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FINAL SITE ASSESSMENT INVESTIGATION AND CHARACTERIZATION OF FUEL PIPELINE AREA NAS FORT WORTH TX

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Site Assessment Investigation and Characterization of the Fuel Pipeline Area

Naval Air Station (NAS) Fort Worth
Joint Reserve Base
Carswell Field, Texas

Department of the Air Force
Headquarters (HQ) Human Systems Center (HSC) PKVCC
Brooks Air Force Base, Texas

Contract No. F41624-95-D-8002
Delivery Order No. 0003
June 1998

FINAL REPORT

SITE ASSESSMENT INVESTIGATION AND CHARACTERIZATION OF THE FUEL PIPELINE AREA

NAVAL AIR STATION (NAS) FORT WORTH
JOINT RESERVE BASE
CARSWELL FIELD, TEXAS

Contract No. F41624-95-D-8002
Delivery Order 0003

June 1998

Prepared for:

Department of the Air Force
Headquarters (HQ) Human Systems Center (HSC) PKVCC
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This technical report provides a summary of investigation activities which included a Site Assessment, Site Investigation, and Site Characterization of the fuel pipeline areas at Naval Air Station Fort Worth, Joint Reserve Base, Carswell Field, Texas. Based on the results of the investigation and characterization, it was recommended that the site be managed under Category I: No Further Action.

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NOTICE

This report has been prepared for the United States Air Force by The Environmental Company, Inc. (TEC) for the purpose of aiding in the implementation of a final remedial action plan under the Air Force Installation Restoration Program (IRP).

Although the area of study was investigated in accordance with IRP guidance, the area has not been identified as an IRP site. NAS Fort Worth (formerly Carswell Air Force Base) is undergoing property disposal/reuse pursuant to the Defense Base Closure and Realignment Act of 1990 and Round II of the Base Closure Commission deliberations. The area of study is being considered for property disposal or reuse and the Air Force Base Conversion Agency (AFBCA) desires to investigate the area to confirm or deny the presence of contamination.

As the report relates to actual or possible releases of potentially hazardous substances, its release prior to a United States Air Force final decision on remedial action may be in the public's interest. The limited objectives of this report and the ongoing nature of the IRP, along with the evolving knowledge of site conditions and chemical effects on the environment and health, must be considered when evaluating this report because subsequent facts may become known that may make this report premature or inaccurate.

Acceptance of this report in performance of the contract under which it is prepared does not mean that the Air Force adopts the conclusions, recommendations, or other views expressed herein, which are those of the contractor only and do not necessarily reflect the official position of the United States Air Force.

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PREFACE

A site assessment (SA), site investigation (SI), and a site characterization (SC) of the fuel pipelines at Naval Air Station (NAS) Fort Worth, Joint Reserve Base, Carswell Field, Texas (identified as Project No. 95-8021) was conducted to determine the presence or absence of contamination and to define the nature and extent of such contamination if present.

This report was prepared by The Environmental Company, Inc. (TEC) under contract No. F41624-95-D-8002, Delivery Order 0003. This technical report has been prepared for Project No. 95-8021.

This report provides a summary of the SA, SI, and SC activities, including a risk evaluation and conclusions of the investigation.

This report was written under the direction of Mr. Bob Duffner, TEC Project Manager. The Contracting Officer's Representative for this project is Mr. Charles Rice, Air Force Center for Environmental Excellence (AFCEE), Environmental Restoration Branch (ERB), Brooks Air Force Base (AFB), Texas.

Approved: Bob Duffner Date: June 22, 1998

Bob Duffner
The Environmental Company, Inc.
TEC Project Manager

Approved: Jack E. Wilson Date: 19 June 1998

Jack E. Wilson, P.E.
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LIST OF ACRONYMS AND ABBREVIATIONS

AA	Atomic Absorption
ACC	Air Combat Command
AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
AL	Action Level
AMSL	Above Mean Sea Level
ARAR	Applicable or Relevant and Appropriate Requirement
ASTM	American Society of Testing and Materials
bgs	below ground surface
BHB	Baird Hampton & Brown, Inc.
BHC	Benzene Hexachloride
BKGRD	Background
BSS	Base Service Station (LPST Site No. 104524)
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
°C	degrees Celsius
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm	centimeter
COE	Corps of Engineers
COPC	Chemical of Potential Concern
COR	Contracting Officer's Representative
CPG	Certified Professional Geologist
DBCRA	Defense Base Closure Realignment Act
DEQPPM	Defense Environmental Quality Program Policy Memorandum

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

DOD	Department of Defense
DOT	Department of Transportation
DQO	Data Quality Objective
DTIC	Defense Technical Information Center
DWEL	Drinking Water Equivalent Level
ECD	Electron Capture Detector
EPA	U.S. Environmental Protection Agency
ERB	Environmental Restoration Branch
°F	degrees Fahrenheit
Fam Camp	Family Camping
FID	Flame Ionization Detector
FOD	Frequency of Detect
FSP	Field Sampling Plan
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectroscopy
GLP	Good Laboratory Practices
GMI	Geo-Marine, Inc.
GORE	W.L. GORE and Associates Screening Module Laboratory
GS	Gore Sorber
GWHBC	Groundwater Health-Based Concentration
GWP	Groundwater Protection
HQ	Headquarters
HSA	Hollow-Stem Auger
ICP	Inductively Coupled Plasma

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

IRP	Installation Restoration Program
IRPIMS	Installation Restoration Program Information Management System
JP4	Jet Fuel 4
JP8	Jet Fuel 8
Kg	Kilogram
L	liter
LCS	Laboratory Control Samples
LSTP	Leaking Storage Tank Program
MCL	Maximum Concentration Level
MDL	Method Detection Limit
mg	milligram
MS	Matrix Spike
MSC	Medium-Specific Concentration
MSD	Matrix Spike Duplicate
MSSL	Media-Specific Screening Levels
NAS	Naval Air Station
NCP	National Contingency Plan
ND	Not Detected
NOAA	National Oceanic and Atmospheric Administration
PAH	Polycyclic Aromatic Hydrocarbons
PCE	Tetrachloroethene
P.E.	Professional Engineer
PID	Photoionization Detector
POL	Petroleum, Oils and Lubricants

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

ppm	parts per million
PQL	Practical Quantitation Limit
PSTD	Petroleum Storage Tank Division
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
QC	Quality Control
RBCA	Risk-Based Corrective Action
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
RRSN	Risk Reduction Standard Number
RV	Recreational Vehicle
SA/SI	Site Assessment/Site Investigation
SAC	Strategic Air Command
SAL	Screening Action Level
SARA	Superfund Amendments Reauthorization Act
SB	Soil Boring
SC	Site Characterization
SOP	Standard Operating Procedures
SOW	Statement of Work
spp	species
SVOC	Semivolatile Organic Compound
TAC	Texas Administrative Code
TCE	Trichloroethylene

LIST OF ACRONYMS AND ABBREVIATIONS (continued)

TDS	Total Dissolved Solids
TEC	The Environmental Company, Inc.
TNRCC	Texas Natural Resource Conservation Commission
TPH	Total Petroleum Hydrocarbons
µg	microgram
USAF	United States Air Force
UST	Underground Storage Tank
UTL	Upper Tolerance Limit
$UTL_{95,95}$	UTL with 95% confidence and 95% coverage
VOC	Volatile Organic Compound
WP	Work Plan
YMCA	Young Men's Christian Association

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EXECUTIVE SUMMARY

A three-phase, investigation was conducted at the Naval Air Station (NAS) Fort Worth, Joint Reserve Base, Carswell Field, Texas. The investigation focused on the Recreational Vehicle Family Camping (RV Fam Camp) and areas adjacent to two privately owned fuel distribution pipelines that traverse U.S. Government property associated with the former Carswell AFB. Properties associated with the former base are undergoing disposal/reuse pursuant to the Defense Base Closure and Realignment Act of 1990 and Round II of the Base Closure Commission deliberations. The investigation activities and results associated with the RV Fam Camp area are presented in a separate report (TEC 1998). This report focuses on the site characterization of areas adjacent to the fuel pipelines.

During the initial site assessment phase, background information including historic observations and investigation reports for adjacent and/or associated sites was collected. Results of this assessment were combined with those from a soil gas survey conducted during the site investigation phase to identify potential areas of concern along the pipelines. The subsurface soils in four areas of concern were characterized during the final phase of the investigation. These included the area surrounding a pipeline valve box, a section of pipeline in the vicinity of Farmers Branch Creek, pipeline areas adjacent to the Unnamed Stream, and pipeline areas along the West Fork of the Trinity River west of Jennings Drive.

A total of 12 boreholes were advanced in the pipeline investigation areas. Twenty-nine subsurface samples collected from the boreholes were analyzed for selected combinations of volatile organics, semivolatile organics, total petroleum hydrocarbons, and inorganics. In addition to these definitive-quality laboratory analyses, screening-level hydrocarbon fingerprinting was performed on selected samples.

Petroleum-related contamination associated with the pipelines was identified at the Valve Box area located north of Highway 183. The contaminant levels identified were below screening action levels and therefore are not expected to pose a risk to human health or the environment. No contaminants were identified at the Farmers Branch Creek investigation area. Petroleum-related contamination was identified at the Unnamed Stream area and along the West Fork of the Trinity River. However, the location of the identified contamination relative to the pipelines and other sources in conjunction with hydrocarbon fingerprinting results, indicate that the contamination is not attributable to the pipelines. Separate investigations are currently addressing these source areas and the associated contamination.

Based on the results of this investigation, it is recommended that the areas adjacent to the pipelines between Highway 183 and the base boundary (including the Valve Box area), in the Unnamed Stream area and along the West Fork of the Trinity River directly west of the Jennings Bridge, be managed under Category 1 with respect to the pipeline. The Air Force Center for Environmental Excellence defines Category 1 management as no further action because no significant impact to human health or the environment exists. The Risk Evaluation demonstrates that no significant current or future impact to human health or the environment exists with respect to the pipeline.

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TAB

1

1.0 INTRODUCTION

This Site Characterization (SC) report has been prepared by The Environmental Company, Inc. (TEC) under U.S. Air Force Center for Environmental Excellence (AFCEE) Contract No. F41624-95-D-8002, Delivery Order 0003, project number 95-8021. The SC report summarizes the results of an investigative effort conducted at the Naval Air Station (NAS) Fort Worth, Joint Reserve Base, Carswell Field, Texas. Areas investigated during this project include the following:

- Fuel distribution lines between Highway 183 and Ascol Drive, in the vicinity of the Unnamed Stream and along the West Fork of the Trinity River west of Jennings Drive; and
- Recreational Vehicle (RV) Family Camping area (Fam Camp).

The project consisted of a three-phase data collection effort that included an initial Site Assessment (SA), followed by a Site Investigation (SI) and an SC. This SC report provides a summary of the activities that took place in each of these phases and their results for the fuel pipeline areas. The investigation activities and results associated with the RV Fam Camp area are presented in a separate report (TEC 1998).

All efforts were completed in accordance with guidelines provided in the Headquarters (HQ) AFCEE *Handbook for the Installation Restoration Program (IRP) Remedial Investigations and Feasibility Studies (RI/FS)*, dated September 1993 (hereafter referred to as the *Handbook*). Although the fuel distribution pipelines were investigated in accordance with IRP guidance, they have not been identified as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site. NAS Fort Worth (formerly Carswell Air Force Base) is undergoing property disposal/reuse pursuant to the Defense Base Closure and Realignment Act (DBCRA) of 1990 and Round II of the Base Closure Commission deliberations. The study areas are being considered for property disposal or reuse.

1.1 THE AIR FORCE INSTALLATION RESTORATION PROGRAM

The objective of the U.S. Air Force IRP is to assess past hazardous waste disposal and spill sites at U.S. Air Force (USAF) installations and to develop remedial actions for those sites. The IRP is the basis for assessments and response actions consistent with the National Contingency Plan (NCP); the CERCLA of 1980; and the Superfund Amendments and Reauthorization Act (SARA) of 1986 for sites that pose a threat to human health and welfare or the environment.

Executive Order 12580, adopted in 1987, gave various Federal agencies, including the Department of Defense (DOD), the responsibility to act as lead agencies for conducting investigations and implementing remediation efforts when they are the sole or co-contributor to contamination on or off their properties.

To ensure compliance with CERCLA and Executive Order 12580, the DOD developed the IRP under the Defense Environmental Restoration Program to identify potentially contaminated sites, investigate these sites, and evaluate and select remedial actions for contaminated sites. The DOD issued Defense Environmental Quality Program Policy Memorandum (DEQPPM) 80-6 regarding the IRP program, dated June 1980. The DOD

formally revised and expanded IRP directives, and amplified all previous directives and memoranda concerning the IRP, through DEQPPM 81-5, dated 11 December 1981. The memorandum was implemented by a USAF message dated 21 January 1982.

The IRP is the primary mechanism for implementing response actions on USAF installations affected by the provisions of SARA. In November 1986, in response to SARA and other United States Environmental Protection Agency (EPA) interim guidance, the U.S. Air Force modified the IRP to provide for an RI/FS program. The IRP was modified so that RI/FS could be conducted as parallel activities rather than serial activities. The IRP now encompasses Applicable or Relevant and Appropriate Requirement (ARAR) determinations, identification and screening of remedial technologies, and the development of remedial alternatives. A project conducted under the IRP may include multiple field activities and studies prior to a detailed final analysis of remedial alternatives.

1.2 NAS FORT WORTH DESCRIPTION

1.2.1 Installation Location

NAS Fort Worth, Joint Reserve Base, Carswell Field (hereafter referred to as NAS Fort Worth) is located in north-central Texas in Tarrant County, approximately 8 miles west of the downtown area of the City of Fort Worth (Figure 1-1). NAS Fort Worth property totals 2,555 acres and consists of a main station and two noncontiguous land parcels. The area surrounding NAS Fort Worth is predominantly suburban, including the residential areas of the City of Fort Worth, Westworth Village, River Oaks, and White Settlement (Figure 1-2).

The main station consists of 2,264 acres and is bordered on the north by Lake Worth, on the east by the Trinity River and Westworth Village, on the northeast and southeast by the City of Fort Worth, on the west and southwest by White Settlement, and on the west by Air Force Plant 4 (Lockheed).

Public and recreational land surrounds Lake Worth north of the station; however, public access along the southern shore of the lake is restricted due to NAS Fort Worth activities. Private recreation lands, a fish hatchery, and a Young Men's Christian Association (YMCA) camp are located along the West Fork of the Trinity River northeast of the station. East and southeast of the station are various types of residential development; a commercial area is located south of the station at the interchange of Interstate Highway I-30 and State Highway 183. This commercial area includes a discount retail center, a shopping mall, and a convenience store. Land uses west of the station are primarily residential and industrial and include single-family residences, Air Force Plant 4, commercial centers, and an industrial complex in White Settlement.

1.2.2 Installation History

The land area currently known as NAS Fort Worth was originally an earthen runway constructed to service an aircraft manufacturing facility. When established in 1942, the installation was referred to as the Tarrant Field Airdrome and was under the jurisdiction of the Gulf Coast Army Air Field Training Command. The installation mission was to provide transition training for B-24 bomber pilots.

The Strategic Air Command (SAC) assumed control of Tarrant Field Airdrome in 1946, and the installation served as the HQ for the Eighth Air Force and as a heavy bomber base. In 1948, the installation was renamed Carswell Air Force Base (AFB) in honor of Major Horace S. Carswell, a Fort Worth native. HQ 19th Air Division was located at Carswell AFB in 1951 and the installation became home base for B-52s and KC-135s in 1956. The Air Combat Command (ACC) assumed control of Carswell AFB in 1992 concurrent with the disestablishment of the SAC.

Carswell AFB was selected for closure and associated property disposal/reuse during Round II of Base Closure Commission deliberations pursuant to the DBCRA of 1990. The planning process for closure and property disposal/reuse at Carswell AFB was initiated in 1992, and Carswell AFB officially closed on 30 September 1993.

The U.S. Navy assumed control of Carswell AFB on 1 October 1994 and renamed the installation NAS Fort Worth.

1.2.3 Regional Topography and Surface Hydrology

NAS Fort Worth is situated in the Grand Prairie Section of the Central Lowlands Physiographic Province. The area is characterized by gently sloping broad terraces that incline to the east and are separated by west-facing escarpments. The surface is typically grass covered with isolated stands of timber on some of the uplands. Within the base, the land surface slopes gently northeast toward Lake Worth and east toward the West Fork of the Trinity River, which flows along the eastern border. Elevations range between 550 and 690 feet above sea level.

NAS Fort Worth is located in the Trinity River Basin immediately south of Lake Worth (Figure 1-2). Surface water generated on the base is discharged through a series of storm drains and natural drainage ways, such as Farmers Branch Creek. Farmers Branch Creek begins near the community of White Settlement and flows to the east. This creek drains the majority of the area included in this investigation. Portions of the base are directly adjacent to Lake Worth and the West Fork of the Trinity River. Surface runoff from adjacent areas discharges directly into these water bodies (Figure 1-3).

1.2.4 Regional Geology and Hydrogeology

A layer of Quaternary sediments covers most of the surface of NAS Fort Worth. This material is thin to absent in some areas where a thin layer of organic soil caps near-surface bedrock. Cretaceous limestones and limy shales of the Goodland Limestone and the Walnut Formation form the bedrock in the areas investigated. These units are a portion of the stable Texas shelf. Bedding is essentially horizontal with regional dips of approximately 35 to 40 feet per mile toward the southeast. No major fracture zones or faults have been mapped in the proximity of the base.

Soils encountered in the present investigation range from organic-rich silty clays to fine-grained sediments of the Trinity River alluvial terraces. Typically, borings drilled in the uplands portion of the base encountered a thin profile of topsoil followed by clay-rich silts containing abundant limestone fragments. However, borings drilled on the flanks of drainages penetrated much thicker profiles of alluvial silts and decomposed limestone products. All borings met refusal against bedrock except those drilled in the West Fork of the Trinity River area. Refusal depths ranged from 17 feet in the shaley

limestone of the Valve Box area to 21 feet in the alluvial fill of the Unnamed Stream area. A stratigraphic map representing the subsurface of the investigation areas is provided in Figure 1-4.

The principal hydrogeologic units underlying NAS Fort Worth include the Terrace Alluvium Aquifer, and the Upper, Middle, and Lower Paluxy Aquifers. The Paluxy Aquifers are bedrock hosted. The Terrace Alluvium Aquifer is the uppermost aquifer and occurs in unconsolidated material and in the Goodland Formation. The unconsolidated material constituting the Terrace Alluvium is predominantly alluvial and fluvial deposits of clay, silt, sand, and gravel. The Goodland Formation is a thinly to massively bedded fossiliferous limestone. The Terrace Alluvium Aquifer is only partially saturated and is not used as a source of drinking water. Recharge of the aquifer is from precipitation and leaking water supply lines, sewer lines, and storm drains. Discharge seeps into small streams and the Trinity River. Boreholes drilled during this project encountered groundwater within the Terrace Alluvium Aquifer.

The Paluxy Aquifers are hosted by fine- to medium-grained sandstone separated by clays and shales of the Paluxy Formation. The Middle Paluxy Aquifer serves as a water supply source for the community of White Settlement. The Paluxy Aquifers are hydraulically separated from the Terrace Alluvium Aquifer by the Walnut Formation, a limestone coquina. The Walnut Formation has been subjected to subaerial erosion, suggesting the possibility of local hydraulic communication between the Terrace Formation Aquifer and the deeper Paluxy Aquifers.

1.2.5 Climate

Sub-tropical humid summers and dry winters characterize the climate of NAS Fort Worth, which is situated at 33°N latitude. The average annual air temperature is 66 degrees Fahrenheit (°F). July is the warmest month, with an average monthly air temperature of 86°F. January is the coldest month, with an average monthly air temperature of 45°F. Temperature changes can be rapid in the region, often changing 20° to 30°F in a matter of hours. During calendar year 1995, temperatures averaged 66°F and varied from 48°F in February to 97°F in July. Freezing temperatures occurred during 34 days in 1995. The average annual relative humidity is 63 percent.

The average annual precipitation is 31.5 inches, with the majority of precipitation falling between April and October. There were 31.4 inches of precipitation during 1995, with the wettest month being May. The period from October to February was the driest of the year. Thunderstorms, clustering between March and July, occurred during 61 days in 1995. The maximum recorded precipitation in 1995 was 2.14 inches during one 24-hour period (May 5th). During the present investigation, two major precipitation events occurred on October 21 and 27, causing flash flooding coupled with wind and hail damage.

Prevailing winds are primarily southerly from March through November and northerly from December through February. The average wind speed is 8 knots. Thunderstorms with wind speeds in excess of 65 knots as well as hail storms are common in the region. Climate conditions in summer make tornado formations possible.

1.3 SITE DESCRIPTIONS

This investigation considered areas adjacent to the fuel distribution pipelines. Two pipelines traverse U.S. Government property associated with the former Carswell AFB (Figure 1-3). In support of this project, the pipeline locations within the investigation area were identified and surveyed. The surveyed pipeline locations are in Appendix A. The privately owned and operated Pride Refining, Inc. (Pride) and Chevron Pipeline Company (Chevron) pipelines are described below.

1.3.1 Pride Pipeline

As shown in Figure 1-3, the active 6-inch diameter jet fuel distribution pipeline runs parallel to Highway 183 to the intersection of Roaring Springs. The line then crosses the NAS Fort Worth golf course in the vicinity of the RV Fam Camp area until reaching Pumphrey Drive. On the west side of Pumphrey Drive, the pipeline branches to the north to service NAS Fort Worth. This service line runs to the north along Pumphrey Drive and crosses Farmers Branch Creek in the vicinity of Ascol Drive. The service line continues north until entering the main station and terminating at the Bulk Fuel Storage Area. The main pipeline continues to the northeast and crosses beneath the West Fork of the Trinity River (Duggan 1997).

Most of the pipeline is buried approximately 4 feet below ground surface (bgs); however, the pipeline is visible in two locations. These locations are just north of Highway 183 where the pipeline is located in a 2-foot-deep valve box, and at the Unnamed Stream where 3 feet of pipeline is suspended across the stream.

The Pride pipeline was constructed in the 1950s by the Permian Corporation, which is based in Houston, Texas. Pride purchased the pipeline in 1980. During the first 30 years of operation under the Permian Corporation, the pipeline transported crude oil along the main line to the Amber Refinery. In 1983, Pride discontinued pumping crude oil to the refinery and abandoned that portion of the main pipeline located northeast of Pumphrey Drive (Figure 1-3). The abandoned line was nitrogen-purged during the abandonment process. According to Pride personnel, the pipeline northeast of Pumphrey Road never carried jet fuels. After 1983, the southern portion of the line and the service line to the bulk fuel storage tanks were used to transport jet fuel to Carswell AFB. Between 1983 and 1994, Jet Fuel 4 (JP-4) was delivered to the base. After 1994, the pipeline delivered Jet Fuel 8 (JP-8). The entire pipeline in the vicinity of NAS Fort Worth was abandoned in January 1997 as a result of a spill located south of the base (Duggan 1997). No Fuel has been delivered to NAS Fort Worth through the pipeline since January 1997.

1.3.2 Chevron Pipeline

The Chevron commercial distribution line parallels the Pride pipeline through U.S. Government property, entering from the south at the intersection of Roaring Springs Road and Highway 183 (Figure 1-3). The pipelines are approximately 3 feet apart. The pipelines travel in a northeastern direction for approximately 4,200 feet to the West Fork of the Trinity River. At this point, the Chevron pipeline turns to the northwest along the southern bank of the West Fork of the Trinity River (Powell 1997). The Chevron pipeline is also buried approximately 4 feet bgs. The Chevron pipeline is visible only at the Unnamed Stream crossing.

The Chevron pipeline was constructed in the 1940s and has reportedly carried various grades of refined petroleum products (i.e., gasoline, diesel). The distribution line has been nitrogen-purged and has been out of service since 1988 (Powell 1997).

1.4 PAST OBSERVATIONS AND INVESTIGATIONS

The sections below summarize past observations and investigations associated with the fuel distribution pipelines. The observations and investigations discussed include those directly related to the pipelines, as well as investigations of adjacent sites that potentially impact these areas.

There are three sections along the fuel distribution pipelines where past observations and/or investigations have occurred (Figure 1-5). These sections include:

- Farmers Branch Creek crossing in the vicinity of the Base Boundary and Ascol Drive;
- Unnamed Stream pipeline crossing; and
- Along the West Fork of the Trinity River west of the Jennings Drive bridge and east of the Base Service Station (LPST Site No. 104524) (BSS).

1.4.1 Farmers Branch Creek

In 1990, the City of Fort Worth was reportedly performing boring operations in the Farmers Branch Creek (near the main entrance to the station) when strong odors of fuel were detected. The station reported this to Pride, which reportedly conducted pressure tests and determined that the line was not leaking. Currently, there are no records of the boring operations or the pressure tests to confirm these findings.

Similar petroleum-related odors were noted by Carswell AFB personnel during utility repair near Farmers Branch Creek. The subsurface operations were occurring west of Pumphrey Drive and south of Ascol Drive where a number of utility lines and equipment are located. These include a gas transmission line, storm water drains and pumps, telephone lines, and the Pride pipeline. It is unknown what utilities were being serviced or on which side of the creek the work was being performed. Visual observations failed to identify the source of the odors (Long 1996).

There have been no previous environmentally related investigations associated with the pipeline in the vicinity of Farmers Branch Creek.

1.4.2 Unnamed Stream Area

There have been one related past investigation and one significant observation in the vicinity of the pipelines near the Unnamed Stream. These include the following:

- RCRA Facility Investigation (RFI) at the Petroleum, Oils and Lubricants (POL) Tank Farm and the Unnamed Stream Areas (Law 1995); and
- Petroleum-related odors noted at the Unnamed Stream pipeline crossings.

RFI at the Tank Farm and Unnamed Stream Area. The RFI at the POL Tank Farm and the Unnamed Stream areas was initiated in 1993. Included in the investigation were surface water, sediment, subsurface soil, and groundwater characterization in the

Unnamed Stream area. Source areas for the petroleum-related contamination identified included the tank farm and the Abandoned Service Station located approximately 400 feet northwest (upgradient) from the Unnamed Stream and the pipelines. Associated with the Abandoned Service Station source area was a French drainage system that drained the fueling station and discharged to an oil/water separator. The oil/water separator discharged to the Unnamed Stream.

Surface soil samples analyzed from the Unnamed Stream area contained lead and total petroleum hydrocarbons (TPH). Lead concentrations were above action levels developed by Law (1995) using methodologies specified in the Texas Natural Resource Conservation Commission (TNRCC) Risk Reduction Standards. Sediment samples from the stream contained cadmium and arsenic in excess of National Oceanic and Atmospheric Administration (NOAA) recommended values.

Three groundwater monitoring wells were installed during the investigation. Subsurface soil samples were collected during their installation (Figure 1-6). Two wells (SD13-06 and SD13-07) were located along the stream within 100 feet and 50 feet of the pipelines, respectively. As shown in Figure 1-6, SD13-06 soils contained 440 milligrams/Kilogram (mg/Kg) and 670 mg/Kg TPH. SD13-07 subsurface soils contained 54 mg/Kg and 8,800 mg/Kg TPH. The combined concentration of benzene, ethylbenzene, toluene, and xylenes (BTEX) ranged from nondetectable to 59 mg/Kg.

Groundwater samples collected from the shallow wells (11 and 19 feet bgs) also contained petroleum-related constituents including ethylbenzene, toluene, and xylenes. Reported concentrations were compared to TNRCC Risk Reduction Standard Number 1 levels (site background) and Standard Number 2 levels (Medium-Specific Concentrations (MSCs)). A number of constituent concentrations exceeded Standard Number 1 background levels, but all POL-related constituents were below the Standard Number 2 MSC. Tetrachloroethylene exceeded the MSC in one event.

Petroleum-Related Odors. In the early 1990s, Carswell AFB personnel and regulatory personnel surveyed the area in relation to ongoing investigations. Petroleum-type odors were noted directly adjacent to the northern side of the stream. The source of the odor could not be determined through visual observation (Long 1996).

1.4.3 West Fork of the Trinity River

A number of investigations and observations have occurred in the vicinity of the West Fork of the Trinity River, west of Jennings Drive. The majority of the investigations have taken place in association with the BSS located on the northwest corner of Jennings Drive and Military Parkway (Figure 1-5). Prior to 1992, a number of limited investigations took place in response to observed gasoline in drainage ditches surrounding the BSS. The most significant observations and investigations in the area have taken place after 1992 and include the following:

- Petroleum-contaminated seep noted along the south bank of the West Fork of the Trinity River;
- Comprehensive Site Assessment of the BSS Underground Storage Tank (UST) system and related contamination (COE 1994); and
- Additional Site Assessment of the BSS (IT Corporation 1997a).

Petroleum-Contaminated Seep. In April 1992, an oil sheen was noted along the southern bank of the West Fork of the Trinity River, approximately 175 feet west of the Jennings Drive bridge crossing. The sheen was traced to a seep discharging from the bank of the river adjacent to Carswell AFB (Figure 1-5). Responders to the discharge included Carswell AFB personnel, Tarrant County Water and Improvement District, and representatives from Chevron Pipeline Company. A containment boom was immediately deployed. As noted previously, the Chevron pipeline had been nitrogen-purged and out of service since 1988. As a precautionary measure, Chevron representatives excavated a 150-foot section of the pipeline directly adjacent to and hydrologically upgradient from the seep. The excavation, which was completed on April 8, 1992, revealed no signs of leaks or pipe corrosion. On April 20, 1992, Chevron conducted a pressure test of the line. There was no net change in pressure through the test period. Based on these observations and tests, Chevron concluded that the pipeline was intact (Ernst 1997). As a result of this contaminated discharge, the Comprehensive Site Assessment of the BSS was initiated.

Comprehensive Site Assessment of the BSS. In an effort to identify the source and extent of contamination related to the seep discharging into the West Fork of the Trinity River, the U.S. Army Corps of Engineers (COE) was tasked to complete an investigation of the area (COE 1994). The project scope required the collection and analysis of subsurface soil samples, a soil gas survey, the installation of additional monitoring wells and analysis of groundwater samples, and the collection and analysis of surface water samples. In addition to the environmental media investigation, the integrity of four UST tanks at the BSS was tested. The tanks were removed in May 1993 and May 1996 because they were leaking (see Section 1.5.3).

Results from the assessment indicated that a gasoline release from the tanks had impacted soil within the immediate vicinity of the UST tank system; the uppermost saturated zone extending 500 feet from the BSS east and downgradient to the West Fork of the Trinity River; and surface water within the drainage ditches adjacent to the BSS.

Of importance to this SC is the groundwater and subsurface soil analyses performed during the COE assessment. As shown in Figure 1-7, the COE concluded that a shallow groundwater TPH plume extended from the BSS tanks to the river, across the area traversed by the Chevron pipeline. Groundwater elevation in the area generally varied from 5 to 15 feet bgs (Law 1996). TPH concentrations within the center of the plume varied from 20.0 mg/L nearest the tanks to 9.0 mg/L. In addition, total BTEX concentrations of 45.88 mg/L and 45.61 mg/L were reported in groundwater samples collected from two wells downgradient of the BSS (BSS-B and MW-10, respectively). Total BTEX concentration found in MW-1 was reported as 17.88 mg/L. It should be noted that the TPH concentration rose from 9.0 mg/L (MW-1) to 9.8 mg/L (MW-10) in the downgradient direction (COE 1994). This downgradient increase has led past reviewers to suggest that a second source (such as the pipeline) may be present (Long 1996).

