270	PHENOL	UGKG	3600.000	4700.000	3000.000	2700.000	2100.000	2200.000	4500.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.242U	620.000	7.430	0.129U	0.170U	0.423U	0.293U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.743	1660.000U	20.100	1.100	2.570	0.383U	0.759
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.220U	117.000	6.810	0.357	0.160U	0.281U	0.229
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.380	186.000	2.170	0.097U	2.990	0.127U	0.173U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.097U	35.300	0.232U	0.072U	0.099U	0.084U	0.084U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	2.990B	9320.000B	121.000B	7.830B	8.260B	2.410B	1.920XB
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.180U	0.492U	0.265U	0.262U	0.236U	0.318U	0.418U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.141U	11.800	0.149U	0.171U	0.133U	0.185U	0.244U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.201U	0.978	0.200U	0.339U	0.238U	0.358U	0.346U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.163U	1.430	0.214U	0.211U	0.165	0.213U	0.186U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.467	934.000	11.100	0.330	0.753	0.383U	0.446
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.220U	101.000	1.360	0.357	0.160U	0.281U	0.229
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.262U	17.700	0.346U	0.198U	0.191U	0.336U	0.170U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.203U	2.300U	0.383U	0.150U	0.352U	0.197U	0.269U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.124U	16.700U	0.296U	0.092U	0.126U	0.107U	0.108U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.131U	18.800	0.247U	0.097U	0.227U	0.127U	0.173U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.097U	7.190	0.232U	0.072U	0.099U	0.084U	0.084U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.142U	6.750	0.269U	0.105U	0.247U	0.138U	0.188U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.140U	0.731U	0.335U	0.104U	0.143U	0.121U	0.122U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.180U	0.492U	0.265U	0.262U	0.236U	0.318U	0.418U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.140U	4.420U	0.149U	0.171U	0.133U	0.184U	0.244U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.127U	0.661U	0.303U	0.094U	0.129U	0.110U	0.110U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.141U	0.158U	0.149U	0.171U	0.133U	0.185U	0.244U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.163U	0.322U	0.214U	0.211U	0.165U	0.213U	0.186U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.201U	0.216U	0.200U	0.339U	0.238U	0.358U	0.346U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6505	GPTS5BA6510	GPTS5BA6606	GPTS5BA6613	GPTS5BA9106	GPTS5BA9114	GPTS5BA9206
			12/9/96	12/9/96	12/9/96	12/9/96	12/11/96	12/11/96	12/11/96
SW6010	ARSENIC	MGKG	0.450B	4.300	0.380U	1.400	0.450B*	1.200B*	0.380U*
SW6010	BARIUM	MGKG	9.100 *	2.500 *	1.100 *	1.400 *	9.700	1 100	13.100
SW6010	CADMIUM	MGKG	0.050U	0.090B	0.050U	0.050U	0.050U	0 050U	0.050U
SW6010	CHROMIUM	MGKG	2.500 *	5.200 *	2.100 *	4.000 *	4.700 *	1 400 *	11.200 *
SW6010	LEAD	MGKG	2 200 *	3.600 *	1.000 *	1.600 *	3.100 *	1.100 *	1.500 *
SW6010	SELENIUM	MGKG	0.350U	0.510B	0.350U	0.380U	0.360B	0.370U	0.340U
SW6010	SILVER	MGKG	0.220U	0.260U	0.220U	0.240U	0.220U	0.240U	0.220U
SW7471	MERCURY	MGKG	0.040U	0.050U	0.040U	0.040U	0.040U	0 040U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3.100U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3.100U	2.800U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	2.900U	3 400U	2 900U	3.200U	2.900U	3.100U	2.800U
SW8080	ALDRIN	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.800U	1.500U	1 600U	1.500U	1 600U	1.500U
SW8080	ALPHA-CHLORDANE	UGKG	1.500U	1.800U	1.500U	1 600U	1.500U	1 600U	1.500U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1 600U	1.500U
SW8080	BETA-ENDOSULFAN	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3.100U	2 800U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	DIELDRIN	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3.100U	2.800U
SW8080	ENDOSULFAN SULFATE	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3.100U	2.800U
SW8080	ENDRIN	UGKG	2.900U	3.400U	2 900U	3.200U	2.900U	3.100U	2.800U
SW8080	ENDRIN ALDEHYDE	UGKG	2.900U	3.400U	2 900U	3.200U	2.900U	3.100U	2.800U
SW8080	ENDRIN KETONE	UGKG	2.900U	3.400U	2.900U	3.200U	2.900U	3 100U	2.800U
SW8080	GAMMA-CHLORDANE	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	GAMMA-HEXOCHLOROCYHEXANE	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	HEPTACHLOR	UGKG	1.500U	1.800U	1.500U	1.600U	1.500U	1.600U	1.500U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.500U	1.800U	1.500U	1.600U	1 500U	1.600U	1.500U
SW8080	METHOXYCHLOR	UGKG	15.000U	18.000U	15.000U	16.000U	15.000U	16.000U	15.000U
SW8080	PCB 1016	UGKG	39.000U	45.000U	38 000U	42.000U	38.000U	41.000U	38.000U
SW8080	PCB 1221	UGKG	39.000U	45.000U	38 000U	42.000U	38 000U	41 000U	38.000U
SW8080	PCB 1232	UGKG	39.000U	45.000U	38.000U	42.000U	38.000U	41.000U	38.000U
SW8080	PCB 1242	UGKG	39.000U	45.000U	38 000U	42.000U	38.000U	41.000U	38.000U
SW8080	PCB 1248	UGKG	39.000U	45.000U	38.000U	42.000U	38.000U	41 000U	38.000U
SW8080	PCB 1254	UGKG	79.000U	92.000U	77.000U	85.000U	78.000U	84.000U	76.000U
SW8080	PCB 1260	UGKG	79.000U	92.000U	77 000U	85.000U	78.000U	84 000U	76.000U
SW8080	TOXAPHENE	UGKG	98.000U	110.000U	95.000U	100.000U	96 000U	100.000U	94.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	19.000U	22.000U	18.000U	20.000U	19.000U	20 000U	18.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	118.000U	137.000U	115.000U	127 000U	116.000U	125 000U	114.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	73.000U	85.000U	71.000U	78.000U	72.000U	78.000U	70 000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	44.000U	51.000U	43.000U	47.000U	43.000U	46.000U	42 000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	62.000U	73.000U	61.000U	67.000U	62.000U	66.000U	60.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	27.000U	32.000U	26.000U	29.000U	27.000U	29.000U	26.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	16.000U	19 000U	16.000U	18.000U	16.000U	18.000U	16 000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1650.000U	1920.000U	1610.000U	1770.000U	1630 000U	1750 000U	1600 000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3530.000U	4110.000U	3450 000U	3800.000U	3490.000U	3750.000U	3410 000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6505	GPTS5BA6510	GPTS5BA6606	GPTS5BA6613	GPTS5BA9106	GPTS5BA9114	GPTS5BA9206