During installation of the monitoring wells, subsurface soil samples were collected for chemical analyses. A summary of these results is presented in Figure 1-8. Soil samples collected from the borehole located within the center of the groundwater contaminant plume (MW-10) contained up to 32.0 mg/Kg of TPH and 8.0221 mg/Kg of BTEX at a depth of 16 to 18 feet bgs. These values were lower than the concentrations of

130 mg/Kg TPH and 1,146 mg/Kg reported in the downgradient surface soil sample collected at the seep area (COE 1994).

Additional Site Assessment of BSS. Under contract with AFCEE, the IT Corporation completed a Site Assessment of the BSS (IT Corporation 1997a). Data from several investigations and removal activities associated with the BSS occurring at NAS Fort Worth from 1992 to 1996 were consolidated and used to support a Plan A assessment in accordance with TNRCC (1994, Publication RG-36). Based on the results of this assessment, which indicated contaminant concentrations above Plan A criteria, a Plan B risk assessment was performed using site-specific data. Contaminants included benzene and carcinogenic PAHs in soil and benzene and toluene in groundwater (IT Corporation 1997a). The results of the Plan B risk assessment demonstrated that there was no unacceptable human health risk for current or future exposure pathways (IT Corporation 1997b). As a result, IT Corporation recommended in its draft Corrective Action Plan of June 1997 that no further action at the BSS be taken except for quarterly groundwater monitoring for one year (IT Corporation 1997b).

Quarterly groundwater monitoring was initiated in January 1997. The most recent quarterly groundwater monitoring report produced by HydroGeoLogic (1998) indicated that the BTEX concentrations (measured in third quarter, July 1997) have remained consistent over time with results of sampling performed downgradient of the BSS since April 1995. The July 1997 BTEX results, however, are significantly lower than those reported for samples collected by the COE in January 1994 (COE 1994). As noted above, COE (1994) reported total BTEX concentrations of 45.88 mg/L, 17.8 mg/L, and 45.61 mg/L in groundwater samples collected from three wells downgradient of the BSS (BSS-B, MW-1, and MW-10, respectively). HydroGeoLogic (1998) reported total BTEX levels of 19.2 mg/L and 31.1 mg/L for BSS-B and MW-10, respectively. The groundwater sample from MW-1 had total BTEX concentrations of 8.24 mg/L.

Subsequent to the risk assessment and corrective action plan, IT Corporation collected surface water samples from the west bank of the West Fork of the Trinity River downgradient of the BSS LPST site. Analytical results indicated the presence of methyl tertiary butyl ether and benzene at concentrations below those detected in previous BSS surface water samples in a location upgradient of the area where a petroleum sheen was observed in 1992. No petroleum-related compounds were detected in the surface water samples collected from the area where the petroleum sheen was observed in 1992. IT Corporation concluded that the absence of contaminants in the surface water samples collected from the petroleum sheen area on the West Fork of the Trinity River should be adequate to fulfill closure requirements at the BSS (IT Corporation 1997a).

1.5 REMEDIAL ACTIONS

No past remedial actions have been completed within the investigation areas directly related to the fuel distribution pipelines. However, a number of remedial actions have taken place in relation to areas adjacent to or otherwise potentially associated with the pipelines. These include the following:

- Sediment removal from the Unnamed Stream;
- Risk-based remedial action for the bulk fueling station (ST-14) and the Abandoned Service Station site (SD-13); and
- Fuel tank removal at the BSS.

1.5.1 Unnamed Stream Sediment Removal

At the time of this report, Geo-Marine, Inc. was in the process of excavating contaminated surficial sediments from the Unnamed Stream. Preliminary tasks included the site clearing and removal of adjacent trees and shrubs.

Dimensions for excavation are estimated to be 8 feet wide and 2 feet deep for a length of 250 feet. Less than 200 cubic yards of loose soil will be excavated and stockpiled on-site. As part of the remedial action, a galvanized water trough will be placed at the former location of the oil/water separator until removal is complete to intercept any flow into the Unnamed Stream.

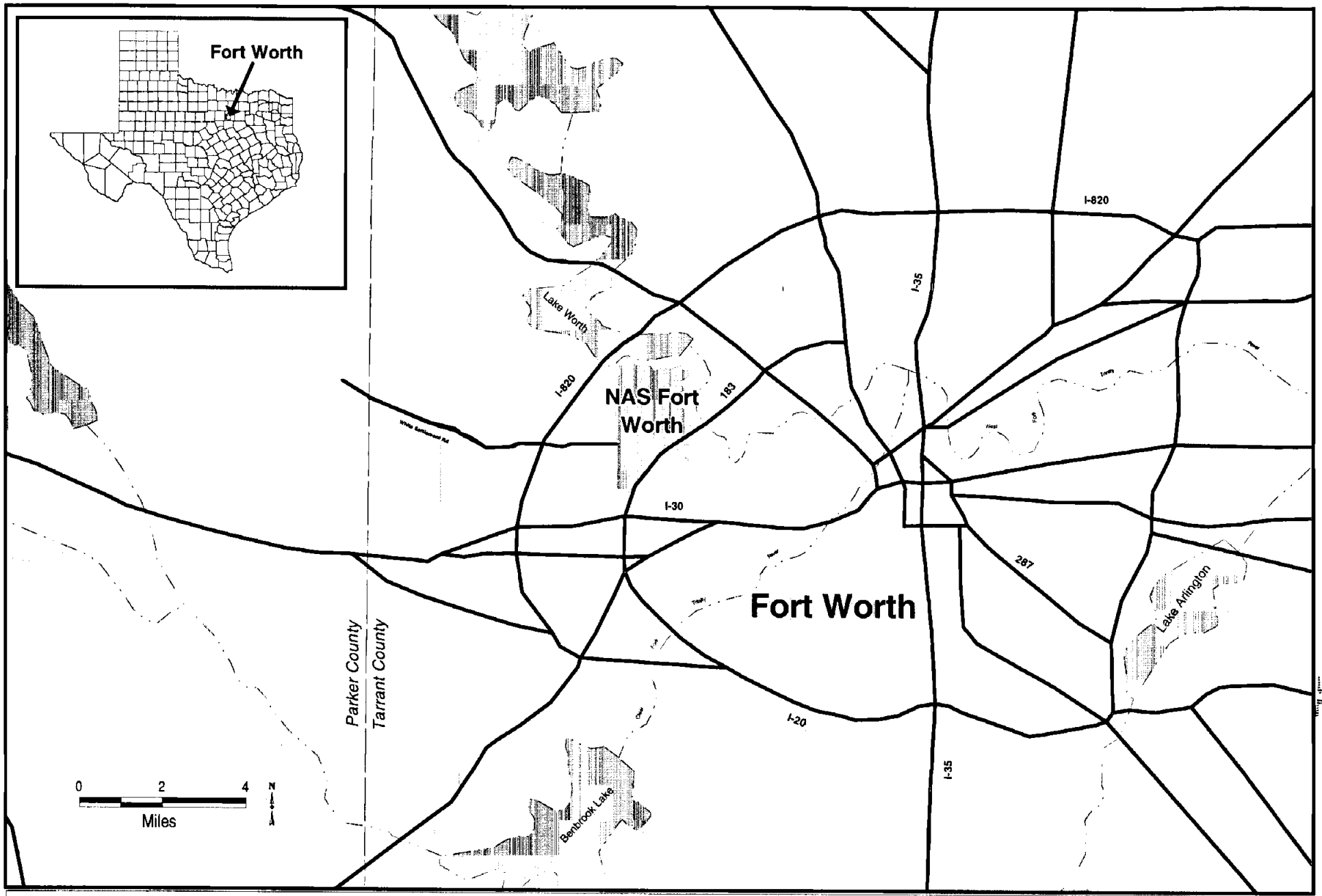
Post-excavation remediation verification sampling will be conducted. Analyses will consist of TPH, metals, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). It is anticipated that the levels of contamination remaining in the stream bed will allow closure of the site under TNRCC Risk Reduction Standard Number 1 Risk Based Closure Rules (Geo-Marine 1997).

1.5.2 Risk-Based Remedial Action for ST-14 and SD-13

A risk-based approach to remediation is currently in progress at the bulk fueling station (ST-14) and the Abandoned Service Station site (SD-13). The Remedial Action Plan is being prepared by Parsons Engineering Science, Inc. and was therefore not available at the time this report was prepared.

1.5.3 Fuel Tank Removal at the Base Service Station

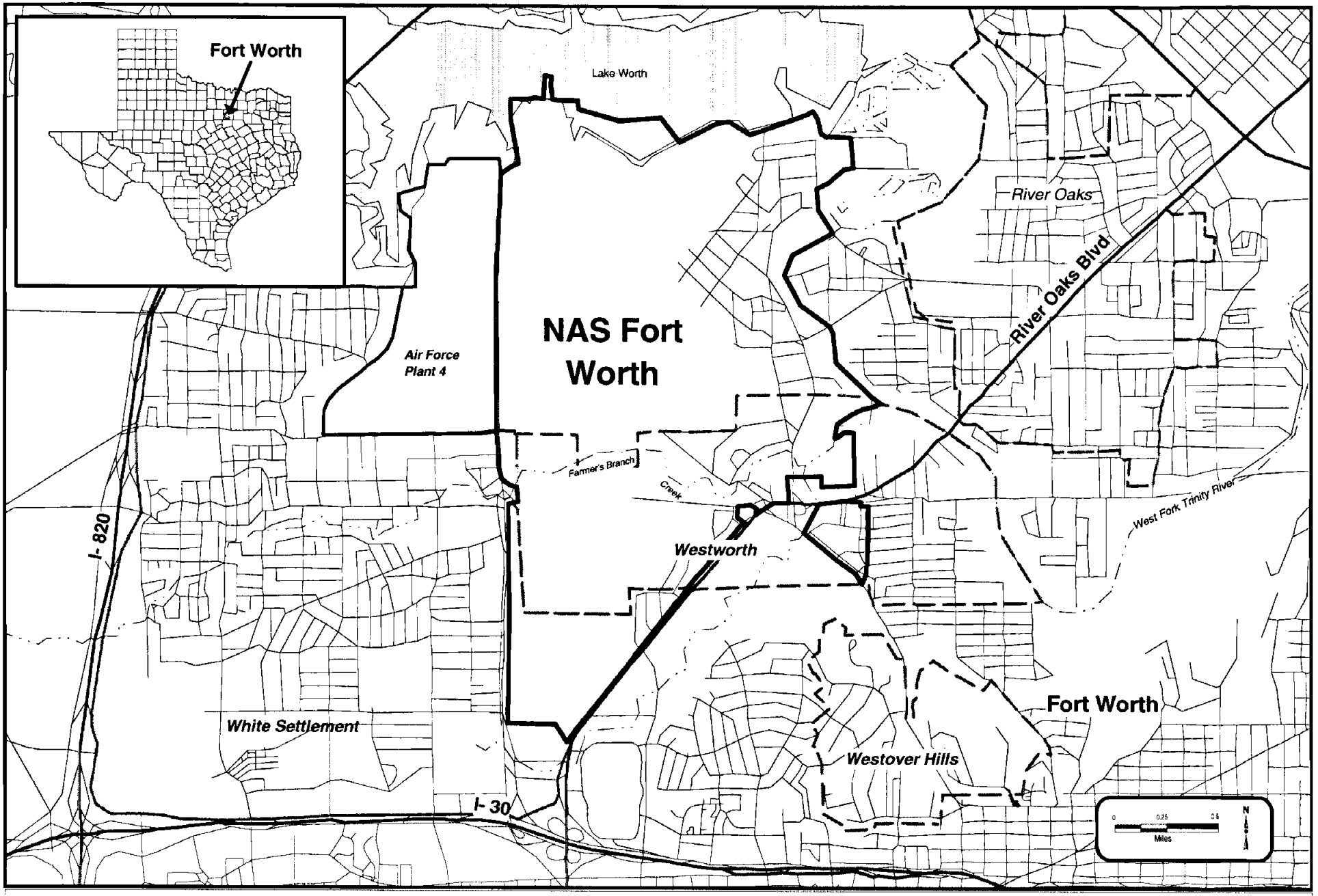
As indicated above, four 10,000-gallon petroleum fuel tanks were removed from the BSS as part of the COE Site Assessment. The tanks were removed on May 11-12, 1993, along with 75 feet of associated piping (COE 1994).



The Environmental Company, Inc.

Figure 1-1 -- NAS Fort Worth Vicinity Map

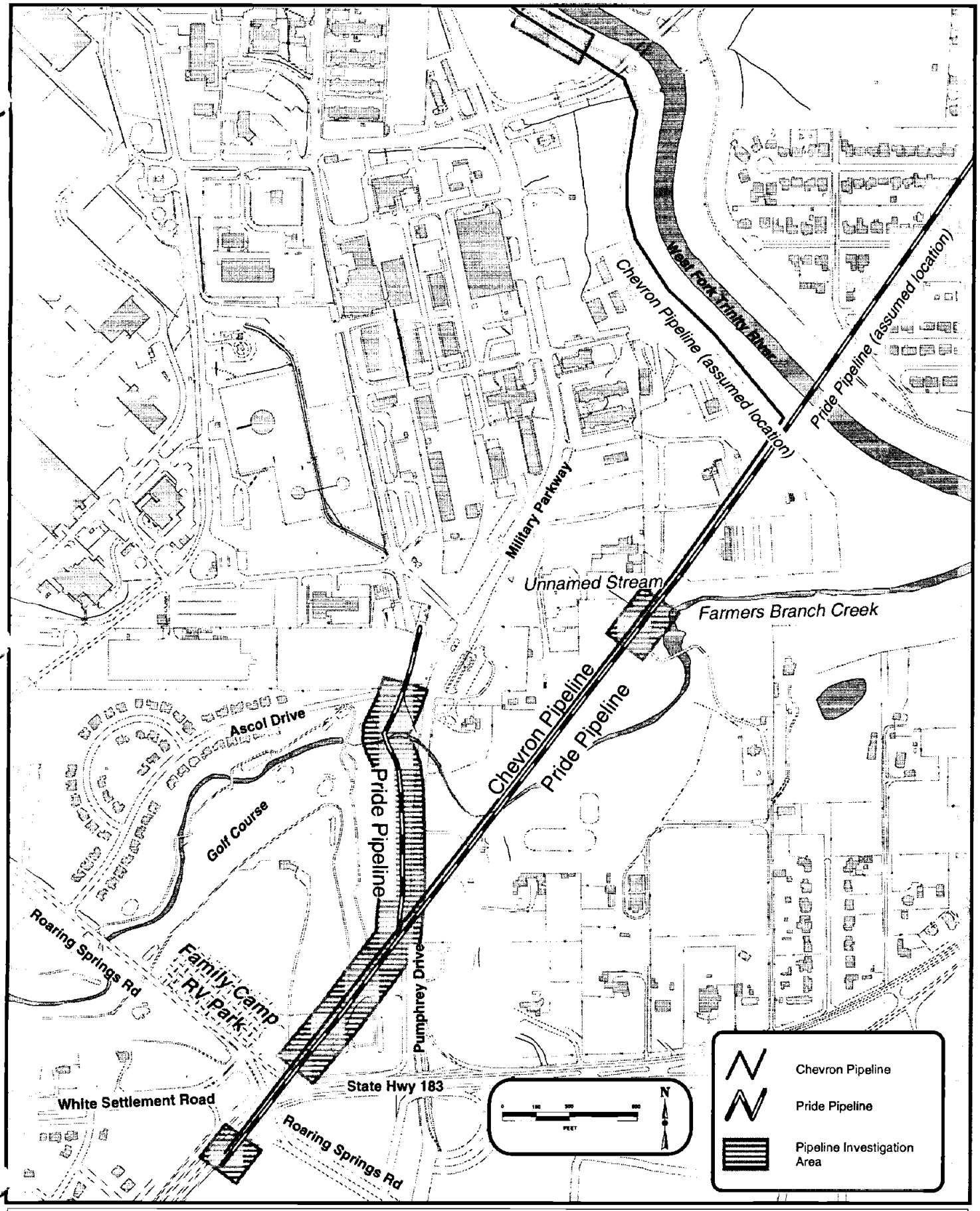
Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No.: P-3103



The Environmental Company, Inc.

Figure 1-2 -- NAS Fort Worth Location Map

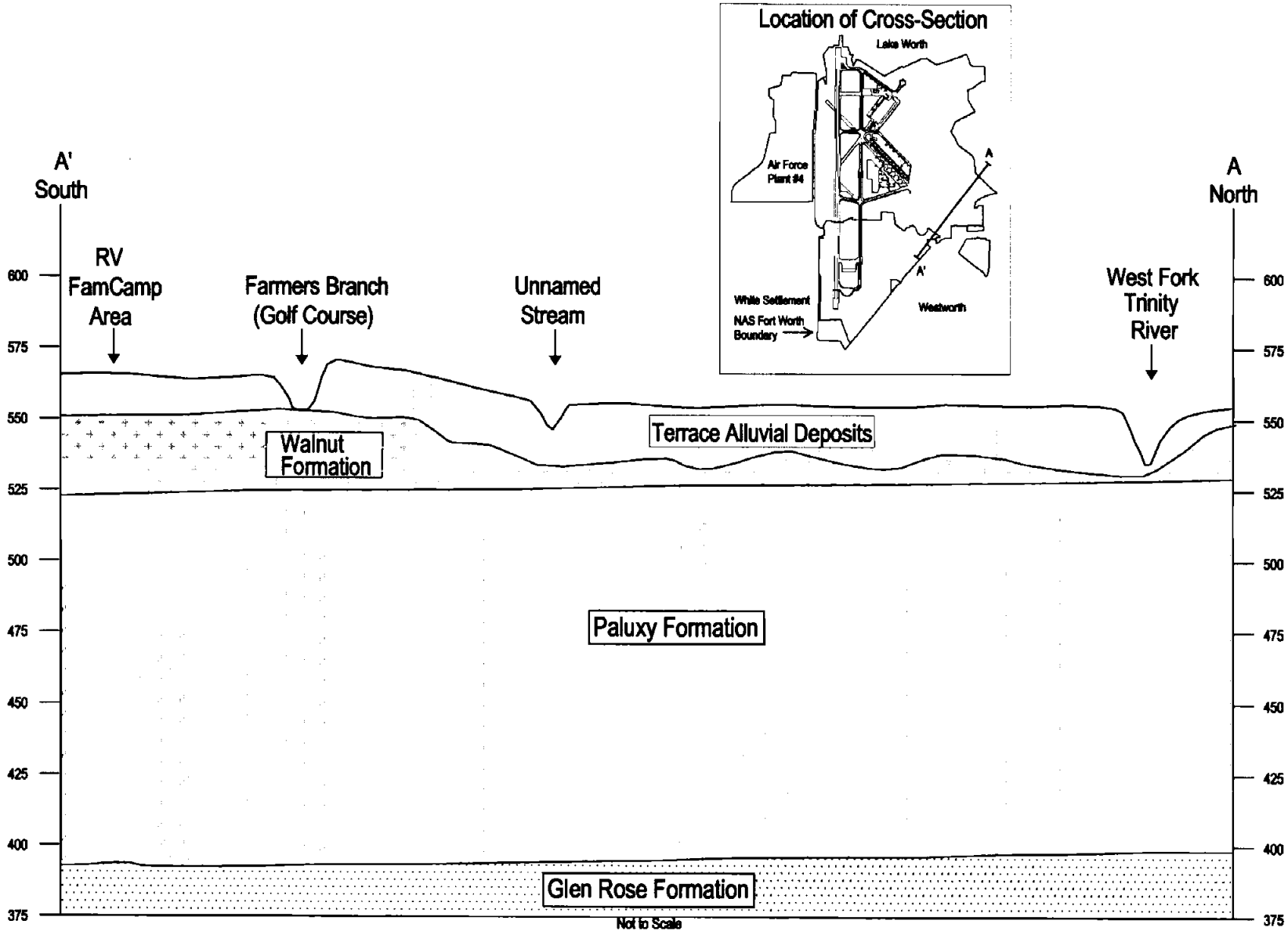
Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3103



The Environmental Company, Inc.

Figure 1-3 -- Site Map

Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P- 3103



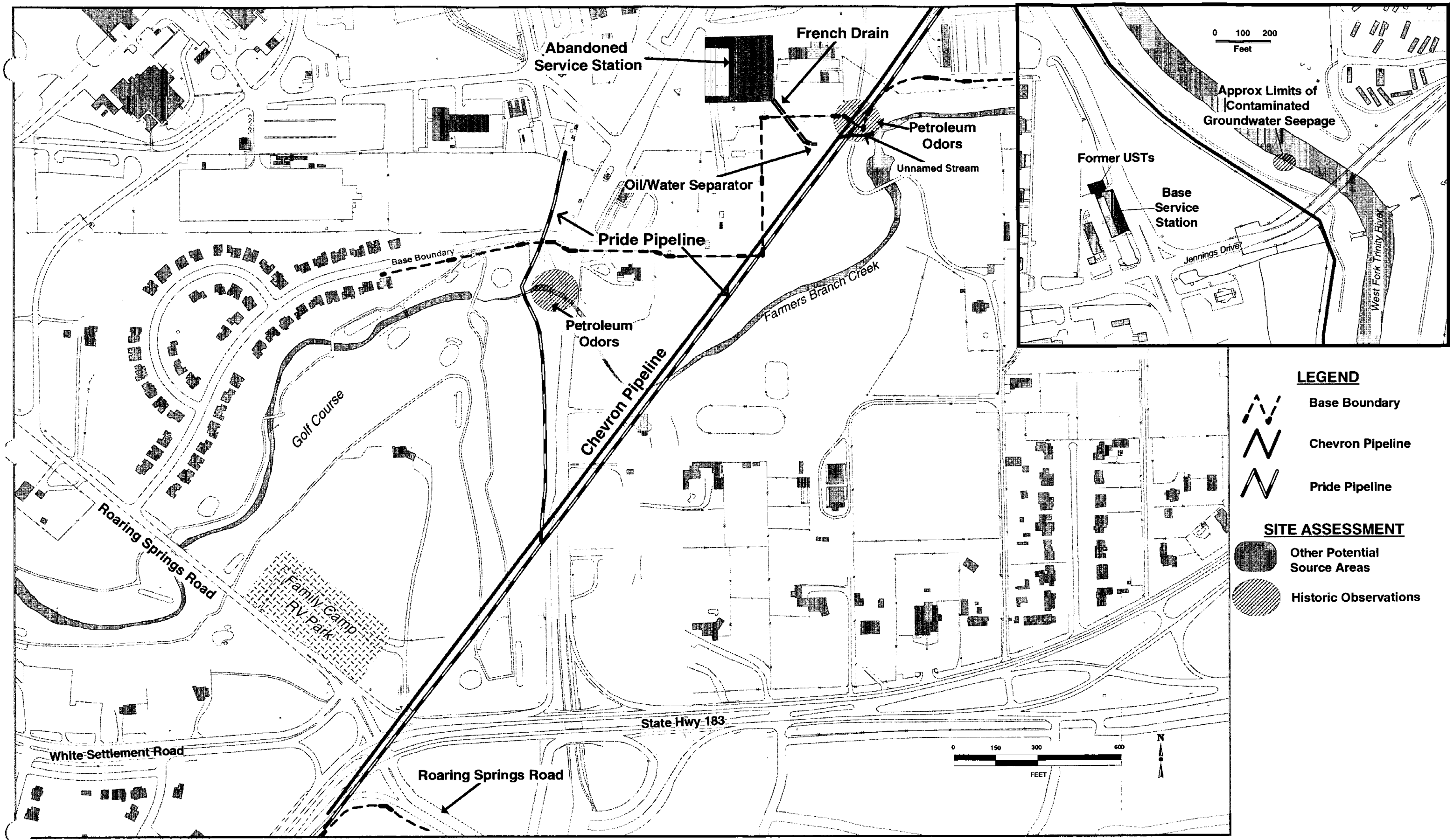
Note: A detailed cross-section for each area of investigation is provided in Section 4.

Drawing Name Figure 1-4a.dwg

The Environmental Company, Inc.

Figure 1-4
Generalized Geologic Cross-Section Through
NAS Fort Worth, Texas

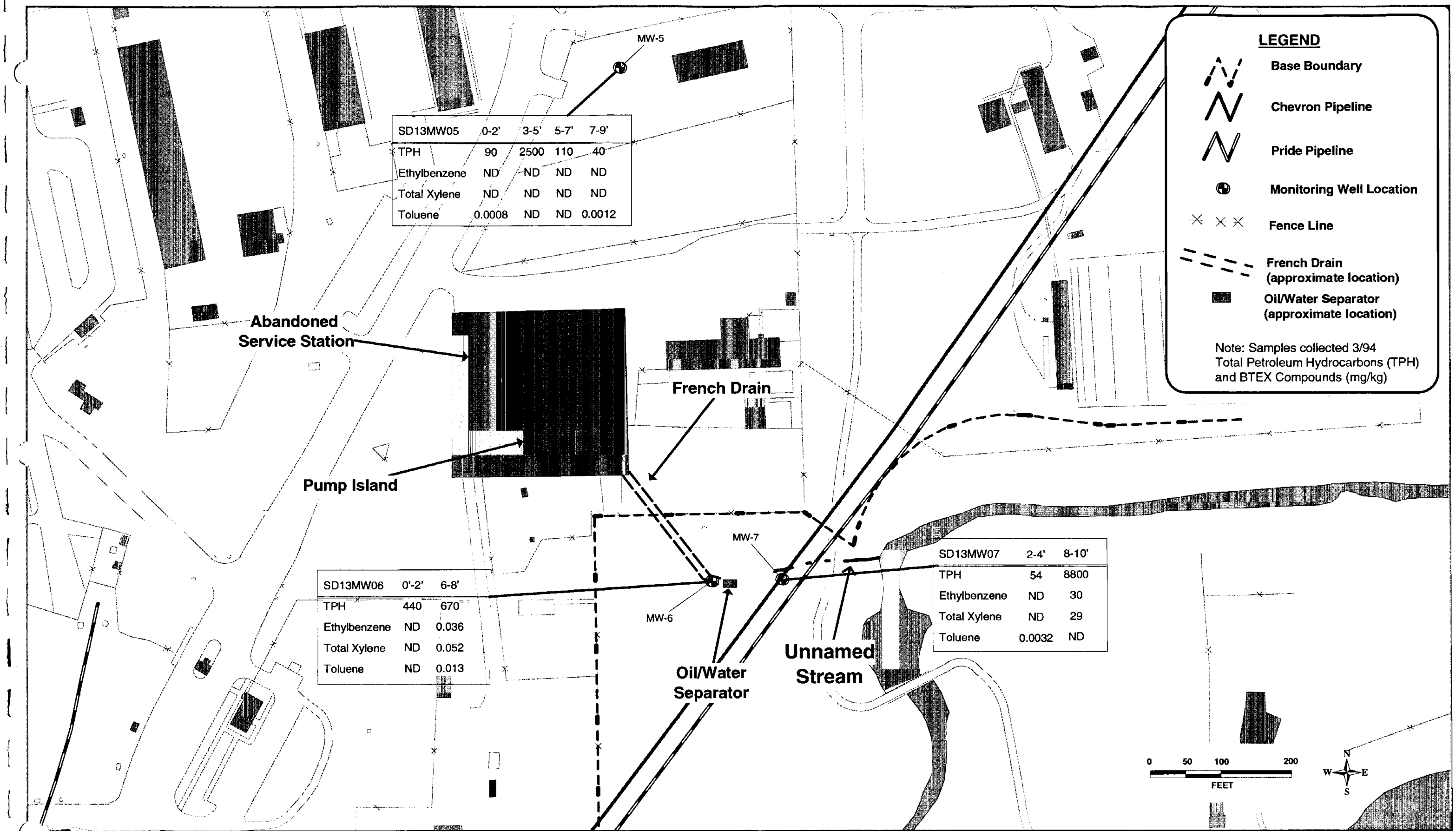
Date: March 1998
Project Manager: B. Duffner
Prepared By: A. Long
Project No: P-3103



The Environmental Company, Inc.

Figure 1-5 -- Past Observation and Investigation Areas

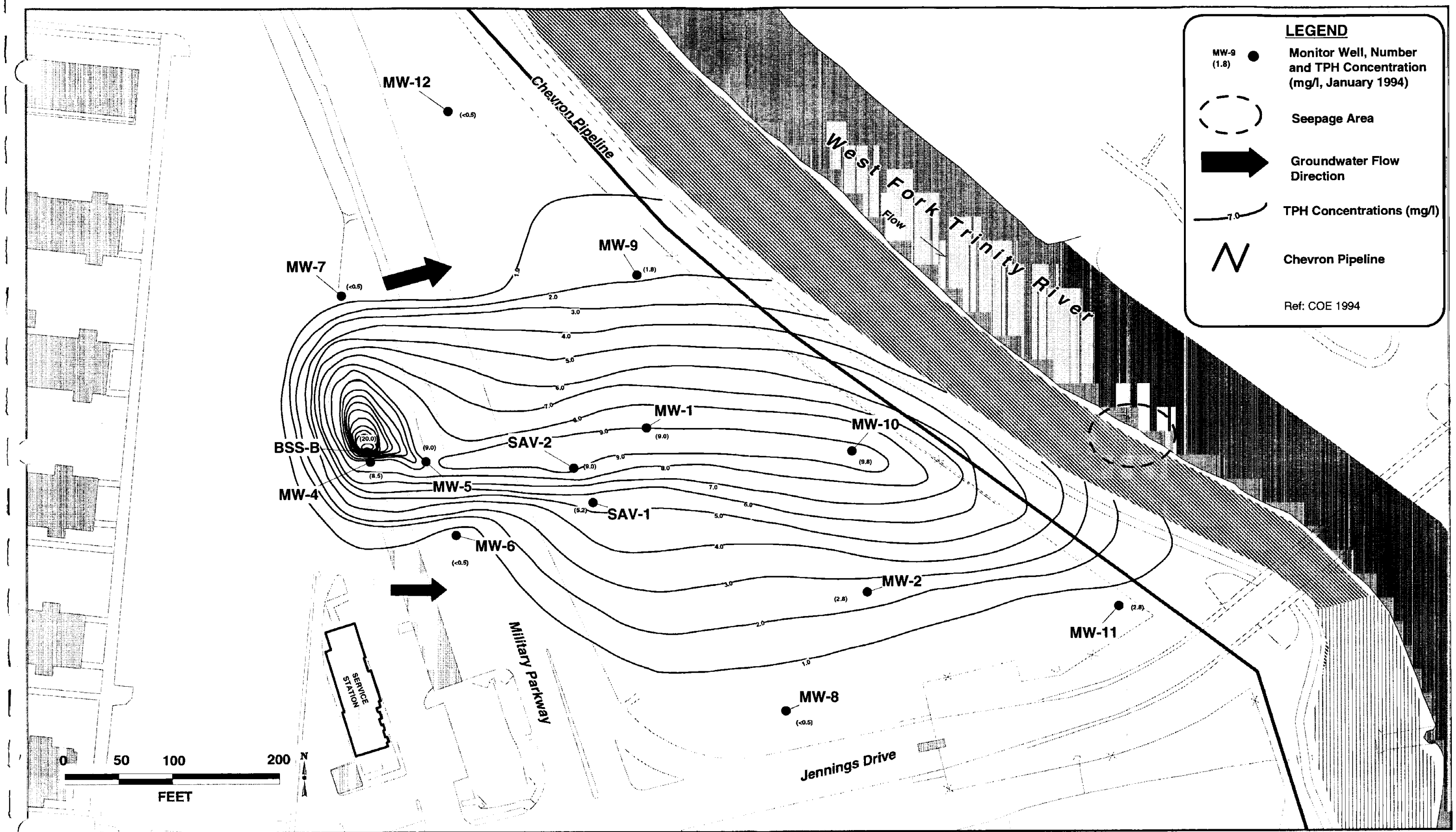
Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3101



The Environmental Company, Inc.

Figure 1-6 -- Historic Subsurface Soil Sample Results at Abandoned Service Station Site

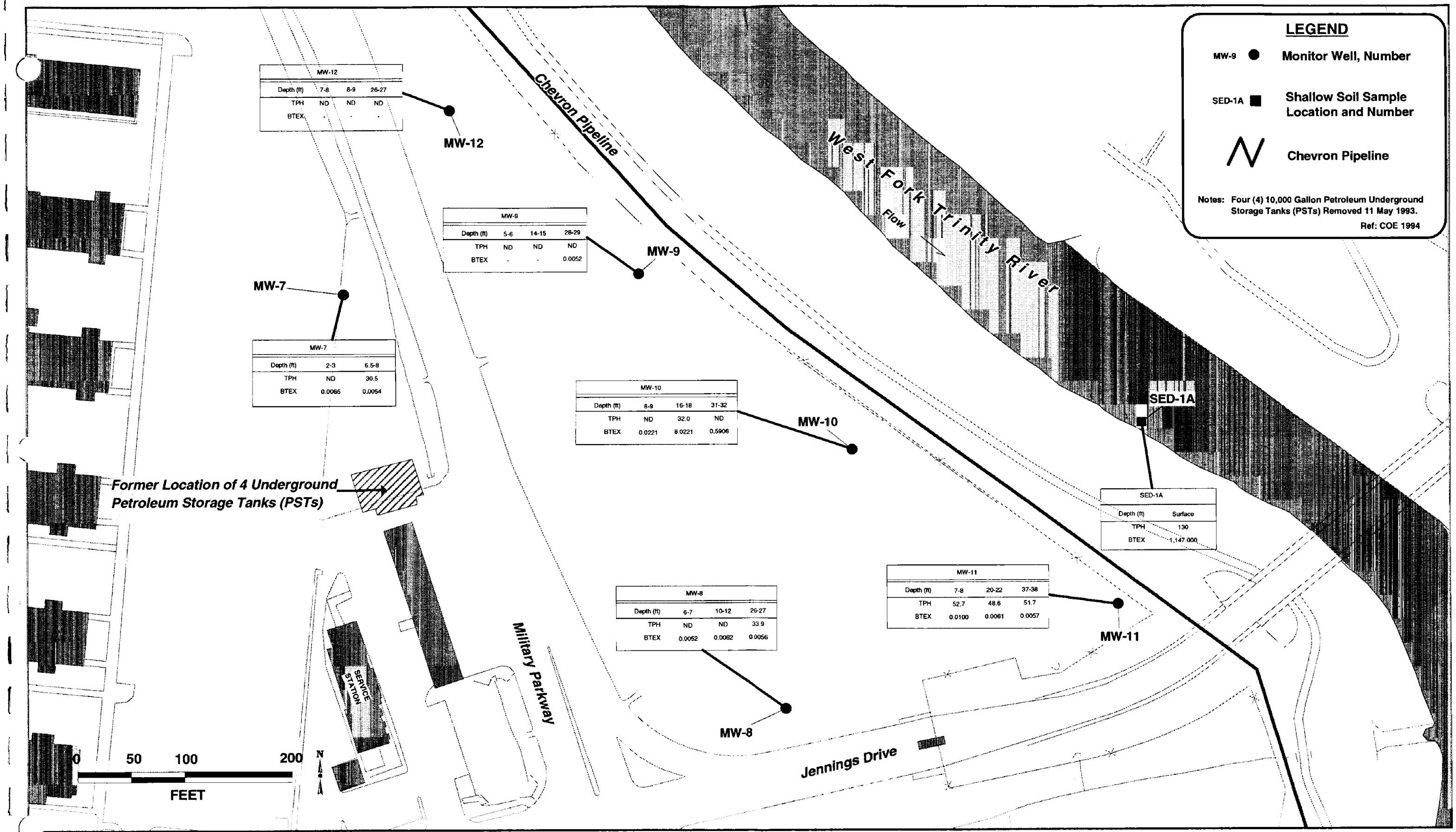
Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3101



The Environmental Company, Inc.

Figure 1-7 -- Historic Groundwater Contaminant Contours at Base Service Station Site
Total Petroleum Hydrocarbon (mg/l)

Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3101



The Environmental Company, Inc.

Figure 1-8 -- Historic Subsurface Soil Sample Results at BSS Petroleum Hydrocarbons and BTEX Compounds (mg/kg)

Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3101

TAB

2

2.0 PROJECT ACTIVITIES

This section provides a synopsis of the objectives, activities, and methods used in the assessment, investigation, and characterization of the pipeline investigation area at NAS Fort Worth. The overall goals for the project are described, as are the phase-specific objectives for each of the potential source areas examined in the field. Also provided is an overall summary of the project field activities, laboratory analytical program, and data evaluation activities and methods. Results of each phase of the project for each of the main study areas are described in Section 3.0.

2.1 PROJECT OBJECTIVES

2.1.1 Overall Objectives and Approach

The overall goal of this project, as defined in the AFCEE Statement of Work (SOW) for Project Number 95-8021 (Contract Number F41624-95-D-8002, Delivery Order Number 3) dated January 25, 1996, is to "determine the presence or absence and nature and extent of contamination." To accomplish this goal, TEC was directed to perform a phased evaluation consisting of an SA, SI, and SC.

As the initial steps in planning the project, several delivery order scoping and plan development tasks were performed. To begin with, all available background data pertaining to the study area were compiled and reviewed. Results of this effort, presented in Sections 1.2 through 1.4 of this report, were used to develop a preliminary conceptual model of the study area and its environs to help identify critical decision points and associated data gaps related to the overall projected goal. For each gap identified, specific types of information needed to fill the gap were then defined, anticipated uses of the data were described, and media-specific field characterization tasks were developed to ensure that the proper quantity and quality of information were generated to support future decision-making.

The quantity and quality of data required to fill the data gaps and to confidently accomplish the project objectives were determined based primarily on the intended data use(s), expected contaminants and levels of concern, required analytical detection limits, and preferred analytical quality levels. With respect to data quality, AFCEE defines two general data quality levels: screening and definitive. Screening data are generated by rapid methods of analysis with less rigorous sample preparation, calibration, and/or quality control (QC) requirements than are necessary to produce definitive data. Definitive data are produced using rigorous analytical methods, such as EPA reference methods. Definitive data are used in support of decisions of the highest relative importance to the project.

For example, decisions related to actual releases and off-site migration of contaminants, or exposures and risks to receptors, were expected to be of primary concern in the Pipeline Investigation project because of the potentially serious consequences associated with making an incorrect decision. Accordingly, chemical data for multimedia samples generally also required a relatively high level of quality. In contrast, data used as indirect indicators of contaminant release and migration potential (i.e., screening data and/or physical data used primarily for site characterization purposes) generally were of lesser quality.

Results of the initial project scoping and planning efforts are documented in TEC's project Work Plan (WP), dated July 1996 (TEC 1996c). Two primary companion documents also were developed and used in conjunction with the WP to implement the Pipeline SA/SI and SC: the Field Sampling Plan (FSP) (TEC 1996a) and the Quality Assurance Project Plan (QAPP) (TEC 1996b). The remainder of Section 2.1 summarizes the specific objectives and approach of each project phase. Project samples, types, numbers, and quality requirements are summarized in Section 2.2.

2.1.2 SA/SI Phase Objectives and Approach

The AFCEE/TEC contract SOW defined three primary goals for the SA/SI phases of the project. They were to:

- Identify all potentially contaminated areas;
- Identify areas that potentially require emergency response; and
- Develop a conceptual site model of the Pipeline Investigation Area.

Three site assessment field tasks were identified in the WP to satisfy these objectives. These tasks included a land survey, a utility location survey, and a visual reconnaissance of site conditions. A passive soil gas survey was planned for the site investigation.

2.1.3 SC Phase Objectives and Approach

Results from the SA/SI phase were used to define areas of concern (i.e., potential contaminant source areas) for focused attention during the SC phase. Accordingly, the SC phase was intended to characterize environmental conditions, to define the nature and extent of contamination, and to estimate the risk to human health and the environment at the potential source areas through the collection, analysis, and evaluation of site-specific environmental media samples.

Based on the SA/SI activities, four potential source areas were identified for further study during the SC phase of the project. These areas are the:

- Valve Box;
- Unnamed Stream;
- Farmers Branch Creek; and
- West Fork of the Trinity River.

To accomplish the SC phase objectives, subsurface soil samples were collected at each of the four potential source areas for physical/chemical analyses.

2.2 FIELD ACTIVITIES

This section summarizes the field activities performed in both the SA/SI (Section 2.2.1) and SC (Section 2.2.2) phases of the project. Included are brief descriptions of the sample/measurement types, numbers, locations, methods, and rationale. Also included is a brief discussion of the project record keeping procedures (Section 2.2.3), a listing of the major responsibilities of field team members and subcontractors in implementing the field program (Section 2.2.4), a chronology of the field activities (Section 2.2.5), and a synopsis of key

aspects of the field quality assessment/quality control (QA/QC) program (Section 2.2.6). Results of the field activities are discussed in Section 3.0.

All field investigative and support activities were performed as outlined in the SOW for Project No. 95-8021 and as described in the TEC WP, FSP, and QAPP (TEC 1996a,b,c), unless otherwise noted in this report. The work was conducted in accordance with the guidelines provided in the HQ AFCEE *Handbook for the Installation Restoration Program (IRP) Remedial Investigations and Feasibility Studies (RI/FS)*, dated September 1993 (hereafter referred to as the AFCEE *Handbook*).

As described in the project WP, contaminants of potential concern in the study area in the immediate vicinity of the pipelines and the West Fork of the Trinity River area are limited to petroleum-related materials. Consequently, field activities in these areas were conducted in accordance with protocols set forth in Texas Administrative Code (TAC), Title 30, Chapter 334. The Unnamed Stream area is currently regulated as a Resource Conservation and Recovery Act (RCRA) site (SD-13). Therefore, the investigation of this area was performed in accordance with TAC, Title 30, Chapter 335.

2.2.1 SA/SI Phase Field Program

Three field activities were performed during the SA. These include:

- Land Survey;
- Utility Location Survey; and
- Site Reconnaissance.

Based on results of these activities, a soil gas survey was performed in the SI. Table 2-1 summarizes the data quality objectives (DQOs) for each SA/SI task as presented in the project WP. The locations, types, numbers, and methods of collecting field measurements and samples during each task are described below.

2.2.1.1 Land Survey

A land survey was performed throughout the study area to identify existing easements, property boundaries, and adjacent landowners in anticipation of future field activities. The survey was performed by Baird, Hampton & Brown, Inc. (BHB), a State of Texas-registered land surveyor. BHB conducted a records search to identify the owners of land through which the pipeline passes as well as adjacent landowners. BHB also field staked and surveyed property boundaries within 50 feet of the centerline of the pipeline, the soil gas monitoring locations evaluated during the SA/SI, and the soil boring locations evaluated during SC activities.

2.2.1.2 Utility Location Survey

The utility location survey was performed by NAS Fort Worth personnel, using existing site plans and public utility locator services, to identify the location and orientation of all underground utilities in areas where soil gas sorbers were to be placed during SI activities. Utility locations were staked in the field and noted on project field maps and field log books. Results of this survey are documented in the Site Log Book archived at TEC headquarters in Charlottesville, Virginia. In addition to the survey performed through NAS Fort Worth

personnel, utility locations were verified by ULS Services Company prior to subsurface intrusions conducted during the SC.

2.2.1.3 Site Reconnaissance

A visual reconnaissance of the overall study area was performed to note areas of stressed vegetation, discolored soils, and/or other indicators of contamination. These observations were used to focus later soil gas sampling and subsurface characterization activities. The visual reconnaissance consisted of a walk-over of key site areas suspected of being actual or potential sources of contamination. Observations of stressed conditions and also of overall site accessibility, use, sampling restrictions, security, and other logistical factors were recorded in the field log books.

2.2.1.4 Soil Gas Survey

The soil gas survey was conducted during the SI along the fuel distribution lines to further delineate areas of possible subsurface contamination and subsequently target soil boring locations for the SC. A total of 69 soil gas samples were collected from the general areas of concern illustrated in Figure 2-1. Samples were collected at 50-foot intervals along transect lines positioned in these areas as shown on the Site Drawing in Appendix A.

GORE-SORBER® Passive Sorbent Collection Devices (sorbers) were used to conduct the soil gas survey due to their affinity for a broad range of VOCs and SVOCs. The sorber contaminant-passive approach involves collecting a sample over time on an adsorbent material. This approach not only provides high sensitivity for VOCs and SVOCs, but also allows for better success on sites with low soil permeability and minimizes fluctuations in soil gas availability due to changing ambient and subsurface conditions.

Fifty sorbers were installed along the fuel distribution lines at 50-foot intervals, as described in the FSP. Three of the 50 sorbers were field duplicates of sorber locations GS-3, GS-39, and GS-56. Two of the sorbers (GS-65 and GS-66) were field check sorbers installed in an area of known contamination. The FSP specified that the sorbers would be installed directly above the centerline of the pipelines. However, because the pipelines were found to be within several feet of the ground surface in many areas, the soil gas probes were positioned off the pipeline centerline, typically by 2 feet. As noted in the FSP, an attempt was made to locate joints/couplings in the pipeline and install sorbers near these locations. However, none were found and the pipeline companies had no information as to the location of the joints/couplings.

Based on discussions with the Air Force Base Conversion Agency (AFBCA) site manager and the AFCEE Contracting Officer's Representative (COR), five sorbers were placed along the pipelines transecting the Unnamed Stream area and 14 sorbers were placed in a grid in the West Fork of the Trinity River area. These areas were included because of suspected contamination in the vicinity based on previously identified petroleum odors and past environmental investigations (see Section 1.3.2).

The soil gas screening modules were installed by initially advancing a 0.75 to 1 inch diameter pilot hole to an average depth of 2 to 3 feet bgs using a slam bar. After the pilot hole was advanced to the desired installation depth, the screening modules were inserted.

The top of each cord was fastened to a cork, which was then tamped flush with the ground surface to facilitate retrieval of the module and to seal the annulus of the pilot hole.

The sorbers were retrieved from the site 14 days from the date of placement, sealed, and submitted with 6 trip blanks for laboratory analyses. Additional details regarding the GORE-SORBER® sample collection are provided in the project WP and FSP (TEC 1996a,c), and in the *GORE-SORBER Screening Survey Final Report* (Gore 1996) included in Appendix B.

2.2.2 SC Phase Field Program

SA/SI results identified four areas in need of additional study during the SC phase. This is necessary to properly evaluate the magnitude and extent of contamination and evaluate potential risks to human health and the environment. Accordingly, a subsurface soil characterization was performed during the SC phase.

Table 2-2 summarizes the SC DQOs for the subsurface soil characterization task as presented in the project WP. The locations, types, numbers, and methods of collecting SC phase field measurements and samples are described below.

2.2.2.1 Subsurface Characterization

Based on the cumulative results of all of the above-noted SA/SI phase activities, a subsurface soil investigation was performed at each of the four areas to characterize the near-surface lithology and to confirm the presence or absence of subsurface petroleum hydrocarbon contamination. A total of 29 subsurface soil samples, excluding QA/QC samples, were collected as part of the SC effort. Table 2-3 summarizes the type and number of subsurface soil samples collected and lists the general analytical requirements for each sample type. Appendix C provides a comprehensive summary and cross reference of all sample identification information collected during the SC phase of the project.

The TEC WP and FSP initially specified installation of an estimated 15 soil borings in the pipeline investigation area during the SC phase of the project. Twelve of the 15 planned soil boring locations were drilled. Three planned soil borings were not installed due to adverse weather conditions which resulted in unstable conditions. Coordinates and elevations of all subsurface soil sampling locations for the project are provided in Appendix A. (SA/SI phase soil gas samples were intended for screening purposes only to help identify potentially contaminated areas requiring more definitive sample collection and analysis efforts. In general, screening data do not meet the objectives of the Installation Restoration Program Information Management System (IRPIMS). Consequently, the coordinates and elevations of these locations are not summarized in Appendix A.)

Figure 2-1 depicts the soil boring locations. Borings SB-01 and SB-02 were drilled in the Valve Box area, one to the north of the valve box and the other to the south. Borings SB-03 to SB-07 were drilled in the Unnamed Stream area as close to the pipelines as possible. Three borings, SB-08 to SB-10, were drilled in the Farmers Branch Creek area, with one located on the south bank of Farmers Creek and the other two located on the north bank. Borings SB-11 and SB-12 were drilled in the West Fork of the Trinity River. Three of the borings (SB-13 through SB-15) planned for the West Fork of the Trinity River area were not drilled as indicated above.

The boreholes were advanced using the hollow-stem auger (HSA) drilling technique by Rone Engineers, Inc. The HSA method offers greater lithologic control during sample collection because sampling tools (e.g., split-spoon sampler) can be inserted while the augers are in place supporting the borehole walls. All drilling activities conformed with state and local regulations and were supervised by a state-licensed geologist/engineer.

All soil borings were drilled to approximately 5 feet below the encountered groundwater table or refusal, whichever occurred first. All borings were properly abandoned according to procedures outlined in the FSP.

The WP originally specified that two subsurface soil samples were to be collected from each borehole. However, based on the conditions encountered and to better delineate the potential sources of contamination, an additional sample was collected from each of seven boreholes (i.e., SB-01, SB-02, SB-03, SB-05, SB-06, SB-11, and SB-12).

The soil samples were collected at approximately 2.5-foot intervals using a 5 -foot-long stainless steel, continuous drive, split-spoon sampler. Immediately upon retrieval and opening of the split-spoon, the soils were screened for organic vapors using the photoionizing detector (PID) and a lithologic description of the sample was made. Field screening was performed by filling a precleaned glass jar approximately half full with a soil sample, quickly covering the jar top with aluminum foil, and securing the foil seal with the screw cap. The soil samples were then vigorously shaken for approximately 30 seconds and allowed to equilibrate a minimum of 15 minutes and a maximum of 2 hours (120 minutes) to a temperature of approximately 25°C. The jar headspace was then screened for organic vapors by puncturing the foil seal with the PID probe, inserting the tip to a distance approximately one-half the headspace depth, and recording the highest reading displayed on the instrument meter.

All information regarding field headspace screening results, soil texture, density, consistency, and color was recorded on soil boring logs. These logs are presented in Appendix D. PID screening results are discussed in Section 3.0.

Two to three samples from each borehole were typically collected for chemical analysis. Two samples were collected from borehole locations where organic vapor readings indicated no contamination. In locations where organic vapor readings exceeded background and/or ambient conditions, three samples were collected for chemical characterization. The samples generally were collected at intervals that would aid in identifying the contaminant source and characterizing contamination within unsaturated and saturated media. In boreholes where the organic vapor readings indicated the presence of a contaminant-free zone between the pipeline and deeper contaminated soils, a sample from this potentially clean interval was collected. Subsequent analytical samples were collected from intervals that provided the highest organic vapor readings in the unsaturated zone. The final sample was collected from the bottom of the borehole.

Split-spoon soil samples selected for definitive VOC analyses were placed in appropriate sample containers in accordance with procedures defined in the FSP. These containers were filled to minimize headspace, affixed with a completed sample label, placed in a plastic bag, and placed in an iced cooler held at a temperature below 4°C. VOC samples were not composited.

Samples collected for other definitive analyses of other analytical parameters (i.e., SVOCs and inorganics as shown in Table 2-3) were collected concurrently with the VOC samples. Sample handling, packaging, and shipping procedures were as defined in the FSP. In some cases, composites were formed to provide sufficient sample volume for a particular analysis. The composite procedure involved mixing and homogenizing the soil from two consecutive depth locations in the same borehole using a stainless steel bowl and stainless steel trowel or scoop. The composite sample was then transferred into the appropriate sample container, sealed, labeled, and placed in an iced cooler at 4 degrees Celsius (°C). Samples were delivered to the laboratory and analyzed for selected compounds (Section 2.3.1).

Throughout the drilling and sampling process, all drilling equipment that contacted samples was decontaminated in designated decontamination stations using procedures outlined in the FSP. Each station consisted of a pad that was lined with heavy-gauge plastic sheeting and designed with a collection system to capture decontamination waters. The drilling rigs and associated drilling equipment were steam-cleaned between borings to minimize the potential for cross-contamination. All decontamination fluids were contained and temporarily stored on Carswell AFB property. Other investigation-derived waste included soil cuttings generated during drilling, which were also collected and stored on AFB property. These wastes were characterized and disposed of as non-hazardous wastes in accordance with TNRCC regulations (Appendix E).

2.2.3 General Record Keeping

Field records were maintained in sufficient detail to recreate all sampling and measurement activities and to meet all IRPIMS data loading and HQ AFCEE requirements. The types of hard copy field records developed included:

- Project log books, including the master Site Log Book, the Health and Safety Log Book, and the Geologic Log Book;
- Field Sampling/Data Forms; and
- Sample Chain-of-Custody forms.

The Site Log Book is the master field investigation document that is a bound book with a hard cover and sequentially numbered pages. The primary objective of the Site Log Book is to maintain, within one document, the actual field data or references to other field documents that contain a specific description of every activity that has occurred in the field on any given day. Any administrative occurrences, conditions, or activities that affected the field work were recorded in the Site Log Book. All field activities entered into the Site Log Book were signed and dated by the responsible party. Other appropriate information, as specified in the FSP, was also recorded in the Site Log Book.

The purpose of the Health and Safety Log Book is to document the proper use, maintenance, and calibration of health and safety instrumentation, record results of regular safety briefings, and describe conditions relating to potential worker and/or site visitor health and safety-related issues during the performance of field work. The Geologic Log Book is used to document drilling procedures, site conditions, lithologic observations, subcontractor performance, and other issues related to the subsurface soil characterization effort. The log books contain all of the information specified in the FSP, including:

- Location;
- Date and time;
- Persons performing activity;
- Weather conditions;
- Sample type and sampling method;
- Sample identity and depth(s);
- Amount of each sample;
- Sample description (e.g., color, odor, clarity);
- Identification of sampling devices; and
- Identification of conditions that might affect the representativeness of a sample (e.g., refueling operations, damaged casing).

For field measurements, the numerical value and units of each measurement and the identity of and calibration results for each field instrument were also recorded.

In addition to the above-referenced log books, standardized field data forms for all field activities were maintained. As specified in the FSP, the forms consist of the following:

- Soil Gas Survey Data Sheet;
- Boring Log;
- Waste Inventory Tracking Form;
- Field Sampling Report;
- Chain-of-Custody Form;
- Health and Safety Monitoring Sheet;
- Instrument Calibration Log; and
- Equipment Decontamination Log Sheet.

Completed field data forms are presented in Appendix F. Chain-of-Custody forms are provided in Appendix G. Original copies of all field records and project log books are maintained at TEC headquarters in Charlottesville, Virginia. These log books are in an easily accessible form that can be made immediately available to the Air Force upon request.

Procedures for completing and maintaining field records were as specified in the FSP (TEC, 1996a). Records were kept for all field activities as a means to maintain full documentation of project QA/QC procedures and compliance. Errors in records were corrected by crossing them out with a single line and then dating and initialing. The documents used during the SA/SI and SC field investigations remained on-site during the entire effort so that they could be reviewed by interested parties. Forms were organized and kept in a central file also located on-site.

2.2.4 Project Team Members

The site assessment, inspection, and characterization efforts were performed by TEC personnel, as well as task-specific subcontractor specialists operating under the direct supervision of the TEC Project Manager. Key project personnel and specialty subcontractors included in this effort are identified below along with their respective project responsibilities.

- Project Director - Jack Wilson, P.E.
- Project Manager - Bob Duffner, P.E.
- Principal Geologist - King Troensegaard, CPG
- Senior Chemist - Glenn Metzler
- Senior Toxicologist - Dawn Nelson
- Surveying Subcontractor - Baird, Hampton and Brown
- Analytical Subcontractor - Inchcape Testing Services
- Drilling Subcontractor - Rone Engineers, Inc.
- Geophysical Subcontractor - ULS Services Company

2.2.5 Chronology of Field Work

Field work associated with the Pipeline Investigation occurred in August and October 1996. The chronology of specific SA/SI and SC phase field tasks is as follows:

- Land Survey - August 14, 1996 to August 16, 1996
- Utility Location Survey - August 14, 1996 to August 16, 1996
- Site Reconnaissance - August 14, 1996 to August 16, 1996
- Soil Gas Sampling
  - Sorber Installation - August 14, 1996 to August 16, 1996
  - Sorber Retrieval - August 28, 1996 to August 29, 1996
- Subsurface Soil Characterization - October 22, 1996 to October 30, 1996

2.2.6 Field Quality Assurance/Quality Control

To ensure that sampling and monitoring activities regularly meet the prescribed DQOs, TEC maintains a formal, comprehensive field QA/QC program for field measurements and environmental sampling and analysis. Key components of the program include developing a project-specific QA Project Plan in accordance with EPA and AFCEE guidance; establishing DQOs; applying pre-defined standard operating procedures (SOPs) for field sampling, record keeping, and laboratory analysis; conducting multiple levels of technical review of project activities, results, and deliverables; and implementing independent QA audits/corrective actions.

For this project, QC responsibility rested primarily with the project manager and field task leaders. These individuals were closest to the field tasks and were therefore most capable of controlling the overall quality of the work. They implemented their QC responsibility through five primary methods: clear and accurate instructions, integrated planning, close coordination/communication with the client, spot checking of work in progress, and review of all products and deliverables.

QA, in comparison, is oriented toward ensuring that quality products are developed. QA is therefore best applied by personnel who are not directly connected to the specific activities being evaluated. For the pipeline investigation, QA was the responsibility of TEC's Project Director. He ensured that all AFCEE policies, procedures, and objectives were met in all project tasks. To accomplish this, he received and reviewed copies of all written correspondence, audited office-based activities as appropriate, documented audit findings, and

recommended corrective actions. Additional detail pertaining to specific QA/QC program activities, problems encountered, and corrective actions taken is provided below.

2.2.6.1 Quality Control Activities

To ensure that samples of appropriate quality and reliability were obtained, all pipeline investigation field activities included the following QC elements:

- Use of AFCEE- and EPA-approved sample collections, field measurement methods, and containers;
- Use of properly calibrated and maintained field instruments appropriate for the anticipated task and DQO;
- Calibration of field instruments to within acceptable limits according to EPA and/or manufacturers' recommendations before, during, and after use in the field;
- Routine periodic inspection and maintenance of all equipment and instruments in accordance with manufacturer's recommendations;
- Use of EPA-accepted sample-handling, preparation, and preservation methods;
- Collection of all important associated environmental data (e.g., weather conditions, sample location observations, unique or abnormal conditions) using acceptable and applicable methods and equipment;
- Use of Department of Transportation (DOT)-approved sample shipment procedures;
- Use of formal chain-of-custody procedures in the field and during shipment;
- Collection of appropriate numbers and types of field QC samples; and
- Maintenance of adequate records and logs of all field-related activity.

In addition to adhering to well-defined SOPs, a number of equipment and/or field measurement-specific QC checks were performed. These included periodic calibration of field instruments and operational checks performed according to the manufacturer's instrument manuals and the AFCEE IRP *Handbook* (1993).

All field instruments were calibrated on a daily basis when in use. The PID was calibrated at least twice per day. In some instances, calibration was performed more frequently. Calibration, repair, and service records were kept in individual site log books as described above, and on Instrument Calibration Log Sheets (Appendix F). Each instrument's individual identification number was transcribed on field data records when it was used for a sampling event. Calibration data were compared to the manufacturer's equipment calibration control limits. Field equipment that consistently failed to meet calibration standards or exceeded the manufacturer's control limits was promptly repaired or replaced.

Field QC samples included equipment blanks, trip blanks, and ambient blanks. Table 2-3 summarizes the type and number of field QC samples collected. Appendix H illustrates the correlation between the various field QC sample types and the environmental samples collected in each of the four study areas. For example, equipment blank FC-WQ-EB-02 applies to environmental samples FC-SB-04-01 through FC-SB-06-03 collected at the Unnamed Stream area.

Equipment blanks were collected to assess the effectiveness of equipment decontamination procedures. A total of four equipment blanks were collected (Table 2-3) at a rate of one per day during subsurface characterization activities at the jet fuel distribution line areas. Equipment blanks were created by pouring a sample of American Society of Testing and Materials (ASTM) Type II reagent grade water into or over the decontaminated split spoon sampler, collecting the water in an appropriate sample container, and packaging/transporting the sample to the laboratory for analysis. The equipment blanks were analyzed for all laboratory parameters requested for the environmental samples collected at the study area.

Trip blanks were used to assess potential cross contamination of environmental samples during transportation and storage. A total of five trip blanks were submitted (Table 2-3) at the rate of one per cooler of samples sent to the laboratory for analysis of VOCs. The trip blanks consisted of a VOC sample vial filled in the laboratory with ASTM Type II reagent grade water, transported to the sampling site, handled like an environmental sample, and returned to the laboratory for analysis. Trip blanks were not opened in the field and were prepared only when environmental samples were collected and submitted for VOC analysis. Consequently, trip blank samples were analyzed only for VOC analytes.

Ambient blanks were used to assess the potential introduction of contaminants from ambient sources (e.g., active runways, engine test cells, internal combustion motors in operation) to the samples during collection. A single ambient blank was collected during the SC field investigation at the West Fork of the Trinity River study area. The sample was collected downwind of potential VOC sources that could have impacted the field samples. Furthermore, because the study area is located in a commercial area of the City of Fort Worth, numerous potential sources of airborne contamination are possible. The ambient blank consisted of ASTM Type II reagent grade water poured into a VOC sample vial at the sampling site. It was handled like an environmental sample and transported to the laboratory for VOC analysis.

2.2.6.2 Quality Assurance Activities

Two types of QA audits are typically performed as a part of TEC's overall QA program: generic and project-specific. Generic audits are performed periodically for each engineering or environmental program and technical services area in the company. Their frequency is determined by the results of previous audits, with a minimum of one per environmental program/technical service area per year. The need for more frequent audits is determined based on the following considerations:

- The importance of the activity to the successful completion of stated corporate objectives;
- Significant changes in the functional areas of the quality assurance program, such as significant reorganization or procedural revisions;
- A suspected nonconformance in an item or service; or
- The necessity to verify implementation of required corrective action.

Project-specific audits are performed at a frequency dictated by contractual agreements and as noted in the project QAPPs. No project-specific audit was performed for this investigation.

2.2.6.3 Problems Detected and Corrective Actions Taken

Comparison of equipment calibration records (Appendix F) with manufacturer-specified calibration control limits indicated no significant problems with field equipment and/or instrumentation that required corrective action.

2.3 LABORATORY ANALYSIS

This section describes the analytical program developed to accomplish the objectives of the Pipeline Investigation SA/SI and SC project. Included are brief descriptions of the overall analytical program including the laboratories involved, and the analytical parameters and methods specified, the chronology of the laboratory analyses, and the QA/QC program that supported the analytical program.

2.3.1 Analytical Program

As noted previously, two types of analytical data quality levels were identified for this project: screening and definitive. Screening analytical data included field measurements of organic vapors in the headspace of subsurface soil samples, particle size distributions for subsurface soil samples, and qualitative measurements of VOCs in subsurface soil gas and hydrocarbon fingerprinting analysis. Definitive data consisted of chemical characteristics of subsurface soil samples.

The soil gas samples collected during the SA/SI Phase were analyzed at W.L. GORE & Associates Screening Module Laboratory (GORE) for a general fuel hydrocarbon list including BTEX, alkanes, and certain SVOCs. Appendix I provides a complete listing of the soil gas analytical parameters. Analytical techniques included thermal desorption, gas chromatography, and mass spectroscopy. Soil gas analytical results are presented in Appendix B.