			12/9/96	12/9/96	12/9/96	12/9/96	12/11/96	12/11/96	12/11/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	5880.000U	6850.000U	5750.000U	6330.000U	5810.000U	6250.000U	5680.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	14.000U	11.000U	13.000U	3.000J	12.000U	11.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	2-HEXANONE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	VINYL ACETATE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	ACETONE	UGKG	200.000	32.000	120.000	26.000	17.000B	23.000	120.000
SW8240	BENZENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	CHLOROFORM	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	1.000J	7.000U	6.000U	2.000J	6.000U	6.000U	6.000U
SW8240	ETHYLBENZENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	14.000U	11.000U	13.000U	12.000U	12.000U	11.000U
SW8240	STYRENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	7.000U	6.000U	6.000U	6.000U	6.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	ISOPHORONE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6505	GPTS5BA6510	GPTS5BA6606	GPTS5BA6613	GPTS5BA9106	GPTS5BA9114	GPTS5BA9206
			12/9/96	12/9/96	12/9/96	12/9/96	12/11/96	12/11/96	12/11/96
SW8270	1,4-DICHLOROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2,4-DINITROPHENOL	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	2,4-DINITROTOLUENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2,6-DINITROTOLUENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2-CHLOROPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2-METHYLPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	2-NITROANILINE	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	2-NITROPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	780.000U	900.000U	760.000U	840.000U	770.000U	820.000U	750.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	3-NITROANILINE	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	4-CHLOROANILINE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	4-METHYLPHENOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	4-NITROANILINE	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	4-NITROPHENOL	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	CARBAZOLE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	FLUORENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	ACENAPHTHENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	ACENAPHTHYLENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	ANTHRACENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BENZO[A]PYRENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	PYRENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BENZOIC ACID	UGKG	1900.000U	56.000J	270.000J	140.000J	1900.000U	2000.000U	59.000J
SW8270	BENZYL ALCOHOL	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	390.000U	49.000J	78.000J	51.000J	88.000J	98.000J	99.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	CHRYSENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DIBENZOFURAN	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DIETHYL PHTHALATE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	DIMETHYL PHTHALATE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA6505	GPTS5BA6510	GPTS5BA6606	GPTS5BA6613	GPTS5BA9106	GPTS5BA9114	GPTS5BA9206
			12/9/96	12/9/96	12/9/96	12/9/96	12/11/96	12/11/96	12/11/96
SW8270	NITROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	FLUORANTHENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	HEXACHLOROBENZENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	HEXACHLOROETHANE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	NAPHTHALENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	PENTACHLOROPHENOL	UGKG	1900.000U	2200.000U	1800.000U	2000.000U	1900.000U	2000.000U	1800.000U
SW8270	PHENANTHRENE	UGKG	390.000U	450.000U	380.000U	420.000U	380.000U	410.000U	380.000U
SW8270	PHENOL	UGKG	330.000U	1700.000	3700.000	1300.000	640.000	680.000	1400.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.162U	0.218U	0.329U	0.201U	3.200X	0.732U	0.843X
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.299U	1.200	0.852	0.268U	35.400	1.160	0.289U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.143	0.106U	0.186U	0.149U	2.590	0.317U	0.313U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.182U	0.234U	0.205U	0.262U	0.272U	0.974	0.360U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.129U	0.127U	0.133U	0.139U	0.843	0.231U	0.169U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	1.020B	3.890B	2.940B	1.880B	166.000	7.520	3.910
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.242U	0.356U	0.430U	0.291U	9.220	0.577U	0.459U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.180U	0.175U	0.228U	0.227U	0.400L	0.334U	0.302U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.173U	0.350U	0.227U	0.304U	0.455L	0.588U	0.500U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.131U	0.237U	0.262U	0.238U	0.168L	0.409U	0.358U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.299U	0.486	0.433	0.268U	6.830	0.437U	0.579X
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.143	0.106U	0.186U	0.149U	0.719U	0.317U	0.841
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.174U	0.127U	0.222U	0.178U	0.531U	0.378U	0.374U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.282U	0.363U	0.318U	0.407U	0.422U	0.561U	0.559U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.165U	0.163U	0.169U	0.177U	0.319U	0.295U	0.216U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.182U	0.234U	0.205U	0.262U	0.272U	0.362U	0.360U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.129U	0.127U	0.133U	0.139U	0.250U	0.231U	0.169U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.198U	0.255U	0.223U	0.285U	0.296U	0.394U	0.392U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.187U	0.184U	0.192U	0.200U	0.361U	0.334U	0.245U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.242U	0.356U	0.430U	0.291U	0.542U	0.577U	0.459U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.179U	0.175U	0.227U	0.227U	0.399U	0.333U	0.301U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.169U	0.167U	0.173U	0.181U	0.327U	0.302U	0.221U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.180U	0.175U	0.228U	0.227U	0.400U	0.334U	0.302U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.131U	0.237U	0.262U	0.238U	0.168U	0.409U	0.358U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.173U	0.350U	0.227U	0.304U	0.455U	0.588U	0.500U