Hydrocarbon fingerprinting of subsurface soil samples collected in the Unnamed Stream and West Fork of the Trinity River areas was performed by Friedman and Bruya. The hydrocarbon fingerprinting technique was used to differentiate between multiple potential contaminant sources. In this technique, contaminants were extracted from sample media and injected into a gas chromatograph (GC). The contaminant was disassociated into its individual constituents based primarily on the boiling points of the constituents. The individual constituents were then separately detected using a flame ionization detector (FID) and an electron capture detector (ECD). Based on the retention time of the constituents in the instrument, and a comparison of the resulting chromatographic patterns with a reference library of products (e.g., gasoline, diesel, JP4, JP8), it was possible for the analytical laboratory to identify the type of product present in the contaminated sample media. Results of the fingerprint analyses are presented in Appendix J and summarized in Section 3.0.

The subsurface soil samples collected for definitive characterization were analyzed for TPH, BTEX, VOCs, SVOCs, and inorganic elements.

The analytical work was performed utilizing the *United States Environmental Protection Agency (USEPA) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846, Third Edition). Appendix I provides a comprehensive list of the analytical parameters and analytical methods for each sample. Table 2-3 summarizes the general analytical requirements for each subsurface soil sample. All laboratory analyses for definitive quality level data were performed by Inchcape Testing Services, Inc. A summary of extraction and analysis dates listed

by field sample number and laboratory number is provided in Appendix K. Raw data are provided with the data validation report in Appendix L.

2.3.2 Chronology of Laboratory Analyses

Environmental sampling during the project occurred in August and October 1996. Appendix K provides a comprehensive chronology of associated laboratory extraction and analysis dates for each field sample.

2.3.3 Quality Assurance/Quality Control Program

For all analytical work, whether carried out in the laboratory or in the field, strict adherence to established analytical program QA/QC is required. Analytical QC checks for both screening and definitive data are defined in the project QAPP and included blank, spike surrogate, replicate, and matrix spike duplicates samples in accordance with a predetermined schedule. The results are tabulated and placed on control charts so that any deviations from routine analytical performance can be identified and rectified. Procedures for routine instrument tuning, calibration, and maintenance are also carefully applied and documented.

Appendix H provides a summary of laboratory QA/QC samples collected for this project. QC procedures for screening samples are summarized in Table 2-4. Laboratory QC results for definitive data are summarized in the quality control report presented in Appendix M. Included are lists of the types of QC samples collected, the frequency of QC sample analyses, problems detected, and corrective actions taken. In addition to laboratory QC actions, results were independently validated. The Data Validation Report is presented in Appendix L and discussed in Section 3.0. The methodology for assessing and validating the data is described in Section 2.4.1.

Technical systems and performance audits were performed as independent assessments of sample collection and analysis procedures. Audit results were used to evaluate the ability of the testing laboratories to produce data that fulfilled the project objectives, comply with the QC criteria, and identify areas requiring corrective action. A complete description of the audit program is outlined in the QAPP (TEC 1996b).

2.4 DATA EVALUATION

This section briefly discusses the procedures used to identify, validate, reduce, interpret, and use field and analytical data generated during the project. Included are discussions of the methodology for data quality assessment, methodology for risk evaluation, and data analysis and interpretation.

2.4.1 Methodology for Data Quality Assessment

This section briefly summarizes the procedures used to identify valid laboratory analytical data. As previously noted, soil gas samples were collected for screening purposes only and therefore a formal validation of the analytical data resulting from those activities was not performed. For soil gas data, the screening laboratory's QA/QC controls and data reporting formats were checked. Results of the data quality assessment for the soil gas survey are discussed in Section 3.2.

The analytical data for the subsurface soil samples were independently validated by ChemWorld Environmental, Inc. The validation process included evaluating the data for acceptability for use

in the SC study and identifying deviations in the data in accordance with the QAPP (TEC 1996b); the AFCEE data validation requirements; and the SW-846 Methods, where applicable and relevant. The following criteria were evaluated during the data validation:

- Holding Times;
- Surrogate Recovery;
- Matrix Spikes (MS) and Matrix Spike Duplicates (MSD);
- Laboratory Control Samples (LCS);
- Initial and Continuing Calibration;
- Blanks (Method and Field);
- Gas Chromatography/Mass Spectroscopy (GC/MS) Instrument Performance Check (for GC/MS methods only);
- Internal Standards (for GC/MS methods only);
- Field Duplicates;
- Compound Identification;
- Compound Quantitation and Reported Detection Limits;
- Inductively Coupled Plasma (ICP) Interference Check Sample (for Atomic Absorption (AA) and ICP methods only);
- ICP Serial Dilution (for AA and ICP methods only); and
- Sample Result Verification (for AA and ICP methods only).

The results of the data validation are presented in the Data Validation Report in Appendix L and are discussed in Section 3.0.

2.4.2 Data Analysis and Interpretation

Data collected during the SA/SI phase included background information primarily obtained through a review of existing investigation documents, records, and other undocumented reports. This information was reviewed to identify potential areas of concern associated with the pipeline areas. The historic data were also reviewed to identify other contaminant sources that could impact areas traversed by the pipeline.

The general quality and reliability of these data sources were evaluated through examining of items such as the relative age of the data, considering the methods by which the data were obtained, and assessing of the degree of comparability of data from different sources. Data judged to be representative of site conditions and of suitable quality for the purposes of this study were then compared to pipeline product characteristics and evaluated for evidence of contaminant release and migration potential with respect to the pipeline location.

As necessary and appropriate, data generated during this project were evaluated by preparing descriptive statistics, charts, graphs, tables, and other interpretive tools, many of which are presented in this report. These included:

- Boring logs;
- Vertical cross sections depicting geologic conditions;

- Aerial maps illustrating site hydrology/geology, contaminant types, contaminant concentrations, and spatial/temporal relationships; and
- Tabulated data summarizing sample physical/chemical evaluations, trends, spatial relationships, and statistics.

SI data were primarily limited to the soil gas survey results. The volatile and semivolatile soil gas screening results were initially analyzed by comparing field data directly against values obtained from trip blanks and method blanks. In addition, a qualitative graphical analysis was performed on the field data in an attempt to identify factors impacting the data, but not associated with the pipeline. For example, low-level concentrations present in samples collected at all locations were interpreted as being associated with background or ambient conditions. Concentrations exceeding those found in the blanks and/or the assumed background/ambient conditions were interpreted as indications of contamination that is potentially associated with the pipeline(s). Results are discussed in Section 3.0.

During the SC subsurface soil investigation, samples were collected and characterized with respect to lithology, organic vapors, and chemical constituents. Lithologic data were plotted as geologic cross sections and interpreted with respect to the location of the pipeline and contaminants detected through organic vapors and/or chemical analyses. Chemical data were compared to background levels and screening action levels, developed as part of the risk evaluation (Section 2.4.3). Results of these evaluations, discussed in Section 3.0, were used to refine the conceptual model of the site and to identify potential contaminant release and migration routes (Section 4.0).

Organic vapor readings were analyzed relative to background and ambient conditions. Organic vapor readings of ambient conditions collected by the PID meter were found to be influenced by soil moisture. Subsurface soil organic vapor readings exceeding background and/or ambient conditions were interpreted as indications of contamination. These readings were used directly in selecting samples for chemical characterization as described in Section 2.2.2.2.

2.4.3 Methodology for Risk Evaluation

The risk evaluation for the pipeline investigation was performed to meet the objectives of the project, which were to identify the nature and magnitude of contamination associated with the pipelines and to evaluate corresponding potential risks. Because of the supporting nature of the SC to other investigations at NAS Fort Worth, a streamlined approach for the risk evaluation was taken in an effort to focus on potential contamination that was not previously identified in the other studies.

Human health risks were evaluated for the pipeline investigation area through development of health-based action levels (ALs) for subsurface soil. These ALs were compared with the site concentrations to characterize human health risks. Ecological risks were semi-quantitatively evaluated using a conservative screening level assessment as part of a tiered approach. In this approach, site concentrations were initially compared to established ecological benchmark concentrations to evaluate the potential impact of the detected compounds on ecological receptors. Based on the results of this screening, subsequent tiers, which represent more complex and site-specific assessments, were discussed.

The human health risk evaluation presented in this report is consistent with the approaches and methods outlined in the AFCEE *Handbook* (USAF 1993), TNRCC Petroleum Storage Tank Division (PSTD) guidance (TNRCC 1994, RG-36), and TAC Chapter 335, Subchapter S (TNRCC 1996). All of these references, as well as this risk evaluation, generally follow standard risk assessment procedures, which include identifying chemicals of potential concern (COPCs), identifying potential receptors and exposure pathways, evaluating the toxicity of the COPCs, and characterizing risks (EPA 1989a). The ecological risk assessment tiered approach is consistent with methods provided in the *Framework for Ecological Risk Assessment* (EPA 1992a) and the *Draft Guidance for Conducting Ecological Risk Assessment Under The Texas Risk Reduction Program* (McBee et al. 1996).

Because of different contaminant types and/or regulatory requirements, this risk evaluation relies on two regulatory protocols to evaluate the study area. Both protocols are governed by TNRCC Office of Waste, but under different divisions (Petroleum Storage Tank and Industrial and Hazardous Waste). Potential contaminants in subsurface soil associated with the Valve Box, Farmers Branch Creek, and the West Fork of the Trinity River areas are limited to petroleum-related materials. In addition, the West Fork of the Trinity River area is currently regulated under the Leaking Storage Tank Program (LSTP). Therefore, health risks for these areas were evaluated in accordance with protocols and guidelines set forth in TNRCC Petroleum PSTD's risk-based corrective action (RBCA) methods, as outlined in *Risk-Based Corrective Action for Leaking Storage Tank Sites* (TNRCC 1994, RG-36) and *Guidance for Risk-Based Assessments at LSTP Sites in Texas* (TNRCC 1995, RG-175).

The Unnamed Stream area is currently regulated as a RCRA site (as the Abandoned Service Station Site) under the TNRCC Risk Reduction Standards (Taffinder 1996). Therefore, potential risks associated with the subsurface soil in this area were evaluated using protocols specified in TAC Chapter 335, Subchapter S, "Risk Reduction Standard Numbers 1 and 2" (RRSN1 and RRSN2).

Both the PSTD RBCA and the Subchapter S methods rely on a two-tiered approach. The first tier is a simple screening evaluation, while the second tier is a comprehensive, site-specific risk assessment. Plan A under the PSTD program and RRSN1 under Subchapter S represent first-tier assessments. Plan B under the PSTD program and RRSN2 under Subchapter S represent second-tier assessments. Plan A and RRSN1 methods were employed as screening tools in Section 3.0 to identify chemicals needing further evaluation of their potential human health impacts and eliminate those that contribute minimally to overall human health risks. These methods were used to generate screening action levels (SALs) for the Valve Box, Farmers Branch Creek, and the West Fork of the Trinity River areas (using Plan A) and the Unnamed Stream area (using RRSN1). Chemicals that were not screened out were carried forward in the risk evaluation and development of ALs (Section 5.0). ALs were developed in accordance with methodology provided in Plan B and RRSN2.

The general purpose of Plan A and RRSN1 is to clean sites to levels that ensure adequate protection of human health without the use of institutional controls and to provide a mechanism for eliminating a more costly and time-consuming site-specific risk assessment if site concentrations are below the Plan A or RRSN1 concentrations. Plan A and RRSN1 provide little flexibility in developing cleanup levels, but eliminate the time and expense needed to conduct a full-scale risk assessment. Plan B and RRSN2 require risk assessments, but provide more flexibility in the site cleanup and may result in a more focused cleanup effort. Screening

procedures in risk assessment are designed to be conservative so that chemicals posing potentially significant risks are not prematurely eliminated. Thus, the SALs developed in the risk evaluation are conservative in light of the actual land use on-site (described in Section 5.1.2).

The methods for developing the SALs are discussed in the section below. Section 2.4.3.2 describes the development of ALs and how ALs were used in the risk evaluation to characterize risk.

2.4.3.1 Screening Action Levels

This section describes the SALs separately for the areas evaluated under the PSTD program and those evaluated under Subchapter S. Table 2-5 summarizes the basis for each SAL. The SALs were used in Section 3.0 to identify a list of chemicals to be carried forward to the risk evaluation.

PSTD Areas. The SALs derived under Plan A methods were based on guidance-specified methods and conservative exposure assumptions. Detected concentrations in the PSTD areas were compared to SALs that were based on the lower of either the protection of Category I groundwater or residential soil ingestion Plan A concentrations provided in Appendix A, Table A-1 of TNRCC (1994). For compounds not listed in Table A-1, soil SALs were derived using the equations and default exposure assumptions for residential groundwater consumption specified in Appendix A and multiplying by the recommended default concentration reduction factor (100). In each case, the groundwater protection concentration was the lower value. Groundwater protection as a basis for developing SALs was considered appropriate because compounds were detected within 15 feet bgs (TNRCC 1994). Groundwater protection concentrations corresponding to the beneficial use Category I were applied as a conservative measure. In addition, potential beneficial use of the groundwater in the vicinity of the Unnamed Stream area is designated as Category I groundwater by TNRCC because of potential contaminant migration into local surface water (Benson 1997b). Although groundwater below the West Fork of the Trinity River is designated Category II groundwater (Maki 1997), for simplicity and consistency with the other areas, Category I target concentrations were used as SALs for this area.

The groundwater protection concentrations were based on Federal Maximum Concentration Levels (MCLs), if available; otherwise health-based residential drinking water concentrations were calculated (TNRCC 1994). SALs were calculated assuming a 1×10^{-6} risk level for carcinogens and a hazard quotient of 1 for noncarcinogens, as specified in TNRCC (1994). If neither an MCL nor a health-based concentration (due to a lack of a toxicity factor) was available for an inorganic compound or if the derived SAL was lower than the measured background (described below), the background soil concentration was used as the SAL.

RRSN Areas. The SALs for the Unnamed Stream area were based on upper tolerance limits (UTLs) of distributions of background soil data populations estimated for Carswell AFB in the *Draft NAS Fort Worth JRB, Texas Basewide Background Study Volume I* (Jacobs 1997). UTLs for some of the metals were subsequently revised when samples were reanalyzed (Jacobs 1998). The UTLs for metals in soil were accepted by TNRCC and can be used in this study (Jacobs 1998). Both surface (defined as Horizon A, ground surface to a depth of 2 feet) and subsurface (defined as Horizon B, second encountered soil type below the organically rich

surface soil) soil were sampled and analyzed for inorganic constituents. Jacobs (1997) collected 30 samples from each horizon. The analytical results were used to calculate background concentrations using the tolerance interval method to estimate UTLs with 95 percent confidence and 95 percent coverage ($UTL_{95,95}$). This value represents a 95 percent confidence that 95 percent of the background population lies below the $UTL_{95,95}$. A site value greater than the UTL has only a 5 percent probability of being from the background population and therefore may indicate site-related contamination (Jacobs 1997).

2.4.3.2 Action Levels

As discussed in Sections 4.0 and 5.1, the risk evaluation focused on risks associated with subsurface soils in the Valve Box and Farmers Branch Creek areas. COPCs and ALs were not developed since no contaminants were identified as concentrations greater than SALs.

Table 2-1 SA/SI Phase Data Quality Objectives

Activity	Data Type	Intended Use	Quality Category
Land Survey	State Plane Coordinates	Precisely Locate Easements, Sample Locations	Screening
Utility Location Survey	Field Reference Points	General Location of Underground Utilities	Screening
Site Reconnaissance	Visual Observations	Qualitatively Identify Areas of Stress or Other Abnormalities	Screening
Subsurface Soil Screen	Photoionization Detector (PID) Measurements	General Presence or Absence of VOCs	Screening
Soil Gas Survey	PID Measurements	General Presence or Absence of VOCs	Screening

Table 2-2 SC Phase Data Quality Objectives

Activity	Data Type	Intended Use	Quality Category
Subsurface Soil Characterization	Physical Parameters	Characterize Geology and Contaminant Migration Potential	Screening
Subsurface Soil Characterization	Chemical Parameters	Magnitude and Extent of Chemical Contamination; Risk Assessment	Definitive
Subsurface Soil Characterization	Hydrocarbon Fingerprinting	Correlate contaminant type identified in environmental samples to product type used	Screening

Table 2-3 SC Phase Sample Collection and Analysis Summary

		Number of Analyses					
Sample Element	No. of Samples	VOCs 8240	BTEX 8020	SVOCs 8270	Inorganics 6010/7470 7471/7421	TPH 8015M	TPH Fingerprint GC
Valve Box Area							
Field Samples	6	1	5	4	1	6	
Duplicates	0						
Trip Blanks	1	1					
Equipment Blanks	1	1		1	1	1	
Unnamed Stream Area							
Field Samples	12	4	8	9	5	12	2
Duplicates	1		1	1		1	
Trip Blanks	2	2					
Equipment Blanks	1	1		1	1	1	
Farmers Branch Creek Area							
Field Samples	5	1	4	5	1	5	
Duplicates	1		1	1		1	
Trip Blanks	1	1					
Equipment Blanks	1	1		1	1	1	
West Fork of the Trinity River Area							
Field Samples	6	2	4	6	2	6	1
Duplicates	0						
Trip Blanks	1	1					
Ambient Blanks	1	1					
Equipment Blanks	1	1		1	1	1	

Note: Only one ambient sample was collected; however it applies to all areas.

Table 2-4 Summary of Calibration and QC Procedures for Screening Methods

Method	Applicable Parameter	QC Check	Minimum Frequency	Acceptance Criteria	Corrective Action[a]
None	Org. vapor conc. (FID and PID)	2 point calibration	Monthly	Response ± 20% of expected value	Recalibrate; replace if necessary
		Calibration verification and check	Daily at beginning and end of day	Response ± 20% of expected value	Correct problem, recalibrate
None	Passive soil gas	See Section 6.2.1 of QAPP	See Section 6.2.1	See Section 6.2.1	Correct problem, repeat measurement
8015 M	Hydrocarbon fingerprint	See Section 6.2.2 of QAPP	See Section 6.2.2	See Section 6.2.2	Correct problem, repeat measurement

[a] All corrective actions were documented in field records.

Table 2-5 Basis for TNRCC Screening Action Levels (SALs) for the Pipeline Investigation

Compound	TNRCC Screening Action Levels (mg/kg) Valve Box, Farmers Creek, West Fork of the Trinity River Areas[a]	Basis for Action Level	Unnamed Stream Area[b]	Basis for Action Level
Metals				
Aluminum	20,260	BKGRD[d]	20,260	BKGRD
Antimony	0.712	BKGRD[c]	ND	--
Arsenic	6.58	BKGRD[c]	6.58	BKGRD
Barium	200	GWP, MCL	128.1	BKGRD
Beryllium	1.13	BKGRD[c]	1.13	BKGRD
Cadmium	0.59	BKGRD[c]	0.59	BKGRD
Calcium	272,000	BKGRD[d]	272,000	BKGRD
Chromium	16.31	BKGRD[c]	16.31	BKGRD
Cobalt	6.19	BKGRD[d]	6.19	BKGRD
Copper	135	GWP, GWHBC	13.72	BKGRD
Iron	17,469	BKGRD[d]	17,469	BKGRD
Lead	12.66	BKGRD[d]	12.66	BKGRD
Magnesium	2,420	BKGRD[d]	2,420	BKGRD
Manganese	511	GWP, GWHBC	351.7	BKGRD
Mercury	ND	--	0.035U	BKGRD
Nickel	19.76	BKGRD[c]	19.76	BKGRD
Potassium	1,717	BKGRD[d]	1,717	BKGRD
Sodium	53,200	BKGRD[d]	53,200	BKGRD
Selenium	5	GWP, MCL	0.313	BKGRD
Silver	ND	--	ND	--
Thallium	1.5	BKGRD[c]	ND	--
Vanadium	37.4	BKGRD[c]	37.4	BKGRD
Zinc	1,095	GWP, GWHBC	31.3	BKGRD
Volatile Organic Compounds				
Benzene	0.13	GWP (Table A-1)	--	BND
Toluene	69	GWP (Table A-1)	NA	BND
Ethylbenzene	160	GWP (Table A-1)	--	BND
mpXylene	568	GWP (Table A-1)	--	BND
oXylene	568	GWP (Table A-1)	--	BND
Methyl tert-butyl ether	5.6	GWP, DWEL	NA	--
2-Hexanone	NA	--	NA	--
Methyl isobutyl ketone	ND	--	NA	--
Semivolatiles				
2-Methylnaphthalene	389	GWP (Table A-1)[e]	NA	--
Phenanthrene	NA	--	--	BND
Bis(2-ethylhexyl)phthalate	0.5	GWP, MCL	--	BND
Naphthalene	389	GWP (Table A-1)	NA	--
2-Methylphenol	183	GWP, GWHBC	--	BND
4-Methylphenol	18.3	GWP, GWHBC	--	BND
Pesticides				
alpha-BHC	ND	--	NA	--
Endrin aldehyde	ND	--	NA	--
gamma-BHC (Lindane)	ND	--	NA	--

-- - not applicable, NA-not available, ND-not detected in specified area, BND-background not determined

BKGRD - subsurface soil background $UTL_{95,95}$ concentration measured at Carswell AFB for Horizon B (> 2 ft bgs) soils (Jacobs 1997, 1998)

GWP, DWEL - groundwater protection based on EPA drinking water equivalent level

GWP, GWHBC - groundwater protection for category I, based on 100 x groundwater health-based concentration for residential exposures

GWP, MCL - groundwater protection for category I, based on 100 x federal maximum contaminant level

Table A-1 - action level was obtained from Table A-1 in Risk-Based Corrective Action for Leaking Storage Tank Sites (TNRCC 1994)

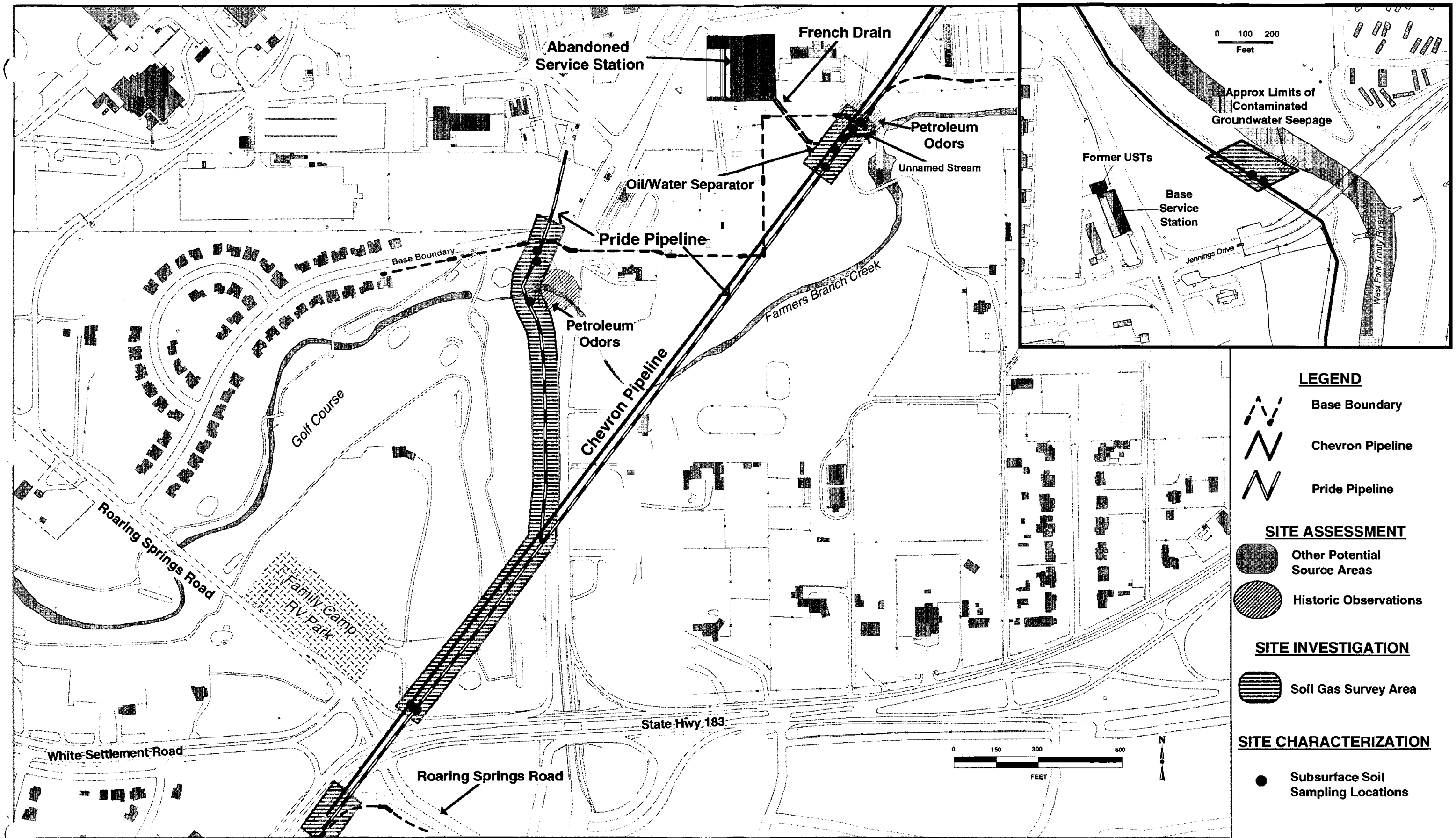
[a] Based on procedures for Plan A target concentrations specified in the Leaking Storage Tank Program risk-based corrective action guidance document (TNRCC 1994).

[b] Based on procedures specified in TNRCC Chapter 335, Subchapter S for Risk Reduction Standard Number 1 (TNRCC 1993).

[c] Background concentration was selected as screening action level because it was higher than the calculated health- or MCL-based value.

[d] Background concentration was selected as screening action level because neither a health-based concentration nor an MCL was available for this compound.

[e] For naphthalene.



The Environmental Company, Inc.

Figure 2-1 -- Site Assessment, Investigation, and Characterization Areas

Date: June 1998
Project Manager: B. Duffner
Prepared By: W. Mitchell
Project No: P-3101

TAB

3

3.0 PROJECT INVESTIGATIONS

The following sections below present the findings of the project investigations. Findings of the SA/SI were used to define the site environmental setting, identify potentially contaminated areas and assess potential sources of contamination along the pipelines.

An SC was performed in areas identified in the SA/SI as having potential contamination associated with the pipelines. The objective of this phase of the field investigation was to delineate the nature and magnitude of contamination, identify the sources of contamination, and characterize environmental site conditions.

3.1 SITE ASSESSMENT

The SA consisted of three activities. The first activity was a land survey. The land survey reports included a site drawing showing prominent study area features and boundaries, as well as the sampling locations identified above, and tabulated summaries of state plane coordinates for the surveyed features. The site drawing is presented in Appendix A. The second activity was a utility location survey. The third activity was a walk-through survey of the site to document visual observations of potential contamination of soil. The background search to assemble all available information related to the pipeline, including interviews with Carswell AFBCA personnel, is detailed in Section 1.0. The following summarizes the findings of the background search:

- Petroleum-related odors were reported on two occasions in the vicinity of the Pride pipeline near Farmers Branch Creek (Long 1996).
- The Pride pipeline service line, which crosses the Farmers Branch Creek, reportedly carried JP4 from 1983 to 1994 and has carried JP8 since 1994 (Duggan 1997).
- Releases from the Abandoned Service Station and associated French drain system and oil/water separator have contributed to subsurface soil and groundwater POL contamination at the Unnamed Stream area near the Pride and Chevron pipelines.
- Petroleum-related odors were reported on one occasion at the Unnamed Stream area near the Pride and Chevron pipeline stream crossings.
- The section of the Pride pipeline crossing the Unnamed Stream area reportedly carried crude oil from the 1950s to 1983, when it was abandoned (Duggan 1997).
- Releases from the BSS have contributed to subsurface soil and groundwater contamination between the BSS and the West Fork of the Trinity River in the vicinity of the Chevron pipeline (COE 1994).
- Visual inspection and pressure testing of the Chevron pipeline in the BSS area indicated no signs of leaks from the pipeline in 1992 (Ernst 1997).
- The Chevron pipeline, which crosses the Unnamed Stream area and lies along the West Fork of the Trinity River, reportedly carried multiple commercial fuels and was abandoned in 1988 (Powell 1997).

The only finding of the walk-through survey was the observation of stained soils in the vicinity of the Valve Box. The exposed pipelines crossing the Unnamed Stream were also

noted. However, there were no signs of contamination at the pipe crossings. No other visible evidence of surface soil contamination along the pipelines was noted.

3.2 SITE INVESTIGATION

The SI consisted of a soil gas survey of the site. The sections below discuss the survey and data quality assessment results, as well as identification of potentially contaminated areas based on the survey results.

3.2.1 Soil Gas Survey Data Quality Assessment

This section discusses the field and laboratory data quality of the soil gas survey based on field records (Appendix F) and the soil gas laboratory report (Appendix B). The assessment of the data quality is performed in accordance with the criteria outlined in the AFCEE *Handbook*. Because the soil gas survey was a screening procedure, some of the data quality assessment criteria specified in the AFCEE *Handbook* are not applicable.

3.2.1.1 Field Records Quality Assessment

Requirements for field sampling activities specified in the SOW (TEC 1995) for the area of study were fulfilled. With the few exceptions discussed in Section 2.2.1.4, field activities, including installation of the sorbers, are consistent with the procedures and methods outlined in the FSP and QAPP (TEC 1996a,b). The field records are complete for each sampling event and are consistent with the procedures specified in the FSP and QAPP (TEC 1996a,b). Soil gas sample data sheets were completed for all installed sorbers. These data sheets include the sample number, sample type, time and date installed, depth of installation, and sampling horizon conditions. The installation field procedures, as well as environmental conditions, generally were consistent for all the sorbers. A chain of custody for the survey was also completed in accordance with procedures outlined in the QAPP (TEC 1996b).

Field records were evaluated for the validity of soil gas samples. With one exception, the field log book indicates that installation of soil gas probes was successful and there were no problems that may impair the equipment's ability to detect contamination. Field records note that the tile probe on the sorber at sample location GS-40 broke during installation because of extremely hard ground; a back-up sorber was installed. During retrieval of the probes, several of the corks on the sorber modules used to retrieve the devices were disturbed; however, all of the sorbers were recovered and appeared to be intact. This anomaly is not expected to affect the results of the sampling. In addition, one sorber installed at sample location GS-08 was lost in the field and not retrieved. Because other sorbers were installed in the vicinity of GS-08, the loss of the GS-08 sorber is not expected to impact the objectives of the SI. No other method was used to collect soil gas.

Sixty-nine of the 70 installed soil gas sorbers were retrieved from the site 14 days from the date of placement (as noted above, one sorber was irretrievable). Once retrieved, the sorbers, along with six trip blank sorbers and four duplicates, were placed in a cooler, sealed with custody tape, and delivered to the laboratory with a chain-of-custody record and retrieval log. The chain-of-custody form(s) delivered with the sorbers is provided in the Soil Gas Report found in Appendix B.

3.2.1.2 Laboratory Data Quality Assessment

Because the soil gas data are screening data, a formal data validation was not performed. However, an internal data check was performed to review the laboratory's QA/QC controls and consistency in the data reporting.

All of the retrieved sorbers (69) and trip blanks (6) were analyzed by thermal desorption (Perkin-Elmer ATD-400) coupled with gas chromatography (HP 5890 gas chromatographs) and mass spectroscopy (5971A mass selective). GORE laboratory practices are consistent with Good Laboratory Practices (GLP) guidelines and ISO Guide 25 (GORE 1996). QA/QC measures were undertaken to ensure sample representativeness, as specified in the QAPP (TEC 1996b). Laboratory QA/QC controls included instrument, manufacturing, and method blanks, as well as calibration standards. Three method blanks were analyzed prior to each run sequence, as well as after every 30 samples and/or trip blanks (GORE 1996). In addition, standards containing the selected compounds at three calibration levels (5, 20, 50 µg) were analyzed prior to each run and a second-source reference standard, at a level of 20 µg of each compound, was analyzed after every 10 samples and/or trip blanks (GORE 1996). Control limits did not fall outside of the acceptable range, and the traceability and instrument performance are reproducible and accurate (GORE 1996).