Gulfp e 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9214	GPTS5BA9306	GPTS5BA9314	GPTS5BA9314DUP	GPTS5BA9405	GPTS5BA9413
			12/11/96	12/11/96	12/11/96	12/11/96	12/10/96	12/10/96
SW6010	ARSENIC	MGKG	1.000B*	0.380U*	2.100 *		1.000B	0.400U*
SW6010	BARIUM	MGKG	0.810B	9.700	1.100*		11.900	1.800
SW6010	CADMIUM	MGKG	0.050U	0.050U	0.050U		0.040U	0.050U
SW6010	CHROMIUM	MGKG	1.000B*	9.000 *	1.700 *		4.600	9.100 *
SW6010	LEAD	MGKG	1.300 *	2.500 *	1.300 *		3.200	1.200 *
SW6010	SELENIUM	MGKG	0.540B	0.340U	0.410U		0.310U	0.370U
SW6010	SILVER	MGKG	0.240U	0.220U	0.260U		0.200U	0.230U
SW7471	MERCURY	MGKG	0.040U	0.040U	0.050U		0.030U	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	ALDRIN	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	DIELDRIN	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	ENDRIN	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.100U	2.900U	3.400U	3.400U	2.600U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	GAMMA-HEXOCHLOROXYHEXANE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	HEPTACHLOR	UGKG	1.600U	1.500U	1.900	1.800U	1.300U	1.700
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.500U	1.800U	1.800U	1.300U	1.600U
SW8080	METHOXYCHLOR	UGKG	16.000U	15.000U	18.000U	18.000U	13.000U	16.000U
SW8080	PCB 1016	UGKG	41.000U	38.000U	44.000U	44.000U	34.000U	40.000U
SW8080	PCB 1221	UGKG	41.000U	38.000U	44.000U	44.000U	34.000U	40.000U
SW8080	PCB 1232	UGKG	41.000U	38.000U	44.000U	44.000U	34.000U	40.000U
SW8080	PCB 1242	UGKG	41.000U	38.000U	44.000U	44.000U	34.000U	40.000U
SW8080	PCB 1248	UGKG	41.000U	38.000U	44.000U	44.000U	34.000U	40.000U
SW8080	PCB 1254	UGKG	84.000U	77.000U	90.000U	90.000U	69.000U	82.000U
SW8080	PCB 1260	UGKG	84.000U	77.000U	90.000U	90.000U	69.000U	82.000U
SW8080	TOXAPHENE	UGKG	100.000U	95.000U	110.000U	110.000U	86.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	18.000U	22.000U	22.000U	16.000U	20.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	125.000U	115.000U	135.000U	135.000U	103.000U	122.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	78.000U	71.000U	84.000U	84.000U	64.000U	76.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	46.000U	43.000U	50.000U	50.000U	38.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	66.000U	61.000U	72.000U	72.000U	55.000U	65.000U
SW8150	2-METHOXY-3,6-DICHLOROBENZOIC ACID	UGKG	29.000U	26.000U	31.000U	31.000U	24.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	18.000U	16.000U	19.000U	19.000U	14.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1750.000U	1610.000U	1890.000U	1890.000U	1440.000U	1710.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3750.000U	3450.000U	4060.000U	4060.000U	3100.000U	3660.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9214	GPTS5BA9306	GPTS5BA9314	GPTS5BA9314DUP	GPTS5BA9405	GPTS5BA9413
			12/11/96	12/11/96	12/11/96	12/11/96	12/10/96	12/10/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	6250.000U	5750.000U	6760.000U	6760.000U	5160.000U	6100.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	5.000J	14.000U	14.000U	10.000U	12.000U
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	ACETONE	UGKG	19.000	17.000B	32.000	30.000	72.000B	34.000B
SW8240	BENZENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000U	6.000U	2.000J	7.000U	1.000JB	4.000JB
SW8240	ETHYLBENZENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	11.000U	14.000U	14.000U	10.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	6.000U	7.000U	7.000U	5.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	2.000J	6.000U	7.000U	7.000U	5.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	ISOPHORONE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	NITroso DI-N-PROPYLAMINE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	1,3-DICHLOROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9214	GPTS5BA9306	GPTS5BA9314	GPTS5BA9314DUP	GPTS5BA9405	GPTS5BA9413
			12/11/96	12/11/96	12/11/96	12/11/96	12/10/96	12/10/96
SW8270	1,4-DICHLOROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	2,4-DINITROTOLUENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	110.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	2-NITROANILINE	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	2-NITROPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	820.000U	760.000U	890.000U	890.000U	680.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	3-NITROANILINE	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	4-CHLOROANILINE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	4-NITROANILINE	UG/KG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	4-NITROPHENOL	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	CARBAZOLE	UGKG	68.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	FLUORENE	UGKG	200.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	200.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	ANTHRACENE	UGKG	100.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	58.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	PYRENE	UGKG	210.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BENZOIC ACID	UGKG	100.000J	44.000J	2200.000U	2200.000U	42.000J	2000.000U
SW8270	BENZYL ALCOHOL	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	53.000J	130.000J	650.000	120.000J	94.000J	78.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	CHRYSENE	UGKG	56.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	170.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9214	GPTS5BA9306	GPTS5BA9314	GPTS5BA9314DUP	GPTS5BA9405	GPTS5BA9413
			12/11/96	12/11/96	12/11/96	12/11/96	12/10/96	12/10/96
SW8270	NITROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	FLUORANTHENE	UGKG	380.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	HEXACHLOROCYCLOPENTADIENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	410.000U	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	NAPHTHALENE	UGKG	180.000J	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	2000.000U	1800.000U	2200.000U	2200.000U	1600.000U	2000.000U
SW8270	PHENANTHRENE	UGKG	770.000	380.000U	440.000U	440.000U	340.000U	400.000U
SW8270	PHENOL	UGKG	1000.000	1200.000	990.000	1400.000	1700.000	180.000J
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.661U	0.570U	0.717U	0.842U	0.369U	0.707U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.669U	0.312U	0.679U	0.852U	0.313U	0.504U
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.364U	0.195U	0.335U	0.438U	0.209U	0.276U
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.527U	0.505U	0.611U	0.764U	0.226U	0.303U
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.340U	0.316U	0.325U	0.424U	0.111U	0.210U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	1.740	4.470	4.210	4.959X	0.912XB	1.730X
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.607U	0.587U	0.629U	0.945U	0.432U	0.607U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.370U	0.329U	0.353U	0.487U	0.251U	0.412U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.567U	0.653U	0.600U	0.693U	0.387U	0.794U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.419U	0.410U	0.341U	0.472U	0.266U	0.411U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.669U	0.312U	0.679U	0.852U	0.313U	0.504U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.364U	0.196U	0.335U	0.438U	0.209U	0.276U
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.435U	0.234U	0.400U	0.523U	0.250U	0.329U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.818U	0.784U	0.948U	1.187U	0.351U	0.471U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.433U	0.403U	0.414U	0.541U	0.142U	0.268U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.527U	0.505U	0.611U	0.764U	0.226U	0.303U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.340U	0.316U	0.325U	0.424U	0.111U	0.210U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.574U	0.550U	0.665U	0.832U	0.246U	0.330U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.491U	0.457U	0.469U	0.613U	0.160U	0.304U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.607U	0.587U	0.629U	0.945U	0.432U	0.607U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.369U	0.328U	0.352U	0.485U	0.250U	0.411U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.444U	0.413U	0.424U	0.555U	0.145U	0.275U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.370U	0.329U	0.353U	0.487U	0.251U	0.412U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.419U	0.410U	0.341U	0.472U	0.266U	0.411U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.567U	0.653U	0.600U	0.693U	0.387U	0.794U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9413DUP	GPTS5BA9505	GPTS5BA9513
			12/10/96	12/10/96	12/10/96
SW6010	ARSENIC	MGKG		0.360U	0.400U
SW6010	BARIUM	MGKG		3.900	3.000
SW6010	CADMIUM	MGKG		0.040U	0.060B
SW6010	CHROMIUM	MGKG		2.000	2.500
SW6010	LEAD	MGKG		1.200	2.400
SW6010	SELENIUM	MGKG		0.330U	0.720
SW6010	SILVER	MGKG		0.210U	0.230U
SW7471	MERCURY	MGKG		0.170	0.040U
SW8080	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-	UGKG	3.000U	2.700U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHANE	UGKG	3.000U	2.700U	3.000U
SW8080	2,2-BIS(P-CHLOROPHENYL)-1,1-DICHLOROETHENE	UGKG	3.000U	2.700U	3.000U
SW8080	ALDRIN	UGKG	1.600U	1.400U	1.600U
SW8080	ALPHA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.400U	1.600U
SW8080	ALPHA-CHLORDANE	UGKG	1.600U	1.400U	1.600U
SW8080	ALPHA-ENDOSULFAN	UGKG	1.600U	1.400U	1.600U
SW8080	BETA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.400U	1.600U
SW8080	BETA-ENDOSULFAN	UGKG	3.000U	2.700U	3.000U
SW8080	DELTA-BENZENEHEXACHLORIDE	UGKG	1.600U	1.400U	1.600U
SW8080	DIELDRIN	UGKG	3.000U	2.700U	3.000U
SW8080	ENDOSULFAN SULFATE	UGKG	3.000U	2.700U	3.000U
SW8080	ENDRIN	UGKG	3.000U	2.700U	3.000U
SW8080	ENDRIN ALDEHYDE	UGKG	3.000U	2.700U	3.000U
SW8080	ENDRIN KETONE	UGKG	3.000U	2.700U	3.000U
SW8080	GAMMA-CHLORDANE	UGKG	1.600U	1.400U	1.600U
SW8080	GAMMA-HEXOCHLOROCYHEXANE	UGKG	1.600U	1.400U	1.600U
SW8080	HEPTACHLOR	UGKG	1.800	1.400U	1.600U
SW8080	HEPTACHLOR EPOXIDE	UGKG	1.600U	1.400U	1.600U
SW8080	METHOXYCHLOR	UGKG	16.000U	14.000U	16.000U
SW8080	PCB 1016	UGKG	40.000U	36.000U	40.000U
SW8080	PCB 1221	UGKG	40.000U	36.000U	40.000U
SW8080	PCB 1232	UGKG	40.000U	36.000U	40.000U
SW8080	PCB 1242	UGKG	40.000U	36.000U	40.000U
SW8080	PCB 1248	UGKG	40.000U	36.000U	40.000U
SW8080	PCB 1254	UGKG	82.000U	74.000U	81.000U
SW8080	PCB 1260	UGKG	82.000U	74.000U	81.000U
SW8080	TOXAPHENE	UGKG	100.000U	91.000U	100.000U
SW8150	(2,4,5-TRICHLOROPHENOXY)ACETIC ACID	UGKG	20.000U	18.000U	19.000U
SW8150	4-(2,4-DICHLOROPHENOXY)BUTYRIC ACID	UGKG	122.000U	110.000U	120.000U
SW8150	2,4-DICHLOROPHENOXYACETIC ACID	UGKG	76.000U	68.000U	75.000U
SW8150	2,4-DINITRO-6-SEC-BUTYLPHENOL	UGKG	45.000U	41.000U	45.000U
SW8150	2-(2,4-DICHLOROPHENOXY)PROPIONIC ACID	UGKG	65.000U	58.000U	64.000U
SW8150	2-METHOXY-3,6-DICHLOROENZOIC ACID	UGKG	28.000U	25.000U	28.000U
SW8150	2-(2,4,5-TRICHLOROPHENOXY)PROPIONIC ACID	UGKG	17.000U	15.000U	17.000U
SW8150	ALPHA,ALPHA-DICHLOROPROPIONIC ACID	UGKG	1710.000U	1540.000U	1690.000U