As specified in the QAPP, positive identification of target compounds was determined by the presence of the target ion and at least two secondary ions, retention time versus reference standard, and the analyst's judgment (GORE 1996). The Soil Gas Report is provided in Appendix B.

3.2.2 Soil Gas Survey Data Summary

Eighteen of the 24 compounds analyzed for were detected in the soil gas samples. Analytical results of the detected compounds in soil gas are presented in Table 3-1. Four of these compounds, the chlorinated solvents chloroform, 1,1,1-trichloroethane, trichloroethylene (TCE), and tetrachloroethene (PCE), are not considered to be related to contamination that may be associated with the pipelines.

To identify potential values of concern, the contaminant masses desorbed were compared to the method detection limits and masses reported in the trip and method blanks in a manner that is consistent with EPA guidelines (EPA 1989a, 1992b). Method detection limits (MDLs) and the results of trip and method blanks are presented in Table 3-1.

Practical quantitation limits (PQLs) were not assigned by the laboratory. Therefore, to identify potential values of concern, a factor of five times the MDL was used. Reported values less than this were not considered a concern. A factor was also applied to values for those compounds detected in trip and/or method blanks. Four of the 26 analytes were detected in the blanks. These included toluene, undecane, m,p-xylene, and petroleum hydrocarbons. Detected masses of these compounds in the field samples that were less than 10 times the maximum detected masses in the trip and/or method blanks were not considered as a value of concern. Potential values of concern are identified in Table 3-1.

Statistical analyses were performed on the detected results to identify data trends. As shown in Table 3-2, all compounds except PCE, ethylbenzene, and o-xylene were

detected in less than 10 percent of the samples collected. Most were detected less than 5 percent of the time. In interpreting these results, it was assumed that low frequency of detection of petroleum-related compounds would indicate the presence of isolated anomalies and areas of potential concern as opposed to more extensive contamination along the entire length of the pipeline. As shown in Table 3-2, parameter results are generally represented by average detected masses several orders of magnitude lower than the maximum mass detected, and a low frequency of detection. The few anomalous results with relatively higher reported masses generally indicate low to no soil gas contamination along the Pride and Chevron pipelines, with the exception of a few distinct areas where values are elevated. These areas are discussed in the section below.

3.2.3 Potential Source Identification

Soil gas sorber locations that contained analyte masses at potential levels of concern include GS-3-1, GS-23, GS-40, GS-47, GS-49, GS-59, and GS-65. Sorber locations are identified on the Site Base Map provided in Appendix A. GS-3-1 was located adjacent to the Pride and Chevron pipelines near the Valve Box adjacent to Highway 183. GS-23, GS-40, and GS-47 were located along the Pride pipeline serving the NAS Fort Worth fuel distribution tanks. GS-49 was located along the Pride and Chevron pipelines in the Unnamed Stream area. GS-59 was located along the West Fork of the Trinity River. GS-65 was located near the BSS-removed USTs in a known area of contamination for comparative purposes.

Sorbers from two locations, GS-3-1 and GS-65, contained multiple analytes at masses that were significantly greater than all others. Sorbers from the Valve Box area (GS-31) and the BSS (GS-65) contained petroleum hydrocarbon masses of 173.13 µg and 819.64 µg, respectively. Petroleum hydrocarbons were not detected in any other sample.

Prior to the soil gas survey, reports of petroleum-related odors and historical investigation results suggested that contamination of soil may exist in the Farmers Branch Creek area directly west of Pumphrey Drive, the Unnamed Stream area, and the West Fork of the Trinity River area, as discussed in Section 1.3. These locations correspond to sorber locations GS-40, GS-49, and GS-59, respectively. Low levels of petroleum-related compounds (ethylbenzene and xylenes) were detected in soil gas sorber GS-40 located at the edge of the Farmers Branch Creek area. Low levels of these same compounds were detected in soil gas sorber GS-49 located in the Unnamed Stream area. Sorber GS-59, located along the West Fork of the Trinity River, contained only undecane at relatively low levels.

The soil gas survey results, along with the historical information presented in Figure 2-1, were used to locate the most appropriate areas for additional investigation during the SC. These areas include the following:

- Valve Box area;
- Farmers Branch Creek area directly west of Pumphrey Drive;
- Unnamed Stream area; and
- West Fork of the Trinity River area.

3.3 SITE CHARACTERIZATION

Based on the results of the SA/SI, an SC was conducted in areas identified as needing additional investigation. The SC consisted of a subsurface soil investigation performed through the advancement of boreholes and the collection of samples for organic vapor screening, lithologic characterization, and chemical characterization. The section below provides a description of the field and laboratory data, followed by discussions of the SC results by area. The SC results include a description of the borehole location and lithology, a summary of screening and analytical results of the soil boring sampling, and a comparison of analytical results with screening action levels.

3.3.1 Field and Laboratory Data Quality Assessment

Field and laboratory data quality assessment was performed through an independent validation of the inorganic and organic analyses. A completed data validation report is provided in Appendix L. Included in the data validation summary report is a copy of all analysis data sheets with qualifiers. Qualifier definitions are provided in Table 3-3. Summaries of the data quality assessment for each analysis performed are provided below. Included in the summaries are the results of laboratory method blanks and field blanks (trip, equipment, and ambient). A summary table that identifies individual field samples associated with each blank sample is provided in Appendix H.

3.3.1.1 Volatile Organics

The potential volatile chemicals of concern and the analytes that were detected in the pipeline investigation area are limited to petroleum-related compounds. A limited number of samples were analyzed by SW-846 Method 8240. The majority were analyzed by SW826 Method 8020 as discussed below.

The VOC results obtained by SW-846 Method 8240 are considered invalid due to laboratory-related limitations and are usable only for qualitative purposes in this report (Appendix N). These data are marked with an "R" in the qualification columns of data summary tables (Tables 3-8 to 3-11). These limitations were identified following completion of the draft investigation report (TEC 1997). The analytical results previously rejected for this analysis are not affected. Data that had been determined to be useable by the data validation process are affected and are marked with an "R" in the qualifier columns of the data summary tables (Tables 3-8 to 3-11).

As presented in Section 3.3.5, the only area with detectable concentrations of VOCs reported for Method 8240 is the West Fork of the Trinity River, which has been evaluated under a separate contract. The data for this area in this report were treated as qualitative in discussions of potential source areas and migration pathways. Because the primary focus of the SC was to determine whether the pipelines are potential hydrocarbon contaminant sources, qualitative use of the data should be sufficient to form conclusions regarding the conditions of the site and the need for further actions. Therefore, the laboratory-related limitations are not expected to affect the Risk Evaluation results or the investigation conclusions.

3.3.1.2 Volatile Aromatic Organics (BTEX Compounds)

Volatile aromatic organics were analyzed for by SW-846 Method 8020. These analyses were not affected by the laboratory-related limitations associated with Method 8240

analyses. All the data quality assessment criteria listed in Section 2.4.1 were generated within acceptable QC specifications. All of the data is considered to be valid and usable with appropriate qualifiers, as noted on the analysis data sheets provided in Appendix L.

Three method blanks were analyzed for volatile aromatic organics. Positive results were not detected in any of the blank samples. Equipment blanks were not analyzed for BTEX compounds because they were analyzed in the volatile organic analyses. As indicated in Section 3.3.1.1, volatile organic analyses are not valid for quantitative use (positive results were not reported for the equipment blank).

3.3.1.3 Volatile Hydrocarbons

All the data quality assessment criteria listed in Section 2.4.1 were generated within acceptable QC specifications. All of the data are considered to be valid and usable with appropriate qualifiers, as noted on the analysis data sheets provided in Appendix L.

Three method blanks and four equipment blanks were analyzed for volatile hydrocarbons. Positive results were not detected in any of the blank samples.

3.3.1.4 Extractable Hydrocarbons

All the data quality assessment criteria listed in Section 2.4.1 were generated within acceptable QC specifications. All of the data is considered to be valid and usable with appropriate qualifiers, as noted on the analysis data sheets provided in Appendix L.

Five method blanks were analyzed for extractable hydrocarbons. Positive results were not detected in any of the method blank samples. Four equipment blanks were collected and analyzed for TPH as diesel. Positive results were detected in FC-WQ-EB-02 (33 ug/L), FC-WQ-EB-03 (68 ug/L), and FC-WQ-EB-05 (126 ug/L). These results are reported at less than the PQL. The data were not qualified based upon these field blanks. A summary of the equipment blank sample analyses identifying positive results is provided in Table 3-4.

3.3.1.5 Semivolatile Organics

All the data quality assessment criteria listed in Section 2.4.1 were generated within acceptable QC specifications with deviations detailed as follows. The acid phenol compounds for the samples SB-01-01, SB-02-01, SB-01-01DL, and SB-02-01DL were qualified as "R," unusable, due to surrogate recovery of less than 10 percent. In addition, samples SB-01-01DL and SB-02-01DL were qualified as "R" for the non-detectable results for 4-chloroaniline because the solid LCS generated a recovery of 22 percent. The samples were reanalyzed with similar low recovery for one of the surrogate compounds. The remaining data are considered to be valid and usable with the appropriate qualifiers.

Three method blanks were analyzed for semivolatile organics. Positive results were not detected in any of the blank samples. Four equipment blanks were analyzed for semivolatile organics. Compounds were detected in two of four equipment blanks. Positive results were detected for di-n-butylphthalate in samples FC-WQ-EB-02 (2.62 ug/L), FC-WQ-EB-03 (1.76 ug/L). The results are reported at less than the

PQL. The data were not qualified based upon these field blanks. A summary of the equipment blank sample analyses identifying positive results is provided in Table 3-4.

3.3.1.6 Inorganics

All the data quality assessment criteria listed in Section 2.4.1 were generated within acceptable QC specifications. All of the data is considered to be valid and usable with appropriate qualifiers, as noted on the analysis data sheets provided in Appendix L.

Calcium was detected in the method blank at 262 ug/L. The three equipment blank samples associated with this method blank were qualified with a "B" to denote a concentration greater than the PQL of calcium in the associated method blank. A summary of the method blank sample analyses identifying positive results is provided in Table 3-5. A total of four equipment blanks were analyzed for inorganics. Positive results were reported for calcium, iron, and mercury in selected equipment blank samples. A summary of the equipment blank sample analyses identifying positive results is provided in Table 3-4. Sodium, calcium, and iron were detected above the PQL. Therefore, samples associated with equipment blank analyses were qualified with a "B," as defined in Table 3-3. The mercury results detected were all reported at less than the PQL. The samples were not qualified based on the equipment blank mercury analyses.

3.3.2 Valve Box Area Results

The Valve Box is approximately 2 feet by 1 foot and 2 feet deep. The box is located along the Pride pipeline adjacent to the north side of Highway 183, east of the entrance road to the RV Fam Camp. Visual observation of stained soils and elevated soil gas results were the basis for drilling boreholes and collecting subsurface soil samples in this area.

3.3.2.1 Borehole Location and Site-Specific Lithology

Borings SB-01 and SB-02 were advanced on either side of the Valve Box to the point of refusal, which occurred at 17 feet bgs in each boring. The borehole locations are shown on Figure 3-1. Logs for each borehole are provided in Appendix D.

The boreholes were advanced in the sediments and in the decomposed limestone soils that were developed by the weathering regimen and depositional activity influenced by the intermittent stream. Depth to bedrock at this area is 10 to 12 feet deeper than the area underlying the RV Fam Camp area, which is approximately 200 yards to the northwest.

A similar profile was intersected in both borings. The profile consisted of a 2-foot-thick layer of organic silty-clay topsoil followed by 10 feet of light-gray silts with a significant clay content. These soils are the weathering product of the underlying shaley limestone that is first intersected at 12 to 13 feet bgs. The last few feet above refusal are dominated by increasing amounts of limestone and shale fragments.

In boring SB-01, a slight petroleum odor was noted at 5 feet, which increased in intensity in the 5- to 7.5-foot interval and then decreased slightly with depth. Similarly, in boring SB-02, petroleum odors were noted in the 8- to 10-foot range but none below 10 feet. No obvious petroleum staining was observed in either boring. No water was observed at the time of drilling.

3.3.2.2 Subsurface Soil Screening and Analytical Sample Selection

Table 3-6 summarizes the organic vapor soil screening readings. Elevated organic vapor was recorded at all intervals in SB-01 with an increase recorded at 7.5 to 12.5 feet bgs. Similar readings at slightly lower depths (5 to 10 feet bgs) were recorded for SB-02. Based on this screening, Table 3-7 presents the depths selected for soil boring sample collection and the laboratory analyses specified for each sample. A total of six samples (three from each borehole) were collected and submitted for laboratory analysis of inorganics, VOCs, BTEX, SVOCs, and TPH.

3.3.2.3 Data Summary

A summary of the subsurface soil analytical results for compounds detected in borings SB-01 and SB-02 is presented in Table 3-8. Results for the petroleum-related organic compounds are also shown in Figure 3-1. Extractable and volatile hydrocarbons were detected in the upper borehole samples at concentrations generally above the laboratory PQLs. Several inorganic compounds were also detected, as were some BTEX compounds and a limited number of SVOCs. Only three VOCs (using SW-846 Method 8020), toluene, ethylbenzene, and xylene, were detected in collected samples. The highest concentrations were present above 10 feet bgs. Figure 3-1 illustrates that samples collected from SB-02, located on the west side of the Valve Box, had more detects of BTEX and SVOCs than those collected from SB-01.

Site concentrations are compared to SALs in Table 3-8. Concentrations of all detected compounds were below SALs.

3.3.3 Farmers Branch Creek Area Results

The Pride pipeline, which serves NAS Fort Worth, crosses Farmers Branch Creek on the west side of Pumphrey Drive, south of Ascol Drive. The pipeline depth increases as it drops below the creek bed, which is 10 to 15 feet below its banks. Reported petroleum-related odors and the soil gas survey results are the basis for drilling boreholes and collecting subsurface soil samples in this area.

3.3.3.1 Borehole Location and Site-Specific Lithology

Three borings, SB-08, SB-09, and SB-10, were advanced in this area. SB-08 was located on the south bank of Farmers Branch Creek, while the other two borings were located on the north bank (Figure 3-2). Borehole logs for each hole are provided in Appendix D. All the borings were advanced in alluvial deposits of Farmers Branch Creek, which consisted of silts and fine sands in the upper portions of the boreholes, followed by medium-grained sands and gravels at the base. The silts of SB-09 and SB-10 were moderately to strongly cemented by caliche in the 7-foot interval above the water table. Water was encountered in all boreholes at a depth corresponding to the elevation of Farmers Branch Creek (10.1 feet bgs in SB-08, 15 feet bgs in SB-09, and 15.5 feet bgs in SB-10). No petroleum odors were observed in any of the borings.

3.3.3.2 Subsurface Soil Screening and Analytical Sample Selection

As shown in Table 3-6, organic vapors generally remained consistently at ambient conditions throughout the soil boreholes, with a few minor fluctuations. Readings above 0.0 parts per million (ppm) (12 ppm to 27 ppm) were shown to be attributed to

moisture buildup within the headspace, which increases PID meter readings. Table 3-7 presents the depths selected for soil boring sample collection and the laboratory analyses specified for each sample. Only one to two samples were collected from each borehole because of the apparent lack of significant levels of contamination. Samples were collected at intervals below the projected depth of the pipeline and at the bottom of the borehole if additional depth was achieved. A total of five soil borehole samples plus a duplicate were collected and submitted for laboratory analysis of inorganics, VOCs, BTEX, SVOCs, and TPH.

3.3.3.3 Data Summary

The subsurface soil analytical results of detected compounds for the three borings advanced adjacent to Farmers Branch Creek are presented in Table 3-9. Sample locations are shown in Figure 3-2. No VOCs, BTEX, SVOCs, or TPHs were detected in any of the Farmers Branch Creek samples. Several inorganic compounds were detected at relatively low levels in SB-08, the only sample submitted for this type of analysis. The manganese concentration slightly exceeded the SAL at SB-08.

3.3.4 Unnamed Stream Area Results

As discussed in Section 1.3.2, while surveying the area in the early 1990s, Carswell AFB personnel accompanied by regulatory personnel noted petroleum-type odors near the stream (Long 1996). In addition, historical investigations have shown that petroleum-related subsurface contamination exists in this area. These observations, together with the soil gas survey results, are the basis for advancing boreholes in the Unnamed Stream area.

3.3.4.1 Borehole Location and Site-Specific Lithology

Five borings, SB-03, SB-04, SB-05, SB-06, and SB-07, were advanced in this area (Figure 3-3). Borehole logs are provided in Appendix G. Two previously existing monitoring wells along with the estimated location of the removed french drain and oil/water separator are also shown for reference. Also shown is the general uppermost groundwater flow direction as inferred by Law (1995). All borings were placed as close as possible to the pipelines, which are buried approximately 4 feet bgs. Silts and clays containing freshwater mussel, land snail shells, and varying amounts of caliche were encountered in all five borings. These soils resulted from sediments deposited by Farmers Branch Creek. The dark brown color of the soils suggests a relatively high carbon content, indicating that they were possibly deposited in a swamp or an isolated lagoon-like environment. Clay lenses up to 9 feet thick were encountered in SB-05 and SB-06, which were advanced directly on the banks of the Unnamed Stream. The lower portions of borings SB-05 and SB-06 passed through lighter colored clays and are mixed with fragments of decomposed limestone.

Borehole refusal was met at depths varying from 7 to 21 feet. Two of the borings intersected a limestone shelf at 7 feet (SB-07) and 8.5 feet (SB-04). It is assumed, based on elevation, that the shallow limestone encountered extends to the south across to Farmers Branch Creek where it is exposed and forms a 5- to 10-foot high ledge across the creek. The other three boreholes were situated in alluvial depositional environments (SB-03; refusal at 21 feet) and were advanced to refusal at 21 feet bgs (SB-03 and SB-05) and 17 feet bgs (SB-06).

Moderate to strong petroleum odor was observed in borings SB-03 and SB-05 in the intervals between 10 feet and refusal. Both of these borings were located to the south of the Unnamed Stream. No odor was observed in boring SB-06 on the north side of the stream or in the two shallow borings, SB-04 and SB-07.

In the area below the zone affected by recent rains, the soils were dry and firm to stiff in consistency. Water was encountered in all three boreholes situated in the thicker alluvial deposits. Water levels were at 15.5 feet bgs in SB-03, 16.3 feet bgs in SB-05, and 8.7 feet bgs in SB-06. Water encountered in SB-06 may have been localized on the clay lenses and associated with the stream rather than the shallow groundwater table encountered in the other borings. No floating petroleum products were detected by the interface probe.

3.3.4.2 Subsurface Soil Screening and Analytical Sample Selection

Table 3-6 summarizes the organic vapor soil screening readings. Elevated organic vapor readings in SB-03 and SB-05 indicated the presence of contamination in these boreholes. In SB-03, organic vapor remained at ambient conditions (less than 30 ppm) until 10 to 20 feet bgs, where readings increased an order of magnitude. Levels decreased seven-fold in saturated soils at the 20 to 21 feet bgs depth range. Similarly, organic vapor readings in SB-05 increased two orders of magnitude in the 10 to 18 feet bgs depth range. Constant low readings were observed throughout the borehole columns in SB-04 and SB-07. Although readings in SB-06 generally were low, a relative increase was noted at 10 to 12 feet bgs.

Based on this screening, Table 3-7 presents the depths selected for soil boring sample collection and the laboratory analyses specified for each sample. Two samples were collected from each borehole, one from the interval with the highest organic vapor screening reading and one from the uppermost saturated interval. One additional sample each was collected from SB03, SB05, and SB06 between the pipeline and the interval with the highest screening reading to better delineate contamination sources. A total of 12 soil borehole samples plus a duplicate were collected and submitted for laboratory analysis of inorganics, VOCs, BTEX, SVOCs, and TPH. One sample each from SB-03 and SB-05 were submitted for hydrocarbon fingerprinting analysis to determine the type of TPH detected in these boreholes.

3.3.4.3 Data Summary

A summary of the subsurface soil analytical results of detected compounds for the samples collected in the Unnamed Stream area is provided in Table 3-10. The organic analytical results are also shown in Figure 3-3. Extractable and volatile hydrocarbons, as well as inorganic compounds, were detected in several samples. Hydrocarbon concentrations were greatest in the extractable fraction in all samples, with concentrations ranging from "not detected" to 1,000 mg/Kg. BTEX were present in a number of samples, but at concentrations generally below the PQL, indicating that the detects are estimated values associated with uncertainty. The sample collected from SB-03 at a depth of 10.0 to 12.5 feet bgs was the only sample with BTEX concentrations well above the PQL. Two SVOCs were also detected (2-methylnaphthalene and phenanthrene).

Figure 3-3 illustrates that the highest petroleum-related concentrations were found in the southern-most soil boring (SB-03), located directly southeast of the removed

oil/water separator. Hydrocarbon fingerprinting of one sample collected from SB-03 and one collected from SB-05 indicated that the TPH present in these boreholes is evaporatively weathered light naphtha, such as JP4. There was no evidence of a regular pattern of *n*-alkanes, suggesting that the petroleum material has been extensively biodegraded. The hydrocarbon fingerprinting characterization report is provided in Appendix J.

The Unnamed Stream SALs, shown in Table 3-10, are based on background subsurface soil concentrations. Of the inorganics detected in the Unnamed Stream samples, only lead exceeded the SAL. Organic compounds were not analyzed for in background samples. The potential sources and migration pathway of these compounds are discussed in Section 4.3. The potential risks associated with this area are evaluated under a separate contract (Benson 1997b) and are not characterized in this report.

3.3.5 West Fork of the Trinity River Area Results

As described in Section 1.4, extensive investigations have been conducted on the site of the former BSS, which is located 500 feet upgradient to the southwest of the West Fork of the Trinity River area. Significant releases of petroleum product from leaking USTs and connecting pipes have been described at this site. This information along with the soil gas survey results form the basis for collecting subsurface soil samples in this area. The Chevron pipeline runs along the south river bank through this area at a depth of approximately 4 feet bgs.

3.3.5.1 Borehole Location and Site-Specific Lithology

Two boreholes (SB-11 and SB-12) were drilled on the south bank of the West Fork of the Trinity River, along the Chevron pipeline, as shown in Figure 3-4. Logs for each borehole are provided in Appendix G. The boreholes were placed within a contamination zone reportedly associated with the BSS and/or the Base Gas Station sites. The groundwater contamination zone along the river bank was projected by the COE in 1994 to span a length of approximately 600 feet based on TPH concentrations, with the center of the plume extending from monitoring well BSSB to monitoring well MW10 and the historic seep location (Figure 3-4). The two boreholes were installed approximately 30 feet and 80 feet southeast of the center of the projected plume.

Both boreholes were drilled to 25 feet bgs without encountering refusal. Both penetrated a column of interbedded silts and sands of the Trinity River alluvial plain and encountered the water table at approximately 19 feet bgs. These sediments were generally moist and friable but firm-to-stiff in their consistency. There were no indications of contamination directly below the pipeline at 4 feet bgs. At 16 feet bgs in SB-11 and 15 feet bgs in SB-12, moderate petroleum odors and staining were observed. Odor and staining increased in intensity with depth and persisted to the base of both boreholes. No visual evidence of petroleum contamination was noted between the ground surface and 15 to 16 feet bgs.

3.3.5.2 Subsurface Soil Screening and Analytical Sample Selection

Table 3-6 summarizes the organic vapor soil screening readings, which indicate that the upper 16 feet of soil at both borehole locations were free of contamination. Readings indicate an increase in the presence of contamination with depth, beginning at

approximately 15 to 20 feet bgs in both boreholes. Based on this screening, Table 3-7 presents the depths selected for soil boring sample collection and the laboratory analyses specified for each sample.

Three samples were collected from each borehole. One was collected above the depths where high PID readings were encountered to demonstrate the relation of the pipeline to the underlying contamination. Two deeper samples were collected from each borehole at the interval with the highest PID reading, which was within the uppermost zone of saturation. The samples were submitted for laboratory analysis of inorganics, VOCs, BTEX, SVOCs, and TPH. One sample collected from SB-12 (SB-12-03) was submitted for hydrocarbon fingerprinting analysis.

3.3.5.3 Data Summary

A summary of the subsurface soil analytical results of detected compounds for the samples collected in the West Fork of the Trinity River area is presented in Table 3-11. The organic compound results are also shown in Figure 3-4.

Extractable hydrocarbons, VOCs, SVOCs, and inorganic compounds were detected in samples collected from both boreholes. The analytical results support the PID screening readings that indicate that contamination is not present between the pipeline and a depth of approximately 17.5 feet bgs. At depths of 10.0 to 12.5 feet bgs, hydrocarbons were not detected in SB-11 and were reported below the PQL at 2.75 mg/Kg in SB-12. Combined volatile and extractable hydrocarbons in SB-11 increased from 0.25 mg/Kg at 17.5 to 20.0 feet bgs to 615.30 mg/Kg in saturated soils at a depth of 20.0 to 22.5 feet bgs. A similar pattern with increased concentrations was found in SB-12 samples below 17.5 feet bgs. Combined hydrocarbon concentrations in the two samples between 17.5 feet and 25.0 feet were 922 mg/Kg and 398.1 mg/Kg. The reported combined BTEX concentrations in SB-11 and SB-12 mirrored the pattern shown by hydrocarbons with values ranging from "generally not detected" to 161.4569 mg/Kg at a depth of 22.5 to 25.0 feet bgs in SB-12 (Figure 3-4). The hydrocarbon fingerprinting results indicate that the TPH detected in borehole SB-12 was characteristic of gasoline (see Appendix J).

Antimony, benzene, and bis(2-ethylhexyl)phthalate were the only compounds with detected concentrations above the SALs. The potential sources and migration pathway of the contamination are discussed in Section 4.4. Potential risks associated with the West Fork of the Trinity River area are evaluated under a separate contract (IT 1996).

Table 3-1 Analytical Data Summary of Detected Compounds from the Soil Gas Survey

			Parameters																	
			Chloroform	1,1,1-Trichloroethane	Benzene[b]	Trichloroethylene	Toluene[b]	Octane[b]	Tetrachloroethene	Ethylbenzene[b]	m-,p-Xylene[b]	o-Xylene[b]	1,3,5-Trimethylbenzene[b]	1,2,4-Trimethylbenzene[b]	Undecane[b]	Naphthalene[b]	Tridecane[b]	2-Methylnaphthalene[b]	Pentadecane[b]	Petroleum Hydrocarbons[b]
Units: ug		MDL:	0.03	0.08	0.02	0	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.02	0.03	0	0.01	0.01	0.01	NA
Field ID[a]	Lab ID	Sample Date																		
GS-1	125685	09/12/1996	ND	ND	ND	ND	ND	ND	ND	0.11	0.32	0.18	ND	ND	ND	ND	ND	ND	ND	ND
GS-2	125686	09/12/1996	0.06	ND	ND	ND	ND	ND	ND	0.10	0.28	0.13	ND	ND	ND	ND	ND	ND	ND	ND
GS-3-1	125687	09/12/1996	ND	ND	ND	ND	ND	0.13	ND	ND	ND	ND	ND	ND	1.46	ND	1.16	ND	0.42	173.13
GS-3-2	125688	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-4	125689	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND
GS-5	125690	09/12/1996	ND	ND	ND	ND	ND	ND	ND	0.03	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND
GS-6	125691	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-7	125692	09/12/1996	0.12	ND	ND	ND	ND	ND	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND
GS-9	125694	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-10	125695	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-11	125696	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-12	125697	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-13	125698	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-14	125699	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-15	125700	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-16	125701	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-17	125702	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-18	125703	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-19	125704	09/13/1996	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-20	125708	09/13/1996	ND	ND	ND	ND	ND	ND	0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-21	125709	09/13/1996	ND	0.03	ND	ND	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-22	125710	09/13/1996	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-23	125711	09/13/1996	ND	ND	ND	ND	ND	ND	0.12	ND	ND	0.04	0.26	0.58	0.35	0.73	ND	ND	ND	ND
GS-24-1	125712	09/13/1996	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-24-2	125713	09/13/1996	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-25	125714	09/13/1996	ND	ND	ND	ND	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-26	125715	09/13/1996	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-27	125716	09/13/1996	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-28	125717	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-29	125718	09/13/1996	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-30	125719	09/13/1996	ND	ND	ND	ND	ND	ND	0.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-31	125720	09/13/1996	ND	ND	ND	ND	ND	ND	0.12	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND
GS-32	125721	09/13/1996	ND	ND	ND	ND	ND	ND	0.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-33	125722	09/13/1996	ND	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-34	125723	09/13/1996	ND	ND	ND	ND	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-35	125724	09/13/1996	ND	ND	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-36	125725	09/13/1996	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-37	125726	09/13/1996	ND	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-38	125727	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-39-1	125728	09/13/1996	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-39-2	125729	09/13/1996	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-40	125730	09/13/1996	ND	ND	ND	ND	ND	ND	ND	0.13	0.45	0.21	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

MDL - Method Detection Limit

ND - Not Detected above the MDL

NA - not available

a The soil gas sorber placed at GS-08 was lost in the field.

b Petroleum-related analyte.

Boxed values indicate potential concentration of concern based on reported value greater than 5 times the MDL and 10 times blank concentrations.

Table 3-1 Analytical Data Summary of Detected Compounds from the Soil Gas Survey, Continued

			Parameters																	
			Chloroform	1,1,1-Trichloroethane	Benzene[b]	Trichloroethylene	Toluene[b]	Octane[b]	Tetrachloroethene	Ethylbenzene[b]	m-,p-Xylene[b]	o-Xylene[b]	1,3,5-Trimethylbenzene[b]	1,2,4-Trimethylbenzene[b]	Undecane[b]	Naphthalene[b]	Tridecane[b]	2-Methylnaphthalene[b]	Pentadecane[b]	Petroleum Hydrocarbons[b]
Units: ug		MDL:	0.03	0.08	0.02	0	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.02	0.03	0	0.01	0.01	0.01	NA
Field ID[a]	Lab ID	Sample Date																		
GS-41	125731	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-42	125732	09/13/1996	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-43	125733	09/13/1996	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-44	125734	09/13/1996	ND	ND	ND	ND	ND	ND	0.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-45	125735	09/13/1996	ND	ND	ND	ND	ND	ND	0.05	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND
GS-46	125736	09/13/1996	ND	ND	ND	ND	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-47	125737	09/13/1996	ND	ND	ND	ND	ND	ND	ND	0.18	0.72	0.36	ND	ND	ND	ND	ND	ND	ND	ND
GS-48	125738	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-49	125739	09/13/1996	ND	ND	ND	ND	ND	ND	0.68	0.09	0.33	0.16	ND	ND	ND	ND	ND	ND	ND	ND
GS-50	125740	09/13/1996	ND	ND	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-51	125741	09/13/1996	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-52	125742	09/14/1996	ND	ND	ND	ND	ND	ND	5.71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-53	125743	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-54	125744	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-55	125745	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-56-1	125746	09/14/1996	ND	ND	ND	ND	ND	ND	ND	0.03	ND	0.09	ND	ND	ND	ND	ND	ND	ND	ND
GS-56-2	125748	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-57	125747	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-58	125749	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-59	125750	09/14/1996	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.21	ND	ND	ND	ND	ND
GS-60	125751	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-61	125752	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-62	125753	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-63	125754	09/14/1996	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GS-64	125755	09/14/1996	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND
GS-65[c]	125756	09/14/1996	ND	ND	42.56	ND	105.34	7.49	ND	2.70	84.89	35.63	38.61	14.70	4.57	0.64	0.42	0.18	0.06	819.64
GS-66[c]	125757	09/14/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TB-1	125758	09/12/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.75
TB-2	125759	09/13/1996	ND	ND	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.79
TB-3	125760	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.16
TB-4	125761	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.52
TB-5	125762	09/13/1996	ND	ND	ND	ND	0.06	ND	ND	ND	ND	ND	ND	ND	0.03	ND	ND	ND	ND	2.11
TB-6	125763	09/13/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.17
MB-1	NA	09/12/1996	ND	ND	ND	ND	0.12	ND	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	2.49
MB-2	NA	09/13/1996	ND	ND	ND	ND	0.26	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	3.71
MB-3	NA	09/13/1996	ND	ND	ND	ND	0.26	ND	ND	ND	0.04	ND	ND	ND	ND	ND	ND	ND	ND	0.41

Notes:

MDL - Method Detection Limit

ND - Not Detected above the MDL

NA - not available

a The soil gas sorber placed at GS-08 was lost in the field.

b Petroleum-related analyte.

c These were test sorbers intentionally installed in an area with known contamination (Base Service Station site) not related to the site.

Boxed values indicate potential concentration of concern based on reported value greater than 5 times the MDL and 10 times blank concentrations.

Table 3-2 Summary Statistics of Detected Compounds from the Soil Gas Survey

Parameter	No. of Detects/ No. of Samples	FOD	Minimum Mass (ug)	Maximum Mass (ug)	Average Mass (ug)	Median Mass (ug)
Chloroform	5/69	7%	0.06	0.22	0.02	MDL
1,1,1-Trichloroethane	1/69	1%	0.03	0.04	0.04	MDL
Benzene	2/69	3%	0.05	42.56	0.63	MDL
Trichloroethylene	1/69	1%	0.05	0.05	0.01	MDL
Toluene [a]	1/69	1%	105.34	105.34	1.54	MDL
Octane	2/69	3%	0.13	7.49	0.12	MDL
Tetrachloroethene	28/69	41%	0.02	5.71	0.16	MDL
Ethylbenzene	8/69	12%	0.03	2.7	0.05	MDL
m-,p-Xylene [a]	6/69	9%	0.28	84.89	1.26	MDL
o-Xylene	12/69	17%	0.02	35.63	0.54	MDL
1,3,5-Trimethylbenzene	3/69	4%	0.02	38.61	0.57	MDL
1,2,4-Trimethylbenzene	2/69	3%	0.58	14.7	0.23	MDL
Undecane [a]	5/69	7%	0.21	4.57	0.12	MDL
Naphthalene	2/69	3%	0.64	0.73	0.02	MDL
Tridecane	2/69	3%	0.42	1.16	0.03	MDL
2-Methylnaphthalene	1/69	1%	0.18	0.18	0.01	MDL
Pentadecane	2/69	3%	0.06	0.42	0.01	MDL
Petroleum Hydrocarbons [a b]	2/69	3%	173.13	819.64	14.4	0

Notes:

FOD - frequency of detect

One-half the method detection limit (MDL) was used for non-detects in calculations.

A detected concentration represents the mass desorbed from the GORE-Sorber modules.

[a] Because compound was detected in the blanks, data points < 10x the maximum blank concentration were treated as non-detects (EPA 1989, 1992).

[b] No MDL was available for petroleum hydrocarbons; as a result, the non-detects were set to zero.

Table 3-3 Data Qualifiers

Qualifier	Definition
Organics	
U	Indicates that the compound was analyzed for, but not detected. The associated numerical value is at or below the Method Detection Limit (MDL).
J	The compound was positively identified. The associated numerical value is an estimated quantity.
UJ	The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance from quality control limits.
F	The compound was positively identified. However, the associated numerical value is below the Practical Quantitation Limit (PQL).
B	The compound was found in the associated blank, as well as in the sample.
M	Designates that a matrix effect may be present due to accuracy and/or precision being generated out of specification for the matrix spike (MS)/MS duplicate (MSD).
E	Reported value is estimated due to quantitation above the calibration range.
D	Reported result taken from diluted sample analysis.
R	Reported value is unusable and rejected due to variance from quality control limits.
R'	Data considered invalid for quantitative purposes due to laboratory limitations.
Inorganics	
U	Indicates that the compound was analyzed for, but not detected. The associated numerical value is at or below the MDL.
J	The analyte was positively identified. The reported value is estimated due to variance from quality control limits.
UJ	The element was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance from quality control limits.
B	The compound was found in the associated blank, as well as in the sample.
M	Designates that a matrix effect may be present due to accuracy and/or precision being generated out of specification for the MS/MSD.
F	The compound was positively identified. However, the associated numerical value is below the PQL.
R	Reported value is unusable and rejected due to variance from quality control limits.

Source: Data Validation Report (Appendix L), based on the project-specific QAPP.

Table 3-4 Summary of Equipment Blank Sample Detected Results

		Sample Number[b]:	EB01	EB02	EB03	EB05
Parameters[a]	**PQL**	**MDL**				
Inorganics ug/L						
Antimony	400.0	2.30	ND	ND	ND	2.57 F
Barium	20.0	0.50	3.84 F[c]	1.15 F	0.74 F	2.02 F
Beryllium	3.0	0.10	0.28 F	0.18 F	0.19 F	ND
Cadmium	40.0	0.50	ND	0.50 F	ND	1.20 F
Calcium	100.0	29.60	686.69 B	313.54 B	274.96 B	306.34
Chromium	70.0	0.86	2.96 F	2.16 F	1.25 F	1.94 F
Copper	60.0	0.47	2.26 F	1.75 F	2.39 F	4.15 F
Iron	70.0	20.10	383.67	36.81 F	30.34 F	50.49 F
Lead	5.0	1.50	ND	ND	ND	2.05 F
Magnesium	300.0	12.10	76.69 F	66.05 F	64.89 F	72.64 F
Manganese	20.0	1.70	3.31 F	ND	ND	ND
Mercury	1.0	0.06	0.09 F	0.10 F	0.07 F	ND
Nickel	150.0	0.93	1.51 F	ND	ND	1.49 F
Sodium	300.0	226.00	654.57	ND	300.83 J	238.26 F
Thallium	400.0	3.60	4.54 F	ND	ND	ND
Zinc	20.0	12.50	ND	ND	ND	18.68 F
Extractable Hydrocarbons (ug/L)	1000.0	30.00	ND	33.00 F	68.00 F	126.00 F
Semivolatile Organics (ug/L)						
Di-n-butylphthalate	10.0	1.60	ND	2.62 F	1.76 F	ND

MDL: Method Detection Limit

ND: Not Detected above the method detection limit

PQL: Practical Quantitation Limit

[a]Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.

[b]Sample EB04 is associated with the RV Fam Camp, which is addressed in a separate report (TEC 1998).

[c]See Table 3-3 for data qualifier definitions.

Table 3-5 Summary of Method Blank Sample Detected Results

Lab Sample ID Number:				12056-19	12092-15	12092-17	12170-21	12170-26
Units:				mg/Kg	mg/Kg	ug/L	mg/Kg	ug/L
Matrix:				Soil	Soil	Water	Soil	Water
Parameters[a]	PQL		MDL					
Inorganics	mg/Kg	ug/L	mg/Kg					
Aluminum	50.0	500.0	2.05	1.15 F[b]	1.15 F	ND	ND	ND
Antimony	40.0	400.0	0.42	ND	ND	ND	4.67 F	ND
Barium	2.0	20.0	0.04	ND	ND	0.72 F	ND	ND
Cadmium	4.0	40.0	0.03	ND	ND	ND	0.26 F	ND
Calcium	10.0	100.0	9.47	ND	ND	262.17	ND	ND
Chromium	7.0	70.0	0.08	ND	ND	1.62 F	ND	3.51 F
Copper	6.0	60.0	0.20	ND	ND	1.33 F	ND	0.85 F
Iron	7.0	70.0	1.05	ND	ND	28.99 F	ND	ND
Magnesium	30.0	300.0	0.27	2.31 F	2.31 F	63.87 F	0.56 F	ND
Mercury	0.1	1.0	0.03	ND	ND	0.08 F	ND	0.07 F
Potassium	500.0	5000.0	21.15	26.92 F	26.92 F	ND	ND	ND
Zinc	2.0	20.0	0.29	0.63 F	0.63 F	ND	1.07 F	15.89 F

MDL - Method Detection Limit

ND - Not Detected above the method detection limit

PQL - Practical Quantitation Limit

[a]Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.

[b]See Table 3-3 for data qualifier definitions.

Table 3-6 Organic Vapor Soil Screening Summary

Investigation Area	Location	Analytical Sample Number	Sample Depth Interval (feet)			Relative Moisture Content[a]	Organic Vapor[b] (ppm)
Valve Box	SB-01	NS	0.0	to	2.5	M	49.5
		NS	2.5	to	5.0	D	47.0
		NS	5.0	to	7.5	M	21.0
		-01	7.5	to	10.0	M	152.0
		-02	10.0	to	12.5	M	329.0
		-03	12.5	to	15.0	M	74.0
		NS	15.0	to	17.0	M	41.0
	SB-02	NS	0.0	to	2.5	M	15.0
		NS	2.5	to	5.0	D	32.0
		-01	5.0	to	7.5	D	159.0
		-02	7.5	to	10.0	D	370.0
		-03	10.0	to	12.5	M	69.0
		NS	12.5	to	15.0	M	35.0
		NS	15.0	to	17.5	M	24.5
Unnamed Stream	SB-03	NS	0.0	to	2.5	M	24.0
		NS	2.5	to	5.0	D	21.0
		NS	5.0	to	7.5	D	16.0
		NS	7.5	to	10.0	D	15.0
		-01	10.0	to	12.5	D	701.0
		NS	12.5	to	15.0	D	674.0
		-02	15.0	to	17.5	M	704.0
		NS	17.5	to	20.0	M	754.0
		-03	20.0	to	21.5	S	124.0
	SB-04	NS	0.0	to	2.5	M	32.0
		NS	2.5	to	5.0	M	29.0
		-01	5.0	to	7.5	M	22.0
		-02	7.5	to	10.0	D	10.0
	SB-05	NS	0.0	to	2.5	M	1.0
		NS	2.5	to	5.0	D	1.0
		NS	5.0	to	7.5	D	7.0
		-01	7.5	to	10.0	M	5.0
		NS	10.0	to	13.5	M	497.0/540.0
		-02	13.5	to	16.0	M	660.0
		NS	16.0	to	18.5	M	615.0
		-03	18.5	to	21.0	S	58.0
	SB-06	NS	0.0	to	2.5	M	0.0
		NS	2.5	to	5.0	M	0.0
		NS	5.0	to	7.5	M	0.0
		-01	7.5	to	10.0	M	0.0
		-02	10.0	to	12.5	M	16.0
		NS	12.5	to	15.0	M	0.0
		-03	15.0	to	17.5	M	0.0
	SB-07	NS	0.0	to	2.5	M	0.0
		NS	2.5	to	5.0	M	0.0
		-01	5.0	to	7.0	M	0.0
Farmers Branch Creek	SB-08	NS	0.0	to	3.5	M	0.0
		NS	3.5	to	8.5	M	0.0
		-01	8.5	to	12.0	D	0.0
	SB-09	NS	5.0	to	7.5	D	25.0

NS: No sample collected for chemical characterization

[a] Relative Moisture Content: D=Dry, M=Slightly to very moist, S=Saturated.

[b] Measured with a photoionization detector (PID).

Table 3-6 Organic Vapor Soil Screening Summary, Continued

Investigation Area	Location	Analytical Sample Number	Sample Depth Interval (feet)			Relative Moisture Content[a]	Organic Vapor[b] (ppm)
Farmers Branch Creek		NS	7.5	to	10.0	D	21.0
		-01	10.0	to	12.5	D	27.0
		NS	12.5	to	15.0	M	19.0
		-02	15.0	to	17.5	M	18.5
		NS	17.5	to	19.0	S	15.0
	SB-10	NS	5.0	to	7.5	D	23.0
		-01	7.5	to	10.0	D	18.0
		NS	10.0	to	12.5	D	14.0
		NS	12.5	to	15.0	M	12.0
		-02	15.0	to	19.0	S	12.0
West Fork of the Trinity River	SB-11	NS	0.0	to	2.5	M	0.0
		NS	2.5	to	5.0	M	0.0
		NS	5.0	to	7.5	M	0.0
		NS	7.5	to	10.0	M	0.0
		-01	10.0	to	12.5	M	0.0
		NS	12.5	to	15.0	M	3.0
		NS	15.0	to	17.5	M	36.0
		-02	17.5	to	20.0	M	85.0
		NS	20.0	to	22.5	S	350.0
		-03	22.5	to	25.0	S	940.0
	SB-12	NS	0.0	to	2.5	M	30.0
		NS	2.5	to	5.0	M	17.0
		NS	5.0	to	7.5	D	22.0
		NS	7.5	to	10.0	D	26.0
		-01	10.0	to	12.5	M	25.0
		NS	12.5	to	15.0	M	36.0
		NS	15.0	to	17.5	M	495.0
		-02	17.5	to	20.0	M	610.0
		NS	20.0	to	22.5	S	625.0
		-03	22.5	to	25.0	S	479.0

NS: No sample collected for chemical characterization

[a] Relative Moisture Content: D=Dry, M=Slightly to very moist, S=Saturated.

[b] Measured with a photoionization detector (PID).

Table 3-7 Subsurface Soil Sample Summary

Investigation Area	Analytical Sample Number		Sample Depth Interval (feet)			Inorganics	VOCs	BTEX	SVOCs	TPH Gasoline	TPH Diesel	Fingerprint
Valve Box	SB-01	-01	7.5	to	10.0			√	√	√	√	
		-02	10.0	to	12.5	√	√		√	√	√	
		-03	12.5	to	15.0			√		√	√	
	SB-02	-01	5.0	to	7.5			√	√	√	√	
		-02	7.5	to	10.0			√	√	√	√	
		-03	10.0	to	12.5			√		√	√	
Unnamed Stream	SB-03	-01	10.0	to	12.5			√	√	√	√	√
		-02	15.0	to	17.5	√	√		√	√	√	
		-03	20.0	to	21.5			√		√	√	
	SB-04	-01	5.0	to	7.5			√	√	√	√	
		-02	7.5	to	8.5	√	√		√	√	√	
	SB-05	-01	7.5	to	10.0			√	√	√	√	
		-02	13.5	to	16.0	√	√		√	√	√	√
		-03	18.5	to	21			√		√	√	
		-04 (Dup.)	7.5	to	10.0			√	√	√	√	
	SB-06	-01	7.5	to	10.0			√	√	√	√	
		-02	10	to	12.5	√		√	√	√	√	
		-03	15.0	to	17.5			√		√	√	
	SB-07	-01	5.0	to	7.0	√	√		√	√	√	
Farmers Branch Creek	SB-08	-01	8.5	to	12.0	√	√		√	√	√	
	SB-09	-01	10.0	to	12.5			√	√	√	√	
		-02	15.0	to	17.5			√	√	√	√	
		-03 (Dup)	10.0	to	12.5			√	√	√	√	
	SB-10	-01	7.5	to	10.0			√	√	√	√	
		-02	15.0	to	19.0			√	√	√	√	
West Fork of the Trinity River	SB-11	-01	10.0	to	12.5			√	√	√	√	
		-02	17.5	to	20.0			√	√	√	√	
		-03	22.5	to	25.0	√	√		√	√	√	
	SB-12	-01	10.0	to	12.5			√	√	√	√	
		-02	17.5	to	20.0			√	√	√	√	
		-03	22.5	to	25.0	√	√		√	√	√	√

Notes:

VOCs: Volatile Organic Compounds

BTEX: Benzene, Toluene, Ethyl Benzene, Xylenes

SVOCs: Semivolatile Organic Compounds

TPH: Total Petroleum Hydrocarbons

Table 3-8 Summary of Valve Box Subsurface Soil Sample Detected Results

	Location		SB01			
	Sample Number:		SB01-01	SB01-02	SB01-03	TNRCC Screening
	Depth (bgs)		7.5-10.0	10.0-12.5	12.5-15.0	Action Levels[b]
Parameters[a]	PQL	MDL				(mg/Kg)
Inorganics: (mg/Kg)						
Aluminum	50.0	2.16	-	3,949.14	-	20,260.00
Arsenic	60.0	0.29	-	6.20 F[c]	-	6.58
Barium	2.0	0.05	-	42.43	-	200.00
Beryllium	0.3	0.02	-	0.48	-	1.13
Calcium	10.0	10.00	-	80,300.00 B	-	272,000.00
Chromium	7.0	0.08	-	6.11 F	-	16.31
Cobalt	7.0	0.06	-	3.99 F	-	6.19
Copper	6.0	0.21	-	5.55 F	-	135.00
Iron	7.0	1.11	-	11,600.91 B	-	17,469.00
Lead	0.5	0.07	-	7.05	-	12.66
Magnesium	30.0	0.29	-	1,841.16	-	2,420.00
Manganese	2.0	0.44	-	104.31	-	511.00
Nickel	15.0	0.10	-	9.24 F	-	19.76
Potassium	500.0	22.20	-	1,440.00	-	1,717.00
Sodium	30.0	30.00	-	120.00 B	-	53,200.00
Vanadium	8.0	0.05	-	11.13	-	37.40
Zinc	2.0	0.31	-	25.08 J	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.20-11.85	2,830.00 J	271.00	2.99 F	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.044-0.047	41.800	4.87	ND	NA
BTEX: (mg/Kg)						
Ethyl benzene	0.002	0.0003-0.0004	0.0259	-	ND	160.00
Toluene	0.002	0.0003-0.0004	0.0136	-	ND	69.00
m,p-Xylene	0.002	0.0007	0.0906	-	ND	568.00
o-Xylene	0.002	0.0003-0.0004	ND	-	ND	568.00
Semivolatile Organics: (mg/Kg)						
2-Methylnaphthalene	0.7	0.33	ND	ND	-	389.00
Phenanthrene	0.7	0.33	ND	ND	-	NA

- : Not Analyzed

MDL: Method Detection Limit

NA: Not applicable or not available

ND: Not Detected above the Method Detection Limit

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-8 Summary of Valve Box Subsurface Soil Sample Detected Results (continued)

		Location	SB02			
		Sample Number:	SB02-01	SB02-02	SB02-03	TNRCC Screening
		Depth (bgs)	5.0-7.5	7.5-10.0	10.0-12.5	Action Levels[b]
Parameters[a]	PQL	MDL				(mg/Kg)
Inorganics: (mg/Kg)						
Aluminum	50.0	2.16	-	-	-	20,260.00
Arsenic	60.0	0.29	-	-	-	6.58
Barium	2.0	0.05	-	-	-	200.00
Beryllium	0.3	0.02	-	-	-	1.13
Calcium	10.0	10.00	-	-	-	272,000.00
Chromium	7.0	0.08	-	-	-	16.31
Cobalt	7.0	0.06	-	-	-	6.19
Copper	6.0	0.21	-	-	-	135.00
Iron	7.0	1.11	-	-	-	17,469.00
Lead	0.5	0.07	-	-	-	12.66
Magnesium	30.0	0.29	-	-	-	2,420.00
Manganese	2.0	0.44	-	-	-	511.00
Nickel	15.0	0.10	-	-	-	19.76
Potassium	500.0	22.20	-	-	-	1,717.00
Sodium	30.0	30.00	-	-	-	53,200.00
Vanadium	8.0	0.05	-	-	-	37.40
Zinc	2.0	0.31	-	-	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.20-11.85	1,710.00 J[c]	892.00 J	27.20	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.044-0.047	34.00	23.10	0.25 F	NA
BTEX: (mg/Kg)						
Ethyl benzene	0.002	0.0003-0.0004	0.0829	0.0741	0.0005 F	160.00
Toluene	0.002	0.0003-0.0004	0.0431	0.0121	ND	69.00
m,p-Xylene	0.002	0.0007	0.4170	0.3320	0.0012 F	568.00
o-Xylene	0.002	0.0003-0.0004	0.1130	0.0321	ND	568.00
Semivolatile Organics: (mg/Kg)						
2-Methylnaphthalene	0.7	0.33	0.47 F	1.67	-	389.00
Phenanthrene	0.7	0.33	ND	0.34 F	-	NA

- : Not Analyzed
MDL: Method Detection Limit
NA: Not applicable or not available
ND: Not Detected above the Method Detection Limit
PQL: Practical Quantitation Limit
[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.
[b] From Table 2-5.
[c] See Table 3-3 for data qualifier definitions.
Note: Boxed values indicate exceedances of SAL.

Table 3-9 Summary of Farmers Branch Creek Subsurface Soil Sample Detected Results

Location:			SB08		SB09			
Sample Number:			SB08-01	SB09-01	SB09-02	SB09-03		TNRCC Screening
Depth (bgs)			8.5-12.0	10.0-12.5	15.0-17.5	10.0-12.5		Action Levels[b]
Parameters[a]	PQL	MDL				DUP		(mg/Kg)
Inorganics: (mg/Kg)								
Aluminum	50.0	2.05	1,901.74	-	-	-		20,260.00
Arsenic	60.0	0.27	6.06	F[c]	-	-	-	6.58
Barium	2.0	0.04	44.23	-	-	-		200.00
Beryllium	0.3	0.02	0.21	F	-	-	-	1.13
Cadmium	4.0	0.03	0.21	F	-	-	-	0.59
Calcium	10.0	9.47	125,000.00	B	-	-	-	272,000.00
Chromium	7.0	0.08	5.68	F	-	-	-	16.31
Cobalt	7.0	0.05	2.65	F	-	-	-	6.19
Copper	6.0	0.20	3.16	F	-	-	-	135.00
Iron	7.0	1.05	6,740.00	B	-	-	-	15,224.00
Lead	0.5	0.07	6.25		-	-	-	12.66
Magnesium	30.0	0.27	1,615.73		-	-	-	2,420.00
Manganese	2.0	0.42	522.00		-	-	-	511.00
Nickel	15.0	0.10	6.89	F	-	-	-	19.76
Potassium	500.0	21.15	402.16	F	-	-	-	1,717.00
Sodium	30.0	28.09	167.63	B	-	-	-	53,200.00
Vanadium	8.0	0.04	18.44		-	-	-	37.40
Zinc	2.0	0.29	15.41	J	-	-	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.17 - 2.39	ND		ND	ND	ND	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.043 - 0.048	ND		ND	ND	ND	NA
Volatile Organics: (mg/Kg)	0.005 - 0.108	0.0010 - 0.0120	ND		-	-	-	NA
BTEX: (mg/Kg)	0.002	0.0002 - 0.0007	-		ND	ND	ND	NA
Semivolatile Organics: (mg/Kg)	0.3 - 3.3	0.11 - 0.43	ND		ND	ND	ND	NA

ND: Not Detected above the Method Detection Limit

- : Not Analyzed

MDL: Method Detection Limit

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-9 Summary of Farmers Branch Creek Subsurface Soil Sample Detected Results (continued)

Location:			SB10		
Sample Number:			SB10-01	SB10-02	TNRCC Screening Action Levels[b]
Depth (bgs)			7.5-10.0	15.0-19.0	
Parameters[a]	PQL	MDL			(mg/Kg)
Inorganics: (mg/Kg)					
Aluminum	50.0	2.05	-	-	20,260.00
Arsenic	60.0	0.27	-	-	6.58
Barium	2.0	0.04	-	-	200.00
Beryllium	0.3	0.02	-	-	1.13
Cadmium	4.0	0.03	-	-	0.59
Calcium	10.0	9.47	-	-	272,000.00
Chromium	7.0	0.08	-	-	16.31
Cobalt	7.0	0.05	-	-	6.19
Copper	6.0	0.20	-	-	135.00
Iron	7.0	1.05	-	-	15,224.00
Lead	0.5	0.07	-	-	12.66
Magnesium	30.0	0.27	-	-	2,420.00
Manganese	2.0	0.42	-	-	511.00
Nickel	15.0	0.10	-	-	19.76
Potassium	500.0	21.15	-	-	1,717.00
Sodium	30.0	28.09	-	-	53,200.00
Vanadium	8.0	0.04	-	-	37.40
Zinc	2.0	0.29	-	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.17 - 2.39	ND	ND	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.043 - 0.048	ND	ND	NA
Volatile Organics: (mg/Kg)	0.005 - 0.108	0.0010 - 0.0120	-	-	NA
BTEX: (mg/Kg)	0.002	0.0002 - 0.0007	ND	ND	NA
Semivolatile Organics: (mg/Kg)	0.3 - 3.3	0.11 - 0.43	ND	ND	NA

ND: Not Detected above the Method Detection Limit

-: Not Analyzed

MDL: Method Detection Limit

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-10 Summary of Unnamed Stream Subsurface Soil Sample Detected Results

Location:			SB03			SB04		
Sample Number:			SB03-01	SB03-02	SB03-03	SB04-01	SB04-02	TNRCC Screening
Depth (bgs)			10.0-12.5	15.0-17.5	20.0-21.5	5.0-7.5	7.5-8.5	Action Levels[b]
Parameters[a]	**PQL**	**MDL**						**(mg/Kg)**
Inorganics: (mg/Kg)								
Aluminum	50.0	2.13-2.31	-	2,641.60	-	-	7,459.23	20,260.00
Arsenic	60.0	0.28-0.31	-	3.87 F[c]	-	-	4.12 F	6.58
Barium	2.0	0.05	-	66.56	-	-	97.78	128.10
Beryllium	0.3	0.02	-	0.34	-	-	0.62	1.13
Cadmium	4.0	0.03-0.04	-	0.07 F	-	-	0.09 F	0.59
Calcium	10.0	9.80-10.70	-	89,500.00 B	-	-	54,500.00 B	272,000.00
Chromium	7.0	0.08-0.09	-	4.33 F	-	-	9.84	16.31
Cobalt	7.0	0.06	-	2.53 F	-	-	4.19 F	6.19
Copper	6.0	0.20-0.22	-	3.73 F	-	-	5.73	13.72
Iron	7.0	1.09-1.19	-	5,105.41 B	-	-	8,984.57	15,224.00
Lead	0.5	0.07	-	6.59	-	-	9.77	12.66
Magnesium	30.0	0.28-0.31	-	1,507.10	-	-	2,333.67	2,420.00
Manganese	2.0	0.44-0.48	-	167.56	-	-	250.26	351.70
Nickel	15.0	0.10-0.11	-	5.52 F	-	-	8.72 F	19.76
Potassium	500.0	22.00-24.00	-	435.00 F	-	-	1,250.00	1,717.00
Sodium	30.0	29.00-32.00	-	490.00 B	-	-	940.00	53,200.00
Vanadium	8.0	0.05	-	15.84	-	-	20.17	37.40
Zinc	2.0	0.30-0.33	-	20.21 J	-	-	28.83 J	31.30
Extractable Hydrocarbons: (mg/Kg)	10.0	2.17-2.51	662.00	1,000.00	3.15 F	3.08 F	2.55 F	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.043-0.050	396.00	325.00	0.300 F	ND	ND	NA
Volatile Organics: (mg/Kg)	0.006-0.118	0.0010-0.120	-	ND R	-	-	ND R	NA
BTEX: (mg/Kg)								
Benzene	0.002	0.0002-0.0003	ND	-	ND	ND	-	NDB
Ethyl benzene	0.002	0.0003-0.0004	1.1200	-	0.0017 F	ND	-	NDB
Methyl tert-Butyl Ether	0.002	0.0003-0.0004	ND	-	ND	ND	-	NDB
Toluene	0.002	0.0003-0.0004	0.4300	-	0.0009 F	0.0015 F	-	NDB
m,p-Xylene	0.002	0.0007-0.0008	3.1700	-	0.0014 F	0.0007 F	-	NDB
o-Xylene	0.002	0.0003-0.0004	0.8290	-	0.0009 F	0.0004 F	-	NDB
Semivolatile Organics: (mg/Kg)								
2-Methylnaphthalene	0.7	0.35-0.36	3.28	4.32	-	ND	ND	NDB
Naphthalene	0.7	0.24	1.58	0.54 F	-	ND	ND	NDB

- : Not Analyzed

MDL: Method Detection Limit

NA: Not Applicable or not Available

ND: Not Detected above the Method Detection Limit

NDB: Not Detected in Background

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-10 Summary of Unnamed Stream Subsurface Soil Sample Detected Results (continued)

Location:			SB05				
Sample Number:			SB05-01	SB05-02	SB05-03	SB05-04	TNRCC Screening
Depth (bgs)			7.5-10.0	13.5-16.0	18.5-21.0	7.5-10.0	Action Levels[b]
Parameters[a]	PQL	MDL				DUP	(mg/Kg)
Inorganics: (mg/Kg)							
Aluminum	50.0	2.13-2.31	-	4,116.69	-	-	20,260.00
Arsenic	60.0	0.28-0.31	-	2.79 F[c]	-	-	6.58
Barium	2.0	0.05	-	65.40	-	-	128.10
Beryllium	0.3	0.02	-	0.48	-	-	1.13
Cadmium	4.0	0.03-0.04	-	0.06 F	-	-	0.59
Calcium	10.0	9.80-10.70	-	86,500.00 B	-	-	272,000.00
Chromium	7.0	0.08-0.09	-	5.09 F	-	-	16.31
Cobalt	7.0	0.06	-	2.78 F	-	-	6.19
Copper	6.0	0.20-0.22	-	3.35 F	-	-	13.72
Iron	7.0	1.09-1.19	-	4,909.82	-	-	15,224.00
Lead	0.5	0.07	-	8.55	-	-	12.66
Magnesium	30.0	0.28-0.31	-	1,440.02	-	-	2,420.00
Manganese	2.0	0.44-0.48	-	197.60	-	-	351.70
Nickel	15.0	0.10-0.11	-	5.56 F	-	-	19.76
Potassium	500.0	22.00-24.00	-	576.78	-	-	1,717.00
Sodium	30.0	29.00-32.00	-	159.24	-	-	53,200.00
Vanadium	8.0	0.05	-	12.79	-	-	37.40
Zinc	2.0	0.30-0.33	-	25.29 J	-	-	31.30
Extractable Hydrocarbons:							
(mg/Kg)	10.0	2.17-2.51	5.07 F	528.00	3.84 F	12.80	NA
Volatile Hydrocarbons:							
(mg/Kg)	1.00	0.043-0.050	ND	151.00	0.180	ND	NA
Volatile Organics:							
(mg/Kg)	0.006-0.118	0.0010-0.120	-	ND R	-	-	NA
BTEX: (mg/Kg)							
Benzene	0.002	0.0002-0.0003	ND	-	ND	0.0003 F	NDB
Ethyl benzene	0.002	0.0003-0.0004	ND	-	0.0006 F	0.0004 F	NDB
Methyl tert-Butyl Ether	0.002	0.0003-0.0004	0.0018 F	-	ND	ND	NDB
Toluene	0.002	0.0003-0.0004	0.0013 F	-	ND	0.0034	NDB
m,p-Xylene	0.002	0.0007-0.0008	ND	-	ND	0.0009 F	NDB
o-Xylene	0.002	0.0003-0.0004	ND	-	0.0006 F	0.0004 F	NDB
Semivolatile Organics: (mg/Kg)							
2-Methylnaphthalene	0.7	0.35-0.36	ND	2.47	-	ND	NDB
Naphthalene	0.7	0.24	ND	0.83	-	ND	NDB

- : Not Analyzed

MDL: Method Detection Limit

NA: Not Applicable or not Available

ND: Not Detected above the Method Detection Limit

NDB: Not Detected in Background

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-10 Summary of Unnamed Stream Subsurface Soil Sample Detected Results (continued)

Location:			SB06		SB07		
Sample Number:			SB06-01	SB06-02	SB06-03	SB07-01	TNRCC Screening
Depth (bgs)			7.5-10.0	10.0-12.5	15.0-17.5	5.0-7.0	Action Levels[b]
Parameters[a]	PQL	MDL					(mg/Kg)
Inorganics: (mg/Kg)							
Aluminum	50.0	2.13-2.31	-	5,449.76	-	3,760.00	20,260.00
Arsenic	60.0	0.28-0.31	-	5.86 F[c]	-	2.63 F	6.58
Barium	2.0	0.05	-	81.13	-	107.69	128.10
Beryllium	0.3	0.02	-	0.71	-	0.43	1.13
Cadmium	4.0	0.03-0.04	-	ND	-	0.10	0.59
Calcium	10.0	9.80-10.70	-	52,700.00 B	-	79,600.00 B	272,000.00
Chromium	7.0	0.08-0.09	-	8.26	-	5.01 F	16.31
Cobalt	7.0	0.06	-	5.29 F	-	2.10 F	6.19
Copper	6.0	0.20-0.22	-	5.01 F	-	3.90 F	13.72
Iron	7.0	1.09-1.19	-	9,839.00	-	5,260.00 B	15,224.00
Lead	0.5	0.07	-	15.00	-	7.39	12.66
Magnesium	30.0	0.28-0.31	-	1,757.46	-	1,214.57	2,420.00
Manganese	2.0	0.44-0.48	-	232.04	-	79.16	351.70
Nickel	15.0	0.10-0.11	-	10.07	-	5.15 F	19.76
Potassium	500.0	22.00-24.00	-	1,247.31	-	710.11	1,717.00
Sodium	30.0	29.00-32.00	-	118.06	-	119.63 B	53,200.00
Vanadium	8.0	0.05	-	20.72	-	20.94	37.40
Zinc	2.0	0.30-0.33	-	20.16 J	-	19.88 J	31.30
Extractable Hydrocarbons: (mg/Kg)	10.0	2.17-2.51	2.87 F	3.51 F	3.65 F	ND	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.043-0.050	ND	ND	0.050 F	ND	NA
Volatile Organics[a]: (mg/Kg)	0.006-0.118	0.0010-0.120	-	-	-	ND R	NA
BTEX: (mg/Kg)							
Benzene	0.002	0.0002-0.0003	ND	ND	ND	-	NDB
Ethyl benzene	0.002	0.0003-0.0004	ND	ND	ND	-	NDB
Methyl tert-Butyl Ether	0.002	0.0003-0.0004	ND	ND	ND	-	NDB
Toluene	0.002	0.0003-0.0004	0.0006 F	ND	ND	-	NDB
m,p-Xylene	0.002	0.0007-0.0008	ND	ND	ND	-	NDB
o-Xylene	0.002	0.0003-0.0004	ND	ND	ND	-	NDB
Semivolatile Organics: (mg/Kg)							
2-Methylnaphthalene	0.7	0.35-0.36	ND	ND	-	ND	NDB
Naphthalene	0.7	0.24	ND	ND	-	ND	NDB

- : Not Analyzed

MDL: Method Detection Limit

NA: Not Applicable or not Available

ND: Not Detected above the Method Detection Limit

NDB: Not Detected in Background

PQL: Practical Quantitation Limit

[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H

[b] From Table 2-5.