SW8150	(4-CHLORO-2-METHYLPHENOXY)ACETIC ACID	UGKG	3660.000U	3300.000U	3610.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9413DUP	GPTS5BA9505	GPTS5BA9513
			12/10/96	12/10/96	12/10/96
SW8150	(±)-2-(4-CHLORO-2-METHYLPHENOXY)PROPANOIC	UGKG	6100.000U	5490.000U	6020.000U
SW8240	CIS-1,3-DICHLOROPROPENE	UGKG	6.000U	5.000U	6.000U
SW8240	TRANS-1,3-DICHLOROPROPENE	UGKG	6.000U	5.000U	6.000U
SW8240	*1,2-DICHLOROETHYLENES (CIS AND TRANS	UGKG	6.000U	5.000U	6.000U
SW8240	*XYLENES	UGKG	6.000U	5.000U	6.000U
SW8240	1,1,1-TRICHLOROETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	1,1,2,2-TETRACHLOROETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	1,1,2-TRICHLOROETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	1,1-DICHLOROETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	1,1-DICHLOROETHENE	UGKG	6.000U	5.000U	6.000U
SW8240	1,2-DICHLOROETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	1,2-DICHLOROPROPANE	UGKG	6.000U	5.000U	6.000U
SW8240	2-BUTANONE	UGKG	12.000U	10.000J	4.000J
SW8240	2-CHLOROETHYL VINYL ETHER	UGKG	12.000U	11.000U	12.000U
SW8240	2-HEXANONE	UGKG	12.000U	11.000U	12.000U
SW8240	VINYL ACETATE	UGKG	12.000U	11.000U	12.000U
SW8240	ACETONE	UGKG	37.000	67.000B	34.000B
SW8240	BENZENE	UGKG	6.000U	5.000U	6.000U
SW8240	BROMODICHLOROMETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	BROMOFORM	UGKG	6.000U	5.000U	6.000U
SW8240	BROMOMETHANE	UGKG	12.000U	11.000U	12.000U
SW8240	CARBON DISULFIDE	UGKG	6.000U	5.000U	6.000U
SW8240	CARBON TETRACHLORIDE	UGKG	6.000U	5.000U	6.000U
SW8240	CHLOROBENZENE	UGKG	6.000U	5.000U	6.000U
SW8240	CHLOROETHANE	UGKG	12.000U	11.000U	12.000U
SW8240	VINYL CHLORIDE	UGKG	12.000U	11.000U	12.000U
SW8240	CHLOROFORM	UGKG	6.000U	5.000U	6.000U
SW8240	CHLOROMETHANE	UGKG	12.000U	11.000U	12.000U
SW8240	DIBROMOCHLOROMETHANE	UGKG	6.000U	5.000U	6.000U
SW8240	METHYLENE CHLORIDE	UGKG	6.000J	3.000JB	2.000JB
SW8240	ETHYLBENZENE	UGKG	6.000U	5.000U	6.000U
SW8240	METHYL ISOBUTYL KETONE	UGKG	12.000U	11.000U	12.000U
SW8240	STYRENE	UGKG	6.000U	5.000U	6.000U
SW8240	TETRACHLOROETHYLENE	UGKG	6.000U	5.000U	6.000U
SW8240	TOLUENE	UGKG	6.000U	5.000U	6.000U
SW8240	TRICHLOROETHYLENE	UGKG	6.000U	5.000U	6.000U
SW8270	4-BROMOPHENYLPHENYL ETHER	UGKG	400.000U	360.000U	400.000U
SW8270	4-CHLORO-3-CRESOL	UGKG	400.000U	360.000U	400.000U
SW8270	4-CHLOROPHENYLPHENYL ETHER	UGKG	400.000U	360.000U	400.000U
SW8270	ISOPHORONE	UGKG	400.000U	360.000U	400.000U
SW8270	NITROSO DI-N-PROPYLAMINE	UGKG	400.000U	360.000U	400.000U
SW8270	1,2,4-TRICHLOROBENZENE	UGKG	400.000U	360.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	360.000U	400.000U
SW8270	DIBENZ[AH]ANTHRACENE	UGKG	400.000U	360.000U	400.000U
SW8270	1,2-DICHLOROBENZENE	UGKG	400.000U	360.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS5BA9413DUP	GPTS5BA9505	GPTS5BA9513
			12/10/96	12/10/96	12/10/96
SW8270	1,4-DICHLOROBENZENE	UGKG	400.000U	360.000U	400.000U
SW8270	2,4,5-TRICHLOROPHENOL	UGKG	2000.000U	1800.000U	1900.000U
SW8270	2,4,6-TRICHLOROPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	2,4-DICHLOROPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	2,4-DIMETHYLPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	2,4-DINITROPHENOL	UGKG	2000.000U	1800.000U	1900.000U
SW8270	2,4-DINITROTOLUENE	UGKG	400.000U	360.000U	400.000U
SW8270	2,6-DINITROTOLUENE	UGKG	400.000U	360.000U	400.000U
SW8270	2-CHLORONAPHTHALENE	UGKG	400.000U	360.000U	400.000U
SW8270	2-CHLOROPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	4,6-DINITRO-2-CRESOL	UGKG	2000.000U	1800.000U	1900.000U
SW8270	2-METHYLNAPHTHALENE	UGKG	400.000U	360.000U	400.000U
SW8270	2-METHYLPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	2-NITROANILINE	UGKG	2000.000U	1800.000U	1900.000U
SW8270	2-NITROPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	3,3'-DICHLOROBENZIDINE	UGKG	800.000U	720.000U	800.000U
SW8270	BENZO[B]FLUORANTHENE	UGKG	400.000U	360.000U	400.000U
SW8270	3-NITROANILINE	UGKG	2000.000U	1800.000U	1900.000U
SW8270	4-CHLOROANILINE	UGKG	400.000U	360.000U	400.000U
SW8270	4-METHYLPHENOL	UGKG	400.000U	360.000U	400.000U
SW8270	4-NITROANILINE	UG/KG	2000.000U	1800.000U	1900.000U
SW8270	4-NITROPHENOL	UGKG	2000.000U	1800.000U	1900.000U
SW8270	CARBAZOLE	UGKG	400.000U	360.000U	400.000U
SW8270	FLUORENE	UGKG	400.000U	360.000U	400.000U
SW8270	ACENAPHTHENE	UGKG	400.000U	360.000U	400.000U
SW8270	ACENAPHTHYLENE	UGKG	400.000U	360.000U	400.000U
SW8270	ANTHRACENE	UGKG	400.000U	360.000U	400.000U
SW8270	BENZO[A]ANTHRACENE	UGKG	400.000U	360.000U	400.000U
SW8270	BENZO[A]PYRENE	UGKG	400.000U	360.000U	400.000U
SW8270	PYRENE	UGKG	400.000U	360.000U	400.000U
SW8270	BENZO[GHI]PERYLENE	UGKG	400.000U	360.000U	400.000U
SW8270	BENZO[K]FLUORANTHENE	UGKG	400.000U	360.000U	400.000U
SW8270	BENZOIC ACID	UGKG	2000.000U	1800.000U	1900.000U
SW8270	BENZYL ALCOHOL	UGKG	400.000U	360.000U	400.000U
SW8270	BIS(2-CHLOROETHOXY) METHANE	UGKG	400.000U	360.000U	400.000U
SW8270	BIS(2-CHLOROETHYL) ETHER	UGKG	400.000U	360.000U	400.000U
SW8270	BIS(2-CHLOROISOPROPYL) ETHER	UGKG	400.000U	360.000U	400.000U
SW8270	BIS(2-ETHYLHEXYL) PHTHALATE	UGKG	88.000J	38.000J	54.000J
SW8270	BUTYLBENZYL PHTHALATE	UGKG	400.000U	360.000U	400.000U
SW8270	CHRYSENE	UGKG	400.000U	360.000U	400.000U
SW8270	DI-N-BUTYL PHTHALATE	UGKG	400.000U	360.000U	400.000U
SW8270	DI-N-OCTYL PHTHALATE	UGKG	400.000U	360.000U	400.000U
SW8270	DIBENZOFURAN	UGKG	400.000U	360.000U	400.000U
SW8270	DIETHYL PHTHALATE	UGKG	400.000U	360.000U	400.000U
SW8270	DIMETHYL PHTHALATE	UGKG	400.000U	360.000U	400.000U

Gulfport Site 5
Analytical Sample Results

Method	Compound	Units	GPTS6BA9413DUP	GPTS6BA9505	GPTS6BA9513
			12/10/96	12/10/96	12/10/96
SW8270	NITROBENZENE	UGKG	400.000U	360.000U	400.000U
SW8270	FLUORANTHENE	UGKG	400.000U	360.000U	400.000U
SW8270	HEXACHLOROBENZENE	UGKG	400.000U	360.000U	400.000U
SW8270	HEXACHLOROBUTADIENE	UGKG	400.000U	360.000U	400.000U
SW8270	HEXACHLOROOCYCLOPENTADIENE	UGKG	400.000U	360.000U	400.000U
SW8270	HEXACHLOROETHANE	UGKG	400.000U	360.000U	400.000U
SW8270	INDENO[1,2,3-C,D]PYRENE	UGKG	400.000U	360.000U	400.000U
SW8270	N-NITROSODIPHENYLAMINE	UGKG	400.000U	360.000U	400.000U
SW8270	NAPHTHALENE	UGKG	400.000U	360.000U	400.000U
SW8270	PENTACHLOROPHENOL	UGKG	2000.000U	1800.000U	1900.000U
SW8270	PHENANTHRENE	UGKG	400.000U	360.000U	400.000U
SW8270	PHENOL	UGKG	1300.000	520.000	450.000
SW8290	*OCTACHLORODIBENZOFURAN, NON-SPECIFIC	NGKG	0.339U	0.420U	0.163U
SW8290	*TOTAL HEPTACHLORODIBENZO-P-DIOXINS	NGKG	0.543U	0.311U	0.357
SW8290	*TOTAL HEPTACHLORODIBENZOFURANS	NGKG	0.371U	0.258U	0.222
SW8290	*TOTAL HEXACHLORODIBENZO-P-DIOXINS	NGKG	0.942	0.818	0.520
SW8290	*TOTAL HEXACHLORODIBENZOFURANS	NGKG	0.224U	0.088U	0.102U
SW8290	*TOTAL OCTOCHLORODIBENZO-P-DIOXINS	NGKG	1.930	8.460B	2.470B
SW8290	*TOTAL PENTACHLORODIBENZO-P-DIOXINS	NGKG	0.385U	0.327U	0.184U
SW8290	*TOTAL PENTACHLORODIBENZOFURANS	NGKG	0.253U	0.161U	0.137U
SW8290	*TOTAL TETRACHLORODIBENZO-P-DIOXINS	NGKG	0.552U	0.230U	0.125U
SW8290	*TOTAL TETRACHLORODIBENZOFURANS	NGKG	0.363U	0.122U	0.090U
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	NGKG	0.543U	1.150X	0.357
SW8290	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	NGKG	0.371U	0.258U	0.222
SW8290	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	NGKG	0.443U	0.308U	0.180U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.647U	0.224U	0.242U
SW8290	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.286U	0.112U	0.130U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.417U	0.144U	0.156U
SW8290	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.224U	0.088U	0.102U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	NGKG	0.454U	0.818	0.170U
SW8290	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	NGKG	0.324U	0.127U	0.148U
SW8290	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	NGKG	0.385U	0.327U	0.184U
SW8290	1,2,3,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.252U	0.160U	0.136U
SW8290	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	NGKG	0.293U	0.114U	0.133U
SW8290	2,3,4,7,8-PENTACHLORODIBENZOFURAN	NGKG	0.253U	0.161U	0.137U
SW8290	2,3,7,8-TETRACHLORODIBENZOFURAN	NGKG	0.363U	0.122U	0.090U
SW8290	2,3,7,8-TETRACHLORODIBENZO[B,E][1,4]DIOXIN	NGKG	0.552U	0.230U	0.125U

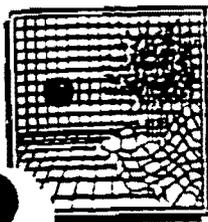


Southwest Laboratory of Oklahoma, Inc.