[c] See Table 3-3 for data qualifier definitions.

Note: Boxed values indicate exceedances of SAL.

Table 3-11 Summary of West Fork of the Trinity River Subsurface Soil Sample Detected Results

Location:			SB11				
Sample Number:			SB11-01	SB11-02	SB11-03	SB11-03-RE[b]	TNRCC Screening
Depth (bgs):			10.0-12.5	17.5-20.0	22.5-25.0		Action Levels[e]
Parameters[a]	PQL	MDL					(mg/Kg)
Inorganics: (mg/Kg)							
Aluminum	50.0	2.13-2.31	-	-	3,026.25 M[d]	-	20,260.00
Antimony	40.0	0.44-0.56	-	-	1.37 M	-	0.712
Arsenic	60.0	0.30-0.31	-	-	0.91 F	-	6.58
Barium	2.0	0.05	-	-	22.97	-	200.00
Beryllium	0.3	0.02	-	-	0.24 F	-	1.13
Calcium	10.0	10.42-10.76	-	-	52,028.64 M	-	272,000.00
Chromium	7.0	0.08-0.09	-	-	3.87 F	-	16.31
Cobalt	7.0	0.06	-	-	1.60 F	-	6.19
Copper	6.0	0.21-0.22	-	-	2.60 F	-	135.00
Iron	7.0	1.16-1.20	-	-	3,456.44	-	15,224.00
Lead	0.5	0.07	-	-	6.54 M	-	12.66
Magnesium	30.0	0.30-0.31	-	-	693.05 M	-	2,420.00
Manganese	2.0	0.47-0.48	-	-	44.75	-	511.00
Nickel	15.0	0.11	-	-	3.45 M	-	19.76
Potassium	500.0	23.27-24.04	-	-	597.33 M	-	1,717.00
Selenium	80.0	0.73-0.75	-	-	ND	-	5.00
Sodium	30.0	30.91-31.94	-	-	193.53 B	-	53,200.00
Thallium	40.0	0.55-0.57	-	-	0.70 F	-	1.50
Vanadium	8.0	0.05	-	-	6.29 F	-	37.40
Zinc	2.0	0.44-0.46	-	-	8.48 M	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.15-2.47	ND	ND	77.30	-	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.04-0.05	ND	0.25 F	538.00	-	NA
Volatile Organics: (mg/Kg)							
Benzene	0.006	0.0010-0.0012	-	-	0.3970 R	2.2800 R	0.13
Ethylbenzene	0.006	0.0023-0.0025	-	-	5.4200 R	38.5000 R	160.00
Methyl ethyl ketone	0.006	0.0035-0.0037	-	-	ND R	ND R	142.00
Toluene	0.006	0.0010-0.0012	-	-	6.8300 R	ND R	69.00
m,p-Xylene	0.006	0.0047-0.0049	-	-	6.8400 R	76.9000 R	568.00
o-Xylene	0.006	0.0047-0.0049	-	-	3.9500 R	36.5000 R	568.00
BTEX: (mg/Kg)							
Benzene	0.002	0.0002	ND	ND	-	-	0.13
Ethyl benzene	0.002	0.0003-0.0004	ND	0.0020	-	-	160.00
Methyl tert-Butyl Ether	0.002	0.0003-0.0004	ND	0.0020	-	-	5.60
Toluene	0.002	0.0003-0.0004	ND	0.0007 F	-	-	69.00
m,p,-xylenes	0.002	0.0006-0.0007	ND	0.0018 F	-	-	568.00
o- xylenes	0.002	0.0003-0.0004	ND	0.0009 F	-	-	568.00
Semivolatile Organics: (mg/Kg)							
Bis(2-ethylhexyl)phthalate	0.7	0.32-0.36/4.13[e]	ND	0.90	ND	-	0.60
2-Methylnaphthalene	0.7	0.32-0.36/2.24[e]	ND	ND	0.87	-	389.00
2-Methylphenol	0.3	0.16-0.18/2.83[e]	ND	ND	0.61	-	183.00
4-Methylphenol	0.3	0.16-0.18/2.13[e]	ND	ND	0.73	-	18.30
Naphthalene	0.7	0.21-0.24/2.60[e]	ND	ND	1.14	-	389.00

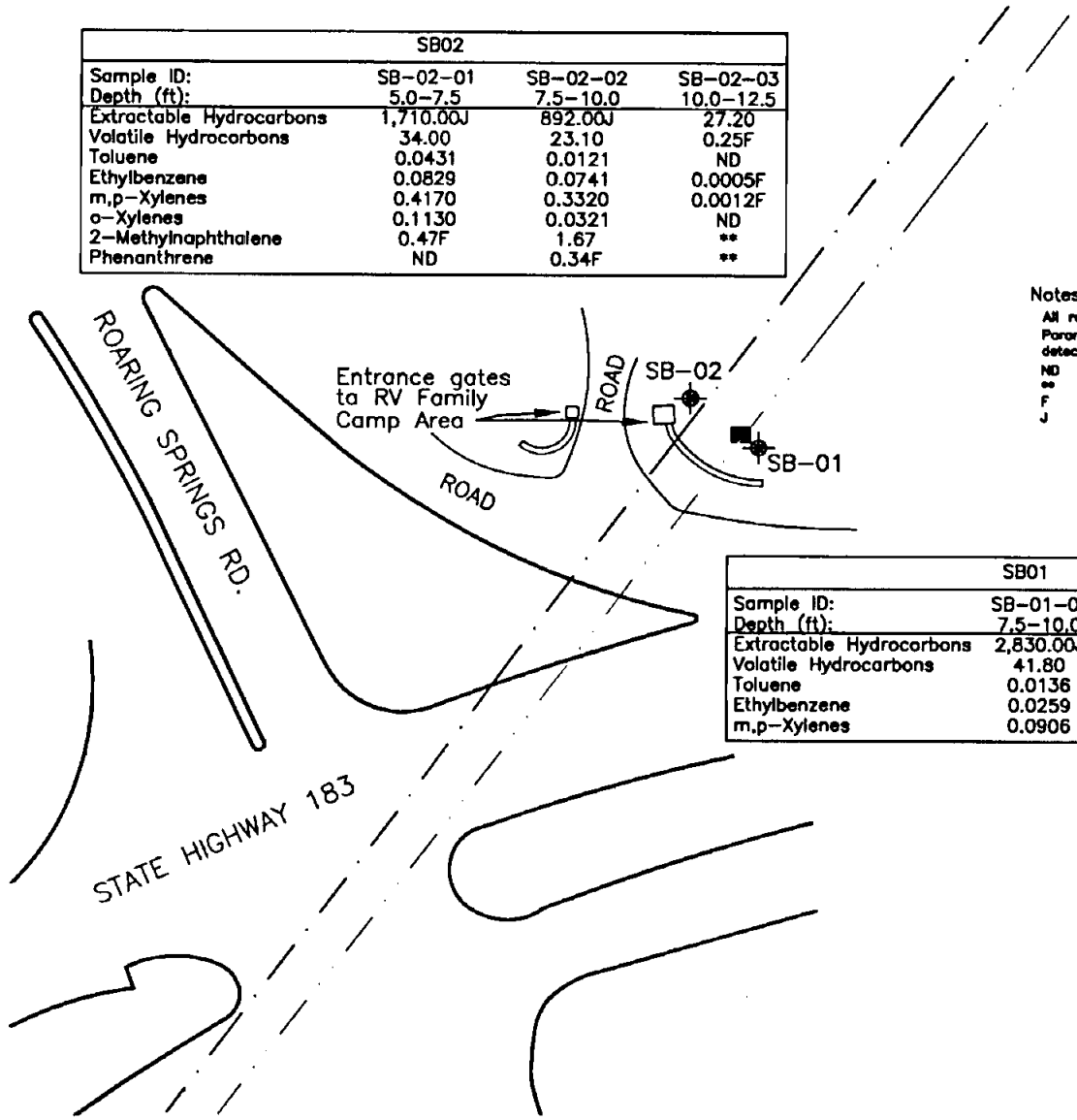
- : Not Analyzed
MDL: Method Detection Limit
NA: Not Applicable or Not Available
ND: Not Detected above the method detection limit
PQL: Practical Quantitation Limit
R: Data considered invalid for quantitative purposes due to laboratory limitation
[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.
[b] Sample diluted and reanalyzed.
[c] From Table 2-5.
[d] See Table 3-3 for data qualifier definitions.
[e] The higher SVOC MDL numbers apply to SB1202-RE
Note: Boxed values indicate exceedances of SAL.

Table 3-11 Summary of West Fork of the Trinity River Subsurface Soil Sample Detected Results (continued)

Location:			SB12					
Sample Number:			SB12-01	SB12-02	SB12-02-RE[b]	SB12-03	SB12-03-RE	TNRCC Screening Action Levels[e]
Depth (bgs):			10.0-12.5	17.5-20.0		22.5-25.0		
Parameters[a]	PQL	MDL						(mg/Kg)
Inorganics: (mg/Kg)								
Aluminum	50.0	2.13-2.31	-	-	-	6,782.98 M[d]	-	20,260.00
Antimony	40.0	0.44-0.56	-	-	-	1.39 M	-	0.712
Arsenic	60.0	0.30-0.31	-	-	-	2.34 F	-	6.58
Barium	2.0	0.05	-	-	-	69.87	-	200.00
Beryllium	0.3	0.02	-	-	-	0.50 J	-	1.13
Calcium	10.0	10.42-10.76	-	-	-	119,975.34 M	-	272,000.00
Chromium	7.0	0.08-0.09	-	-	-	8.29	-	16.31
Cobalt	7.0	0.06	-	-	-	3.65 F	-	6.19
Copper	6.0	0.21-0.22	-	-	-	5.06 F	-	135.00
Iron	7.0	1.16-1.20	-	-	-	7,629.10	-	15,224.00
Lead	0.5	0.07	-	-	-	11.26 M	-	12.66
Magnesium	30.0	0.30-0.31	-	-	-	1,459.43 M	-	2,420.00
Manganese	2.0	0.47-0.48	-	-	-	84.41	-	511.00
Nickel	15.0	0.11	-	-	-	8.17 M	-	19.76
Potassium	500.0	23.27-24.04	-	-	-	1,234.28 M	-	1,717.00
Selenium	80.0	0.73-0.75	-	-	-	1.23 F	-	5.00
Sodium	30.0	30.91-31.94	-	-	-	145.87 B	-	53,200.00
Thallium	40.0	0.55-0.57	-	-	-	ND	-	1.50
Vanadium	8.0	0.05	-	-	-	15.22	-	37.40
Zinc	2.0	0.44-0.46	-	-	-	18.85 M	-	1,095.00
Extractable Hydrocarbons: (mg/Kg)	10.0	2.15-2.47	2.76 F	248.00	-	68.10	-	NA
Volatile Hydrocarbons: (mg/Kg)	1.00	0.04-0.05	ND	674.00	-	330.00	-	NA
Volatile Organics: (mg/Kg)								
Benzene	0.006	0.0010-0.0012	-	-	-	0.3975 R[f]	1.5679 R[f]	0.13
Ethylbenzene	0.006	0.0023-0.0025	-	-	-	2.9259 R[f]	29.7531 R[f]	160.00
Methyl ethyl ketone	0.006	0.0035-0.0037	-	-	-	ND R[f]	2.4815 R[f]	142.00
Toluene	0.006	0.0010-0.0012	-	-	-	4.6914 R[f]	38.2716 R[f]	69.00
m,p-Xylene	0.006	0.0047-0.0049	-	-	-	4.5432 R[f]	63.8272 R[f]	568.00
o-Xylene	0.006	0.0047-0.0049	-	-	-	2.7901 R[f]	25.5556 R[f]	568.00
BTEX: (mg/Kg)								
Benzene	0.002	0.0002	0.0003 F	0.4540	-	-	-	0.13
Ethyl benzene	0.002	0.0003-0.0004	ND	19.7000	-	-	-	160.00
Methyl tert-Butyl Ether	0.002	0.0003-0.0004	0.0006 F	ND	-	-	-	5.60
Toluene	0.002	0.0003-0.0004	ND	45.2000	-	-	-	69.00
m,p. -xylenes	0.002	0.0006-0.0007	ND	48.1000	-	-	-	568.00
o- xylenes	0.002	0.0003-0.0004	ND	17.7000	-	-	-	568.00
Semivolatile Organics: (mg/Kg)								
Bis(2-ethylhexyl)phthalate	0.7	0.32-0.36/4.13[c]	ND	ND	ND	ND	-	0.61
2-Methylnaphthalene	0.7	0.32-0.36/2.24[c]	ND	6.78	4.21	2.11	-	389.00
2-Methylphenol	0.3	0.16-0.18/2.83[c]	ND	0.34	ND	0.52	-	183.00
4-Methylphenol	0.3	0.16-0.18/2.13[c]	ND	0.52	ND	0.53	-	18.30
Naphthalene	0.7	0.21-0.24/2.60[c]	ND	8.24	6.20	2.47	-	389.00

- : Not Analyzed
MDL: Method Detection Limit
NA: Not Applicable or Not Available
ND: Not Detected above the method detection limit
PQL: Practical Quantitation Limit
R[f] Data considered invalid for quantitative purposes due to laboratory limitation
[a] Parameters listed include only those detected in at least one sample. See complete parameters list in Appendix H.
[b] Sample diluted and reanalyzed.
[c] From Table 2-5.
[d] See Table 3-3 for data qualifier definitions.
[e] The higher SVOC MDL numbers apply to SB1202-RE
Note: Boxed values indicate exceedances of SAL.

SB02			
Sample ID:	SB-02-01	SB-02-02	SB-02-03
Depth (ft):	5.0-7.5	7.5-10.0	10.0-12.5
Extractable Hydrocarbons	1,710.00J	892.00J	27.20
Volatile Hydrocarbons	34.00	23.10	0.25F
Toluene	0.0431	0.0121	ND
Ethylbenzene	0.0829	0.0741	0.0005F
m,p-Xylenes	0.4170	0.3320	0.0012F
o-Xylenes	0.1130	0.0321	ND
2-Methylnaphthalene	0.47F	1.67	**
Phenanthrene	ND	0.34F	**



LEGEND

- Borehole Location
- Chevron Pipeline
- Pride Pipeline
- Volve Box

Notes:

All results in mg/kg

Parameters listed include only organic compounds detected in at least one sample.

ND Not detected above Method Detection Limit

** Parameter not analyzed for

F Analytes detected above MDL and below PQL

J Analyte positively identified, but quantitation is an estimation

SB01			
Sample ID:	SB-01-01	SB-01-02	SB-01-03
Depth (ft):	7.5-10.0	10.0-12.5	12.5-15.0
Extractable Hydrocarbons	2,830.00J	271.00	2.99F
Volatile Hydrocarbons	41.80	4.87	ND
Toluene	0.0136	**	ND
Ethylbenzene	0.0259	**	ND
m,p-Xylenes	0.0906	**	ND

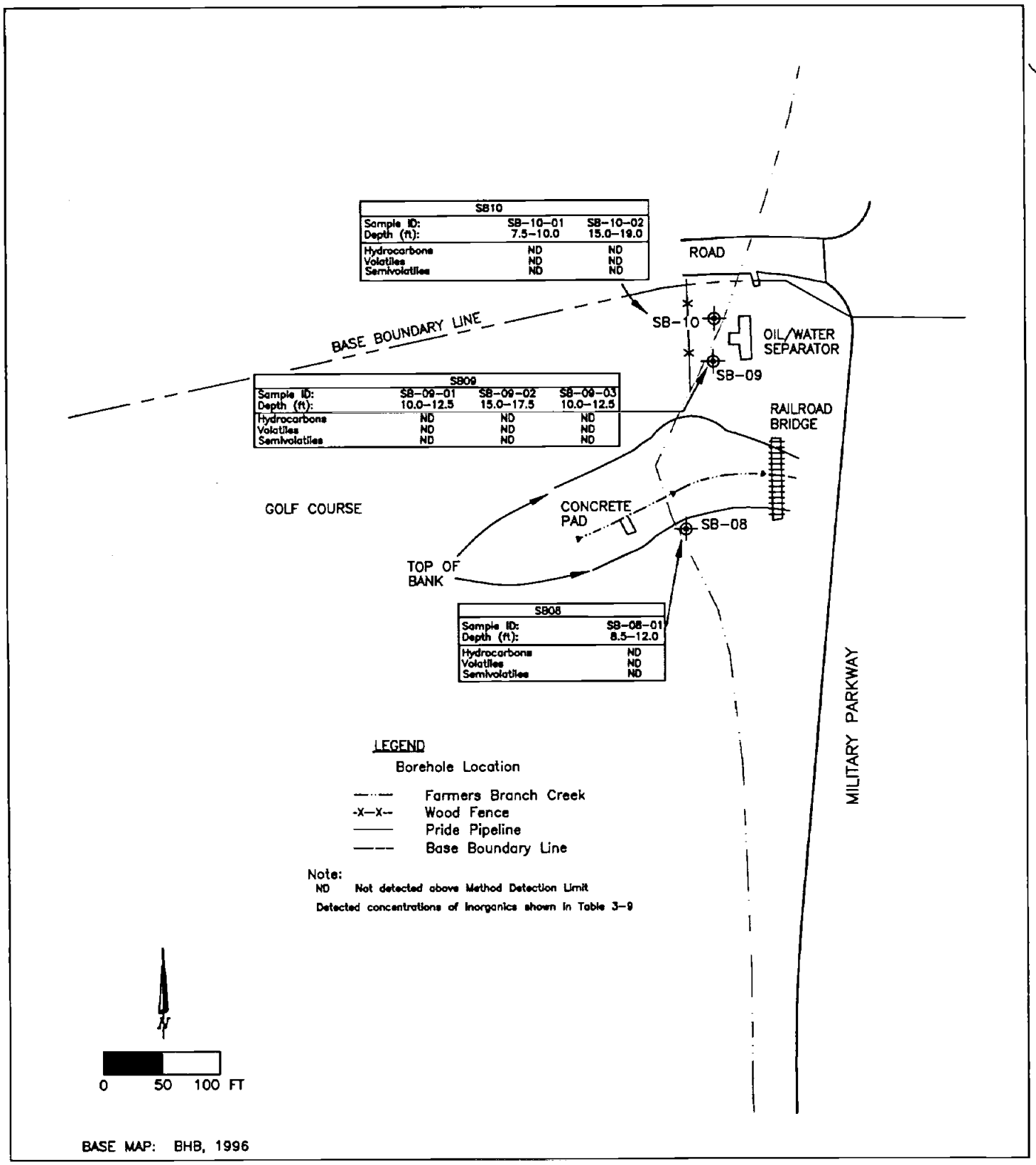
BASE MAP: BHB, 1996

The Environmental Company, Inc.

Figure 3-1
Valve Box Area Subsurface Soil Organic Analytical Results
NAS Fort Worth JRB
Fort Worth, Texas

Date: June 1998
Project Manager: B. Duffner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Figure 3-1a.dwg

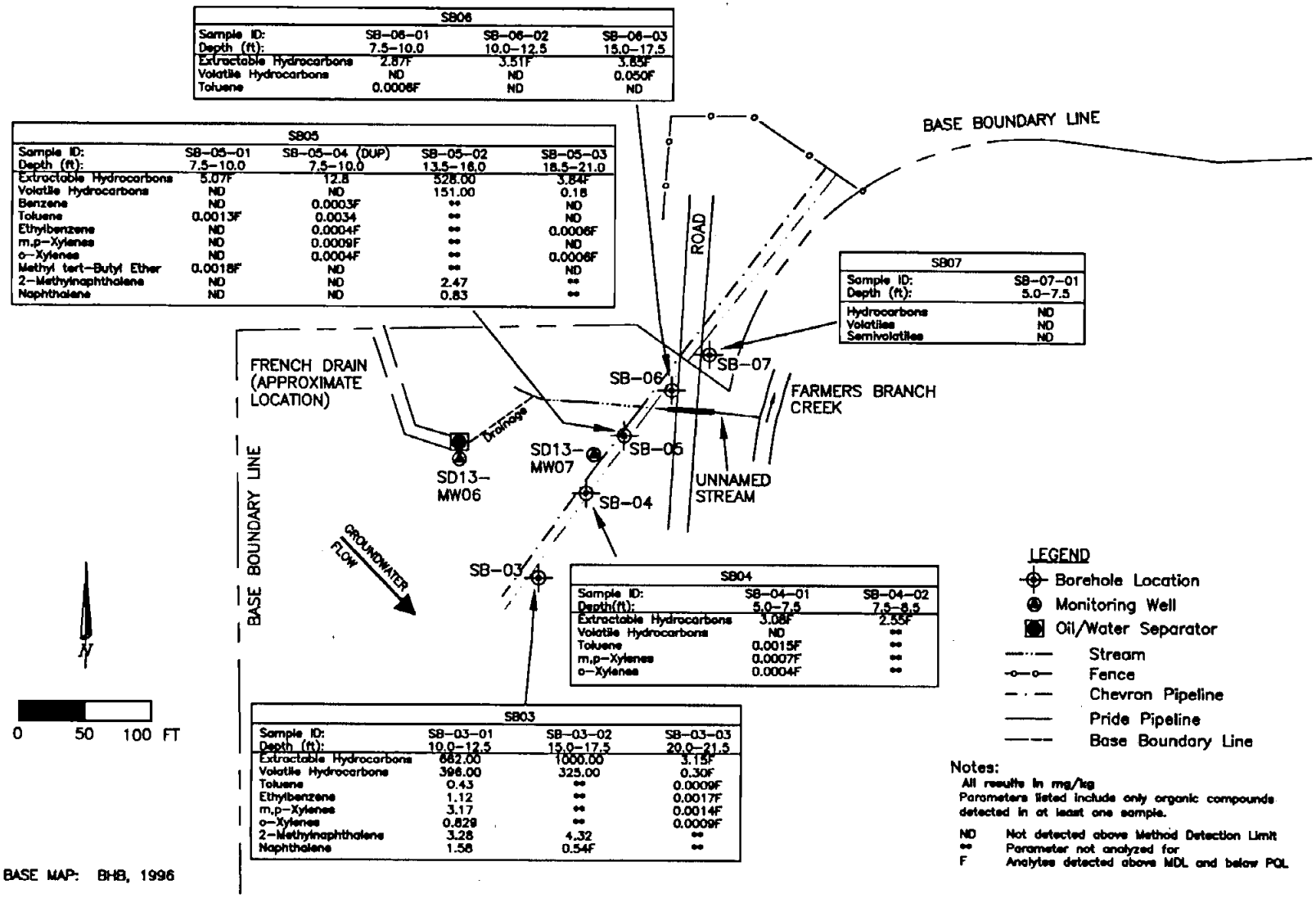


The Environmental Company, Inc.

Figure 3-2
Farmers Branch Creek Subsurface Soil Organic Analytical Results
NAS Forth Worth JRB
Fort Worth, Texas

Date: June 1996
Project Manager: B. Duffner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Figure 3-2.dwg



SB06			
Sample ID:	SB-06-01	SB-06-02	SB-06-03
Depth (ft):	7.5-10.0	10.0-12.5	15.0-17.5
Extractable Hydrocarbons	2.87F	3.51F	3.85F
Volatile Hydrocarbons	ND	ND	0.050F
Toluene	0.0008F	ND	ND

SB05				
Sample ID:	SB-05-01	SB-05-04 (DUP)	SB-05-02	SB-05-03
Depth (ft):	7.5-10.0	7.5-10.0	13.5-16.0	18.5-21.0
Extractable Hydrocarbons	5.07F	12.8	528.00	3.84F
Volatile Hydrocarbons	ND	ND	151.00	0.18
Benzene	ND	0.0003F	**	ND
Toluene	0.0013F	0.0034	**	ND
Ethylbenzene	ND	0.0004F	**	0.0006F
m,p-Xylenes	ND	0.0009F	**	ND
o-Xylenes	ND	0.0004F	**	0.0006F
Methyl tert-Butyl Ether	0.0018F	ND	**	ND
2-Methylnaphthalene	ND	ND	2.47	**
Naphthalene	ND	ND	0.83	**

SB07	
Sample ID:	SB-07-01
Depth (ft):	5.0-7.5
Hydrocarbons	ND
Volatiles	ND
Semivolatiles	ND

SB04		
Sample ID:	SB-04-01	SB-04-02
Depth(ft):	5.0-7.5	7.5-8.5
Extractable Hydrocarbons	3.08F	2.55F
Volatile Hydrocarbons	ND	**
Toluene	0.0015F	**
m,p-Xylenes	0.0007F	**
o-Xylenes	0.0004F	**

SB03			
Sample ID:	SB-03-01	SB-03-02	SB-03-03
Depth (ft):	10.0-12.5	15.0-17.5	20.0-21.5
Extractable Hydrocarbons	682.00	1000.00	3.15F
Volatile Hydrocarbons	396.00	325.00	0.30F
Toluene	0.43	**	0.0009F
Ethylbenzene	1.12	**	0.0017F
m,p-Xylenes	3.17	**	0.0014F
o-Xylenes	0.829	**	0.0009F
2-Methylnaphthalene	3.28	4.32	**
Naphthalene	1.58	0.54F	**

Notes:
All results in mg/kg
Parameters listed include only organic compounds detected in at least one sample.

ND Not detected above Method Detection Limit
** Parameter not analyzed for
F Analytes detected above MDL and below PQL

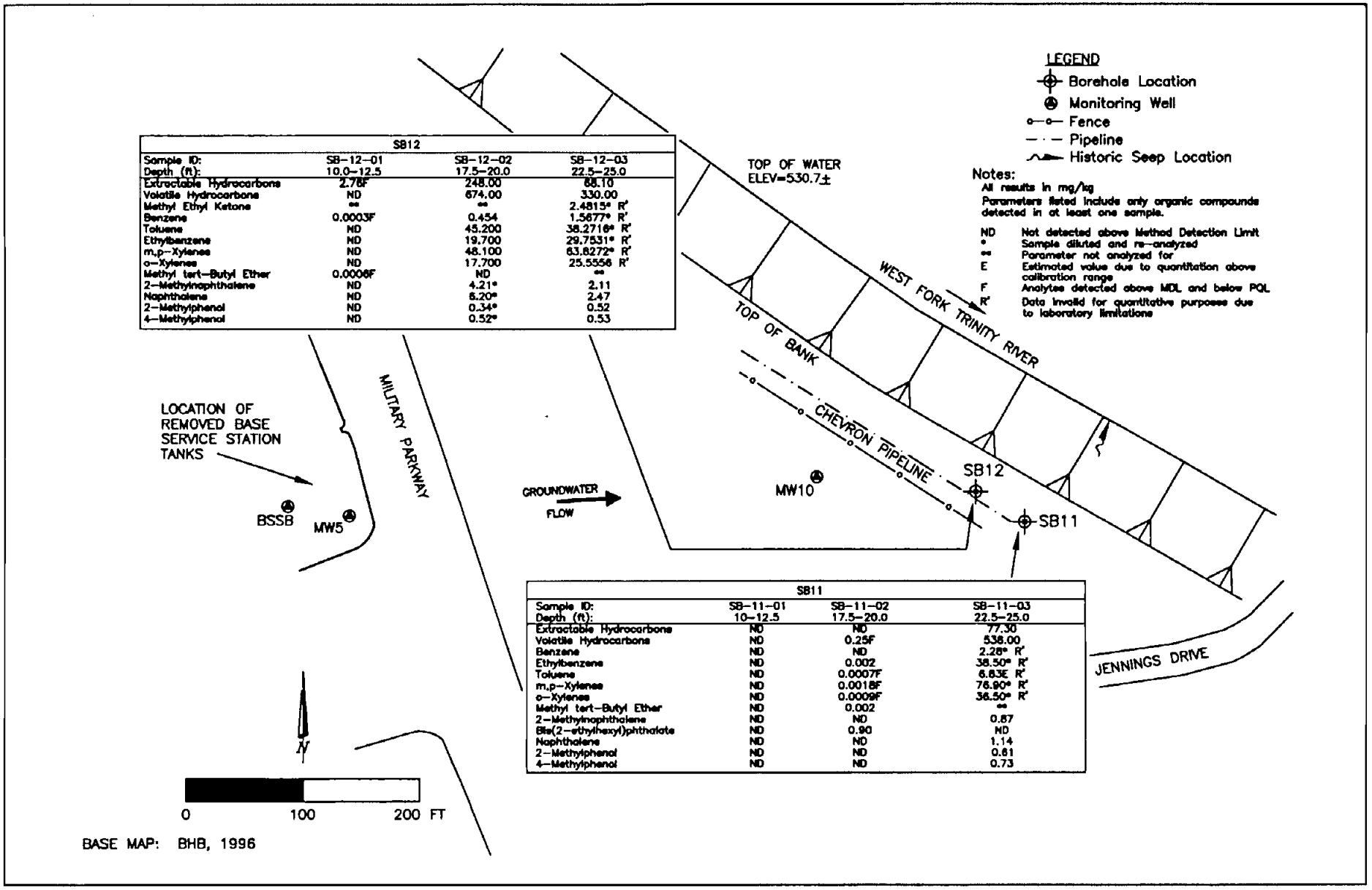
BASE MAP: BHB, 1996

The Environmental Company, Inc.