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ORGANICS QUALIFIER FLAGS

D	Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to: $\frac{330 \text{ U}}{D} \times df \text{ where } D = \frac{100 - \% \text{ moisture}}{100}$ and $df = \text{dilution factor}$ at 24% moisture, $D = \frac{100-24}{100} = 0.76$ $\frac{330 \text{ U}}{76} \times 10 = 4300$ U rounded to the appropriate number of significant figures
J	Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identify compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 µg/Kg and a sample quantitation limit of 430 µg/Kg, report the concentration as 300J on Form I.
N	Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
P	This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides > 10 µg/l in the final extract shall be confirmed by GC/MS.
B	This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TIC compound.
E	This flag identifies compounds whose concentrations exceed the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and reanalyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.
A	This flag indicates that a TIC is a suspected alcohol-contamination product.
X	Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such descriptions attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "YX" flag might combine the "A", "E", "P", and "D" flags for some sample.



SOUTHWEST LABORATORY OF OKLAHOMA, INC.

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INORGANICS CLP QUALIFIER FLAGS

B	The reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL), if the analyte was analyzed for but not detected, a "U" must be entered.
E	The reported value is estimated because of the presence of interference. An explanatory note must be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I - IN (if it is an isolated problem).
M	Duplicate injection precision not met.
N	Spike sample recovery not within control limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance. (See Exhibit E.)
*	Duplicate analysis not within control limits.
+ -	Correlation coefficient for the MSA is less than 0.995.

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METHODOLOGY

SM = Standard Methods, 17th Edition, 1989
EPA = #EPA600/4-79-020, March 1983
SW = EPA Methodology, "#SW846", 3rd Edition,
July, 1992

GENERAL QUALIFIER FLAGS

B - Analyte is detected in blank as well as sample.
J - Estimated value: concentration is below limit of
quantitation
T - Trace Amount
U - Not detected above quantitation limit
> - Concentration greater than value reported
E - Compound exceeds calibration range
D - Sample dilution run or surrogates diluted out
sample run at secondary dilution
I - Not quantifiable due to matrix interference
* - Surrogate outside of QC limits on both original
and re-analysis

TEST SPECIFIC FOOTNOTES

TPH 8015

- 1 - Analysis shows miscellaneous peaks which cannot be identified as any specific pattern. Response factor for nearest eluting hydrocarbon standard was used to calculate concentration. Numbers indicate the approximate carbon chain length.
- 2 - Pattern is similar to, but not identical to standard.
- 3 - May be a weathered gasoline.

APPENDIX IX SEMIVOLATILES

- 1 - Detected as Diphenylamine
- 2 - Coelute on GC Column

TCLP SEMIVOLATILES

- 1 - 2-Methyl Phenol
- 2 - Compounds Co-elute (3&4-Methylphenol)
- 3 - Combination of O, M, & P Cresols

Gulfport Site 1
Calculated 2,3,7,8-TCDD Toxicity Equivalency Factors Summary

Field ID	Sample Date	Units of Measure	Total TEF
GPTS1BA1004	14-Dec-96	NGKG	0.82
GPTS1BA1011	14-Dec-96	NGKG	0.78
GPTS1BA1102	12-Dec-96	NGKG	0.60
GPTS1BA1109	12-Dec-96	NGKG	0.59
GPTS1BA1202	13-Dec-96	NGKG	0.95
GPTS1BA1209	13-Dec-96	NGKG	0.41
GPTS1BA1302	13-Dec-96	NGKG	0.52
GPTS1BA1310	13-Dec-96	NGKG	0.35
GPTS1BA1402	13-Dec-96	NGKG	0.91
GPTS1BA1410	13-Dec-96	NGKG	0.61
GPTS1BA1502	12-Dec-96	NGKG	0.40
GPTS1BA1509	12-Dec-96	NGKG	0.50
GPTS1BA1602	13-Dec-96	NGKG	0.75
GPTS1BA1609	13-Dec-96	NGKG	0.71
GPTS1BA1703	13-Dec-96	NGKG	1.01
GPTS1BA1710	13-Dec-96	NGKG	1.74
GPTS1BA1804	13-Dec-96	NGKG	0.62
GPTS1BA1811	13-Dec-96	NGKG	0.45
GPTS1BA1904	14-Dec-96	NGKG	0.96
GPTS1BA1911	14-Dec-96	NGKG	0.51
GPTS1BA2103	16-Dec-96	NGKG	0.53
GPTS1BA2110	16-Dec-96	NGKG	0.46
GPTS1BA2203	16-Dec-96	NGKG	0.50
GPTS1BA2210	16-Dec-96	NGKG	0.45
GPTS1BA2303	16-Dec-96	NGKG	0.51
GPTS1BA2310	16-Dec-96	NGKG	0.82
GPTS1BA2403	16-Dec-96	NGKG	0.78
GPTS1BA2409	16-Dec-96	NGKG	0.91
GPTS1BA2502	16-Dec-96	NGKG	0.95
GPTS1BA2509	16-Dec-96	NGKG	0.58
GPTS1BA3103	16-Dec-96	NGKG	0.45
GPTS1BA3110	16-Dec-96	NGKG	0.47
GPTS1BA3203	16-Dec-96	NGKG	0.68
GPTS1BA3211	16-Dec-96	NGKG	0.54
GPTS1BA3303	15-Dec-96	NGKG	0.40
GPTS1BA3310	15-Dec-96	NGKG	0.36
GPTS1BA3403	16-Dec-96	NGKG	0.50
GPTS1BA3410	16-Dec-96	NGKG	0.72
GPTS1BA3503	16-Dec-96	NGKG	0.63
GPTS1BA3510	16-Dec-96	NGKG	0.44
GPTS1BA3603	14-Dec-96	NGKG	0.58
GPTS1BA3610	14-Dec-96	NGKG	0.55
GPTS1BA3702	14-Dec-96	NGKG	0.49
GPTS1BA3710	14-Dec-96	NGKG	0.65
GPTS1BA3802	14-Dec-96	NGKG	0.96
GPTS1BA3809	14-Dec-96	NGKG	0.65
GPTS1BA3902	14-Dec-96	NGKG	0.90
GPTS1BA3909	14-Dec-96	NGKG	0.63
GPTS1BA4103	07-Dec-96	NGKG	15.01
GPTS1BA4203	08-Dec-96	NGKG	0.33
GPTS1BA4210	08-Dec-96	NGKG	0.42
GPTS1BA4303	08-Dec-96	NGKG	0.54
GPTS1BA4313	08-Dec-96	NGKG	0.39
GPTS1BA4403	08-Dec-96	NGKG	0.30
GPTS1BA4413	08-Dec-96	NGKG	0.20
GPTS1BA5102	08-Dec-96	NGKG	0.41
GPTS1BA5109	07-Dec-96	NGKG	0.24
GPTS1BA5205	12-Dec-96	NGKG	0.88
GPTS1BB1103	08-Dec-96	NGKG	0.49

Notes:

Calculations of Total TEF were based upon the I-TEF/89 Toxicity Equivalency Factors for individual congeners. In cases where there were no hits, the reporting limit was used to calculate the Total TEF.

Gulfport Site 1
Calculated 2,3,7,8-TCDD Toxicity Equivalency Factors Summary

Field ID	Sample Date	Units of Measure	Total TEF
GPTS1BB1110	08-Dec-96	NGKG	0.26
GPTS1BB1205	08-Dec-96	NGKG	0.57
GPTS1BB1303	08-Dec-96	NGKG	0.33
GPTS1BB1310	08-Dec-96	NGKG	0.32
GPTS1BB4109	07-Dec-96	NGKG	0.31

Notes:

Calculations of Total TEF were based upon the I-TEF/89 Toxicity Equivalency Factors for individual congeners. In cases where there were no hits, the reporting limit was used to calculate the Total TEF.

Gulfport Site 5
Calculated 2,3,7,8-TCDD Toxicity Equivalency Factors Summary

Field ID	Sample Date	Units of Measure	Total TEF
GPTS5BA10106	09-Dec-96	NGKG	0.36
GPTS5BA10113	09-Dec-96	NGKG	0.24
GPTS5BA10206	09-Dec-96	NGKG	0.36
GPTS5BA10213	09-Dec-96	NGKG	0.40
GPTS5bA1106	06-Dec-96	NGKG	0.44
GPTS5bA1113	06-Dec-96	NGKG	0.44
GPTS5bA1206	06-Dec-96	NGKG	1.30
GPTS5bA1212	06-Dec-96	NGKG	0.61
GPTS5bA1306	06-Dec-96	NGKG	0.50
GPTS5bA1313	06-Dec-96	NGKG	0.54
GPTS5bA2106	06-Dec-96	NGKG	0.41
GPTS5bA2113	06-Dec-96	NGKG	0.42
GPTS5bA2207	06-Dec-96	NGKG	0.49
GPTS5bA2214	06-Dec-96	NGKG	0.36
GPTS5bA2307	06-Dec-96	NGKG	0.47
GPTS5bA2314	06-Dec-96	NGKG	0.72
GPTS5BA3105	05-Dec-96	UGKG	0.31
GPTS5BA3112	05-Dec-96	UGKG	0.56
GPTS5BA3206	05-Dec-96	UGKG	0.67
GPTS5BA3213	05-Dec-96	UGKG	0.31
GPTS5BA3306	05-Dec-96	UGKG	0.46
GPTS5BA3311	05-Dec-96	UGKG	0.36
GPTS5bA5108	04-Dec-96	UGKG	0.58
GPTS5bA5115	04-Dec-96	UGKG	0.41
GPTS5bA5206	04-Dec-96	UGKG	0.80
GPTS5bA5213	04-Dec-96	UGKG	0.37
GPTS5BA5306	05-Dec-96	UGKG	0.72
GPTS5BA5313	05-Dec-96	UGKG	0.49
GPTS5BA5406	05-Dec-96	UGKG	0.44
GPTS5BA5413	05-Dec-96	UGKG	0.53
GPTS5BA5505	05-Dec-96	UGKG	0.43
GPTS5BA5513	05-Dec-96	UGKG	0.49
GPTS5BA6105	10-Dec-96	NGKG	0.28
GPTS5BA6112	10-Dec-96	NGKG	0.30
GPTS5BA6205	10-Dec-96	NGKG	10.49
GPTS5BA6213	10-Dec-96	NGKG	0.43
GPTS5BA6305	10-Dec-96	NGKG	0.46
GPTS5BA6312	10-Dec-96	NGKG	0.34
GPTS5BA6405	10-Dec-96	NGKG	0.48
GPTS5BA6412	10-Dec-96	NGKG	0.50
GPTS5BA6505	09-Dec-96	NGKG	0.29
GPTS5BA6512	09-Dec-96	NGKG	0.47
GPTS5BA6606	09-Dec-96	NGKG	0.38
GPTS5BA6613	09-Dec-96	NGKG	0.45
GPTS5BA9106	11-Dec-96	NGKG	0.86
GPTS5BA9114	11-Dec-96	NGKG	0.82
GPTS5BA9206	11-Dec-96	NGKG	0.71
GPTS5BA9214	11-Dec-96	NGKG	0.81
GPTS5BA9306	11-Dec-96	NGKG	0.88
GPTS5BA9314	11-Dec-96	NGKG	0.83
GPTS5BA9405	10-Dec-96	NGKG	0.55
GPTS5BA9413	10-Dec-96	NGKG	1.06
GPTS5BA9505	10-Dec-96	NGKG	0.34
GPTS5BA9513	10-Dec-96	NGKG	0.21

Notes:

Calculations of Total TEF were based upon the I-TEF/89 Toxicity Equivalency Factors for individual congeners. In cases where there were no hits, the reporting limit was used to calculate the Total TEF.