Figure 3-3
Unnamed Stream Area Subsurface Soil Organic Analytical Results
NAS Fort Worth JRB
Fort Worth, Texas

Date: June 1998
Project Manager: B. Dullner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Figure 3-3.dwg



SB12			
Sample ID:	SB-12-01	SB-12-02	SB-12-03
Depth (ft):	10.0-12.5	17.5-20.0	22.5-25.0
Extractable Hydrocarbons	2.78F	248.00	68.10
Volatile Hydrocarbons	ND	674.00	330.00
Methyl Ethyl Ketone	**	**	2.4815* R'
Benzene	0.0003F	0.454	1.5677* R'
Toluene	ND	45.200	38.2716* R'
Ethylbenzene	ND	19.700	29.7531* R'
m,p-Xylenes	ND	48.100	63.8272* R'
o-Xylenes	ND	17.700	25.5556 R'
Methyl tert-Butyl Ether	0.0006F	ND	**
2-Methylnaphthalene	ND	4.21*	2.11
Naphthalene	ND	6.20*	2.47
2-Methylphenol	ND	0.34*	0.52
4-Methylphenol	ND	0.52*	0.53

SB11			
Sample ID:	SB-11-01	SB-11-02	SB-11-03
Depth (ft):	10-12.5	17.5-20.0	22.5-25.0
Extractable Hydrocarbons	ND	ND	77.30
Volatile Hydrocarbons	ND	0.25F	538.00
Benzene	ND	ND	2.28* R'
Ethylbenzene	ND	0.002	38.50* R'
Toluene	ND	0.0007F	6.83E R'
m,p-Xylenes	ND	0.0018F	76.90* R'
o-Xylenes	ND	0.0009F	36.50* R'
Methyl tert-Butyl Ether	ND	0.002	**
2-Methylnaphthalene	ND	ND	0.87
Bis(2-ethylhexyl)phthalate	ND	0.90	ND
Naphthalene	ND	ND	1.14
2-Methylphenol	ND	ND	0.61
4-Methylphenol	ND	ND	0.73

The Environmental Company, Inc.

Figure 3-4
West Fork of the Trinity River Area Subsurface Soil Organic Analytical Results
NAS Fort Worth JRB
Fort Worth, Texas

Date: June 1998
Project Manager: B. Dullner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Figure 3-4.dwg

TAB

4

4.0 POTENTIAL CONTAMINANT SOURCE AND MIGRATION PATHWAYS

The SA/SI and SC results and findings presented in Section 3.0 are interpreted in the sections below to identify potential sources of the detected constituents in subsurface soil. If the pipeline is identified as a source of the contamination, the potential for migration is also discussed.

4.1 VALVE BOX AREA

Petroleum-related constituents were detected in both boreholes drilled in the Valve Box area. No other potential sources were identified during the project. Visible staining was identified in the Valve Box area. The source of contamination is therefore assumed to be the pipelines.

The geologic cross section of the sampled area is shown in Figure 4-1. Both the PID organic vapor screening results and the analytical data indicated that POL contamination is vertically localized around the pipelines. Contamination, as indicated by combined volatile and extractable hydrocarbon concentrations, was primarily found above 10 feet bgs in silty clay soil and decreased with depth. Both boreholes met refusal on limestone bedrock found at approximately 17 feet bgs. Although contamination has most likely not reached this depth, any further vertical migration would be restricted by the bedrock. Any horizontal contaminant migration would be limited to unsaturated soil because groundwater is not present in the area above the limestone. The horizontal extent of contamination is therefore expected to be limited.

4.2 FARMERS BRANCH CREEK AREA

Petroleum-related contamination was not identified in the subsurface soils of this area in either the saturated or unsaturated zones. With the exception of manganese, all detected inorganic concentrations are below SALs. The source of this compound is not known. The potential risks associated with the levels of this compound are addressed in Section 5.0. For reference, a geologic cross section of the area has been included in Figure 4-2. As shown, the pipeline is presumed to lie within saturated soils beneath the Farmers Branch Creek. Although no leaks were detected, any future leaks at this location would directly impact the shallow groundwater.

4.3 UNNAMED STREAM AREA

In addition to the Pride and Chevron pipelines, potential sources include the oil/water separator, the French drain, and in general the upgradient IRP sites ST-14 and SD-13. Figure 3-3 shows that SB-03 is located southeast of the excavated oil/water separator and French drain associated with IRP site SD-13.

As indicated in Section 3.3.4, POL contamination was not identified in any of the boreholes installed in the Unnamed Stream area beneath the pipelines. Organic vapor readings generally indicated a lack of contamination between the surface and a depth of 10 feet bgs. Hydrocarbons were detected in borehole soil samples collected below 10 feet. Leaks from the 4-foot-deep pipeline would most likely have been detected in soils between 4 and 10 feet bgs.

Other data collected during the SC that support source identification include the hydrocarbon fingerprinting analysis performed on sample SB-03-01. The fingerprinting analysis indicated that the hydrocarbon was of an evaporatively weathered light naphtha such as JP4. Hydrocarbon fingerprinting on soil samples previously collected from a hydraulically upgradient sample at the Abandoned Service Station site (SD-13) was also indicative of JP4 (Benson 1997a). The JP4 characterization does not correspond to the type of fuel reportedly carried in the Pride and Chevron pipelines in the Unnamed Stream area. As discussed in Section 1.3, this section of the Pride pipeline carried crude oil from its time of construction until abandonment in 1983. The Chevron pipeline reportedly carried various commercial petroleum products such as gasoline, leaded gasoline, and diesel.

The lack of contamination between pipelines at 4 feet bgs and 10 feet bgs and the hydrocarbon characterization of a fuel type not carried by the pipelines suggests that the contamination identified at the Unnamed Stream area is most likely associated with sources other than the pipeline. As stated above, other sources in the immediate area include the French drain, oil/water separator, and the Abandoned Service Station site.

The relative concentration of organic compounds varied across the five boreholes drilled in the Unnamed Stream area, as shown in Figure 4-3. The highest concentrations were found in the southwestern-most borehole (SB-03) and decrease in samples collected from boreholes located to the northeast. An analysis of the groundwater elevations measured in site monitoring wells by Law Environmental, Inc. indicates that SB-03 is directly downgradient of the oil/water separator and the French drain.

As indicated in Figure 4-3, contamination was primarily found below an elevation of 544 feet Above Mean Sea Level (AMSL). This was shown not only in the samples collected during this SC, but also in samples collected in 1994 during the installation of monitoring well SD-MW07. Reported water table elevations within the immediate vicinity of the pipelines and the removed oil/water separator indicate that levels may fluctuate above the identified zone of contamination. Elevations in 1996 in MW06 and MW07 vary as much as 8 feet to 546.88 feet AMSL (4th quarter 1996 at MW06) to 538.07 feet AMSL (3rd quarter 1996 at MW07). This association suggests that the contamination identified in the SC boreholes may have been transported to the area via groundwater from upgradient sources.

4.4 WEST FORK OF THE TRINITY RIVER AREA

In addition to the Chevron pipeline, potential sources of POL contamination in the vicinity of the West Fork of the Trinity River investigation area include the BSS and the Base Gas Station.

A geologic cross section of the area provided in Figure 4-4 illustrates the lenticular nature of the deposits in the immediate area. Most notable is the sand lens that apparently extends to MW10, the upgradient monitoring well. Contamination found in SC samples was primarily identified below 17.5 feet (537.61 feet AMSL) and extended down into the transmissive sand layer. There was no evidence of contamination between the surface and 15 feet bgs (540.11 feet AMSL). The lack of contamination in the upper soils is consistent with historical results obtained during the installation of upgradient monitoring well MW10 (Figure 4-4).

In October 1996, groundwater was identified in the boreholes at an elevation of approximately 536 feet AMSL. Based on measurements collected between May 1993 and January 1994, groundwater elevations in this area can be expected to vary as much as 5 feet (COE 1994). Such a variation would place the uppermost zone of contamination found in the SC borehole below the seasonal high water table.

The presence of hydrocarbon concentrations in seasonally saturated soils hydraulically downgradient from known upgradient sources of POL suggests that the contamination is most likely associated with sources other than the pipeline. This assumption is supported by the visual observations made by Chevron personnel and overseen by Tarrant County Water and Improvement District personnel. As indicated in Section 1.3, excavation and inspection in 1992 revealed no signs of leaks or contamination. The pipeline has been abandoned since 1988.

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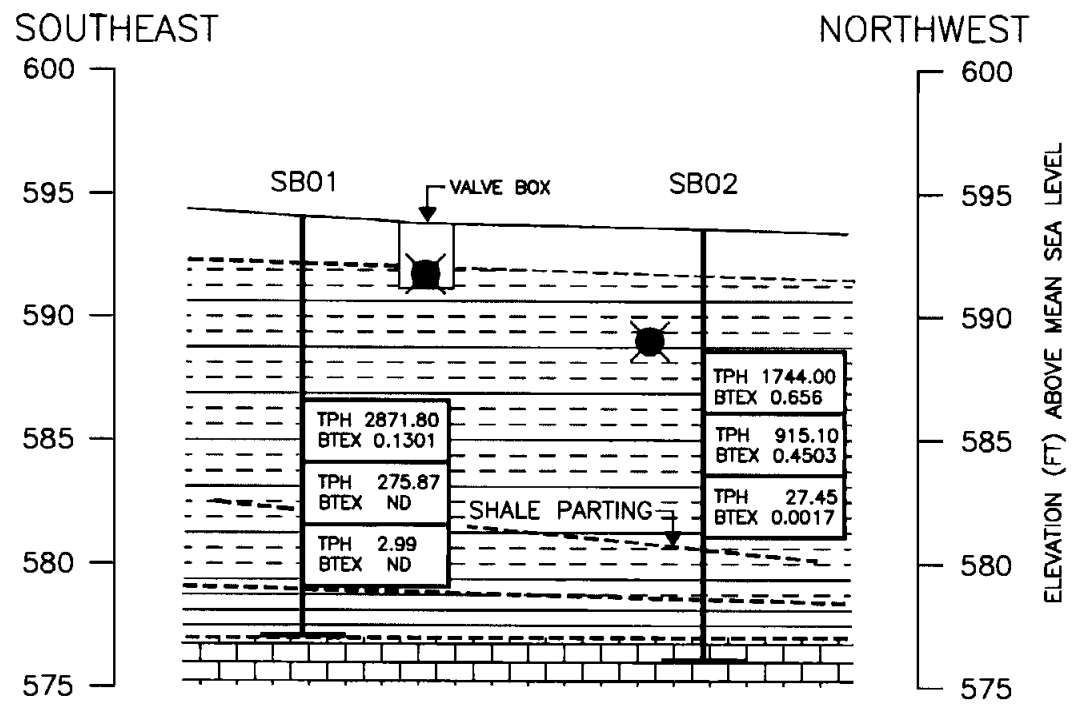


LEGEND

SUBSURFACE SOIL ANALYTICAL RESULTS (mg/kg)

TPH 10
BTEX 5

SC Sample Interval and Results, Collected 10/96

T: Total Petroleum Hydrocarbons (Current volatile and extractable fractions combined)

BTEX: Benzene, Toluene, Ethylbenzene, and Toluene

ND: Not detected above Method Detection Limit

ESTIMATED CONTACT

CHEVRON PIPELINE

PRIDE PIPELINE

TOPSOIL

SILTY CLAY

SHALE

LIMESTONE

5

SCALE (FT)

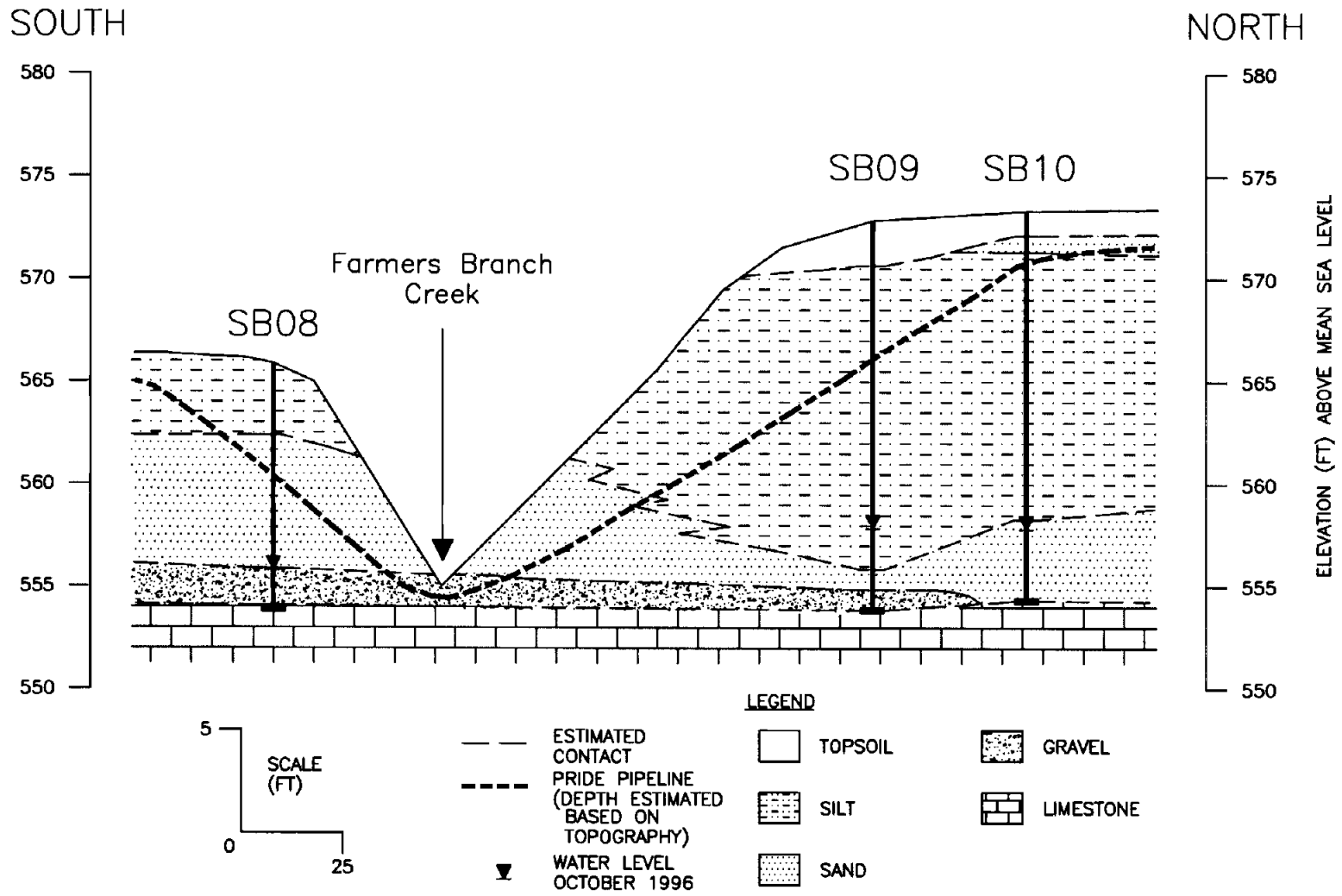
5

The Environmental Company, Inc.

Figure 4-1
Valve Box Area Geologic Cross Section and Contaminant Distribution
NAS Fort Worth JRB, Fort Worth, Texas

Date: June 1998
Project Manager: B. Dullner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Figure 4-1.dwg

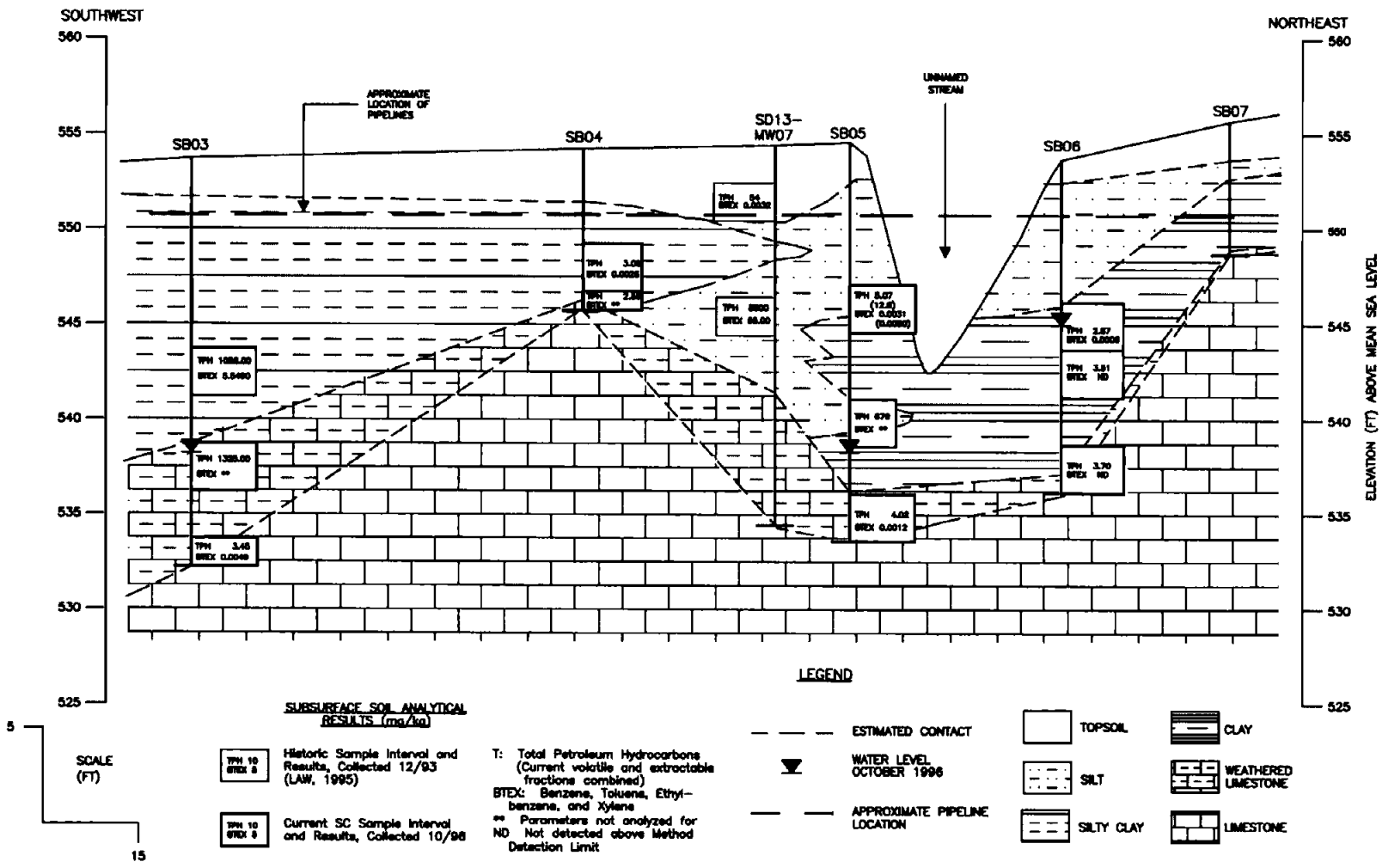


The Environmental Company, Inc.

Figure 4-2
Farmers Branch Creek Geologic Cross Section
NAS Fort Worth JRB, Fort Worth, Texas

Date: June 1998
Project Manager: B. Duffner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name Fig4-2.dwg



The Environmental Company, Inc.

Figure 4-3
Unnamed Stream Area Geologic Cross Section and Contaminant Distribution
NAS Fort Worth JRB, Fort Worth, Texas

Date: June 1998
Project Manager: B. Duffner
Prepared By: L. Myers
Revised by: A. Long
Project No: P-3103

Drawing Name: Fig4-3.dwg

TAB

5

5.0 RISK EVALUATION

The risk evaluation focuses on risks associated with subsurface soil in the Valve Box and Farmers Branch Creek areas. A risk evaluation on the West Fork of the Trinity River and Unnamed Stream areas was not performed as part of this site characterization because, as discussed in Section 4.0, the current study findings indicate that the petroleum-related contamination is not associated with the pipelines. Risk assessments have been performed for sites that encompass these areas under separate contracts (Benson 1997b; IT 1996, 1997b). In these investigations, the petroleum-related contamination identified at the sites has been attributed to the Abandoned Service Station and oil/water separator near the Unnamed Stream area and the BSS/Base Gas Station near the West Fork of the Trinity River area.

The risk evaluation is divided into the Human Health Evaluation (Section 5.1) and the Ecological Evaluation (Section 5.2). Section 5.1 identifies COPCs and potential human receptor and exposure pathways and develops ALs for protection of human health. Section 5.2 presents the biological resources present in the study area and evaluates potential ecological impact using toxicological benchmarks.

5.1 HUMAN HEALTH EVALUATION

In this section, human health risks are evaluated through the development of health-based ALs (i.e., target concentrations under the PSTD program) for the Pipeline Investigation Area, as described in Section 2.4.3. This approach is consistent with the methods and protocols outlined in the AFCEE *Handbook* (USAF 1993) and TNRCC PSTD guidance (TNRCC 1994). These references generally follow standard risk assessment procedures, which includes identifying COPCs, identifying potential receptors and exposure pathways, evaluating the toxicity of the COPCs, and characterizing risks (EPA 1989a,b).

A human exposure conceptual site model in tabular format is presented in Table 5-1. It summarizes the contaminants, contaminated media, and migration and exposure pathways for each study area based on the findings of the site characterization and risk evaluation.

5.1.1 Identification of Chemicals of Potential Concern

As described in Section 3.0, soil samples were collected at various depths for laboratory analysis according to PID readings. Surface soils were not collected because PID screening indicated a lack of contamination in the top 2 feet of soil in the Valve Box and Farmers Branch Creek areas. Groundwater in these areas was not sampled because evidence of contaminant migration from subsurface soil was not identified in any of the three areas, as discussed in Section 4.0. The potential for future migration is limited by geological barriers or lack of subsurface contamination. Therefore, the only environmental medium of concern for this risk evaluation is subsurface soil. In Section 3.0, detected site concentrations in subsurface soil were compared with SALs. Chemicals in the Valve Box and Farmers Branch Creek areas with concentrations exceeding SALs were carried forward into the risk evaluation.

Exceedances of the SALs are identified with boxes around the concentrations in Tables 3-8 to 3-12. The Valve Box area had no chemicals with concentrations exceeding SALs.

The Farmers Branch Creek area had one exceedance (manganese). Neither of these areas had petroleum-related compounds exceeding SALs.

The one manganese exceedance (522 mg/Kg vs. the background UTL of 511 mg/Kg) in soil at the Farmers Branch Creek area is well within the range considered to be regional background listed in EPA (1996). This range is 389-850 mg/Kg for manganese. Thus, the manganese concentration observed in subsurface soil at the Farmers Branch Creek area was considered background for purposes of this risk evaluation. Consequently, this compound was not selected as a COPC.

Based on the discussion above, no COPCs were identified for the Valve Box or Farmers Branch Creek. Therefore, no exposure scenario analysis was performed and no ALs were developed for these two areas. Concentrations detected in these areas are well within the normal range of local and regional background levels and are not expected to pose a threat to human health and the environment.

5.2 ECOLOGICAL EVALUATION

Potential ecological risks were evaluated using a screening level assessment in which site concentrations were compared to established ecological benchmarks. This approach is consistent with methods outlined in the *Framework for Ecological Risk Assessment* (EPA 1992a) and the *Draft Guidance for Conducting Ecological Risk Assessment Under The Texas Risk Reduction Program* (McBee et al. 1996).

The sections below describe the biological resources in the vicinity of the study area, identify potential receptors and exposure pathways, and compare study area concentrations with screening benchmarks.

5.2.1 Biological Resources

Biological resources in the Pipeline Investigation areas are expected to be limited because of their industrial or disturbed nature. However, vegetated areas within or adjacent to the study area may provide habitat for wildlife.

5.2.1.1 Vegetation

NAS Fort Worth and the study area are located in the Grand Prairie portion of the Black Prairies section of the Central Lowlands Physiographic Province. This province is characterized by broad terraces that slope to the east. The topography in the vicinity of the pipelines is relatively flat.

Vegetated areas in the study area are predominantly mowed grasses and weedy herbaceous species. Most of the native habitat and species have been replaced by introduced ornamental or invasive weedy species. Grasses in the vicinity of the Valve Box area are typical of undeveloped industrial areas. According to ETC (1994), these grasses include little bluestem (*Schizachyrium scoparium*), Indian grass (*Sorghastrum avenaceum*), big bluestem (*Andropogon gerardi*), and buffalo grass (*Buchloe dactyloides*). Grasses along Farmers Branch Creek in the pipeline corridor are Bermuda grass and buffalo grass (Figure 1-3). These species are also found on the golf course. Introduced trees on the golf course include catalpa (*Catalpa bignonioides*) and chinaberry (*Melia azedarach*).

A riparian habitat is located to the east along Farmers Branch Creek (Figure 1-3). Trees and shrubs located in this area include blackjack oak (*Quercus marilandica*),

cedar elm (*Ulmus crassiflia*), American elm (*Ulmus americana*), hackberry (*Celtis laevigata*), and sumac (*Rhus* spp.) (ETC, 1994).

Although water periodically flows through Farmers Branch Creek and the golf course contains several small ponds, hydrophytic (wetland) vegetation is limited to a few emergent species such as cattails, sedges (*Carex* spp.), and rushes (*Juncus* spp.).

5.2.1.2 Wildlife

Wildlife in the vicinity of the study area includes a variety of birds, mammals, and reptiles. Wildlife typically found in the grassy areas includes common bird species such as grackle (*Quiscalus quiscula*), starling (*Starnus vulgaris*), western meadowlark (*Sturnella neglecta*), and mourning dove (*Zenaidura macroura*). Mammals that may use the general area are coyote (*Canis latrans*) and black-tailed hare (*Lepus californicus*). Vegetation along Farmers Branch Creek may provide habitat for Eastern cotton-tailed rabbit (*Sylvilagus floridanus*), fox squirrel (*Sciurus niger*), and opossum (*Didelphis virginiana*). Other mammals that could be found in the study area include raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), nine-banded armadillo (*Dasypus novemcinctus*), red fox (*Vulpes fulva*), and gray fox (*Urocyon cinereargenteus*) (ETC, 1994).

The study area may also provide habitat for reptiles and amphibians. Reptiles may include snakes, including Western cottonmouth (*Agkistrodon piscivorus*), Western diamondback (*Crotalus atrox*), Western milk (*Lampropeltis triangulum gentillis*), and Western ribbon (*Thamnophis proximus proximus*). Bullfrog (*Rana catesbeiana*) and softshell turtle (*Trionyx* spp.) are the dominant water-dependent species known to live in the ponds on the golf course and along the Trinity River (ETC, 1994).

Some stretches of the Trinity River contain habitat for waterfowl and shorebirds. Waterfowl known to use the West Fork of the Trinity River and nearby Lake Worth include wood duck (*Aix sponsa*), mallard (*Anas platyphynchos*), pintail (*Anas acuta*), American golden-eye (*Buchepala clangula*), and merganser (*Mergus merganser*) (ETC, 1994). Common shorebirds are the killdeer (*Charadrius vociferus*) and great blue heron (*Ardea herodias*).

5.2.1.3 Threatened and Endangered Species

There are no known Federal or state threatened or endangered plant or wildlife species or sensitive habitats within or adjacent to the Pipeline Investigation Area. However, NAS Fort Worth is located in the Central North American Migratory Flyway, through which several threatened and endangered species migrate, including the Arctic peregrine falcon (Falco peregrinus tundrius), bald eagle (Haliaeetus), and whooping crane (Grus americana) (ETC, 1994). These species are attracted to Lake Worth, which is located approximately 1.5 miles north of the study area. These species are migratory and are not expected to reside in the vicinity of the study area.

The Silver Creek heron rookery is located along the northeast side of the lake, approximately 5 to 6 miles north of the study area. The rookery is protected as a sensitive wildlife area by the Texas Parks and Wildlife Department.

Two federally listed candidate reptiles may exist in Tarrant County. They are the Texas horned lizard (*Phrynosoma cornutum*) and the Texas garter snake (*Thamnophis sirtallis*

annectens). The Texas horned lizard prefers grassy upland areas, while the Texas garter snake prefers seeps and wet grass areas. Either of these species could inhabit the grassy areas surrounding the golf course, along the banks of the Trinity River or in portions of Farmers Branch Creek. However, to date they have not been identified on NAS Fort Worth or in the project vicinity. Suitable habitat in the study area is fragmented and routinely maintained by mowing and herbicides. Therefore, it is not anticipated that these species exist within or adjacent to the study area.

5.2.2 Potential Receptors and Exposure Pathways

Chemicals detected in the study area located along the pipelines (i.e., Valve Box and Farmers Branch Creek areas) were found in soil samples collected at depths greater than 5 feet bgs. Given that these depths are below the root zone of most plants, contaminants in these areas are not likely to be absorbed by the vegetation (McBee et al. 1996). Herbivorous wildlife consuming these plants are also not expected to be exposed. Both insects and burrowing animals generally inhabit the root zone and are therefore not expected to be exposed to the chemicals detected in these areas (McBee et al. 1996). In addition, the area in the vicinity of the pipelines is maintained such that deep rooting plants (trees and shrubs) are not able to become established and therefore are not exposed to chemicals present in the subsurface soils.

5.2.3 Screening Benchmark Comparison

In the absence of exposure pathways for ecological receptors to come in contact with contaminants, no ecological benchmarks for the Valve Box or Farmers Branch Creek areas were developed.

5.3 RISK EVALUATION SUMMARY

No subsurface soil COPCs for human health were identified for the Valve Box and Farmers Branch Creek areas. No COPCs related to the pipelines were identified at the Unnamed Stream and West Fork of the Trinity River areas. Risk assessments for sites encompassing these two areas are being performed under separate contracts. Exposure pathways are incomplete for ecological receptors at the Valve Box and Farmers Branch Creek areas. Therefore, ALs were not derived for any of the Pipeline Investigation areas.

Table 5-1 Conceptual Site Model Summary

Site ID	Site Description	Contaminated Media and Detected Compounds	COPCs	Potential Migration Pathway	Potential Receptor(s)	Exposure Pathway
Valve Box	Valve box for pipeline	Subsurface soil: metals TEX TPH 2-MN phenanthrene	None	Not expected	None	Incomplete because no COPCs identified from SAL comparison.
Farmers Branch Creek	Pipeline crossover	Subsurface soil: metals	None	None	None	Incomplete because no COPCs identified from SAL comparison.
Unnamed Stream	Pipeline adjacent to stream	Subsurface soil: metals, TPH, BTEX, 2-MN, naphthalene	ND	Contamination from sources other than pipeline	ND	ND
West Fork of the Trinity River	Pipeline parallels river	Subsurface soil: metals, TPH, BTEX, Methyl tert butyl ether, PAHs, phenols	ND	Contamination from sources other than pipeline	ND	ND

2-MN- 2-methylnaphthalene
BTEX - benzene, toluene, ethylbenzene, xylene
COPC - chemical of potential concern; identified in Section 3.0 screening
SAL - screening action level

ND - not determined; risk assessment conducted under separate contract
TEX - toluene, ethylbenzene, xylene
TPH - total petroleum hydrocarbon

TAB

6

6.0 CONCLUSIONS AND RECOMMENDATIONS

As indicated in Section 4.0, contamination directly related to the pipelines was identified only at the Valve Box area located north of Highway 183. The contaminant levels identified were below screening action levels and therefore do not pose a risk to human health or the environment.

Other pipeline areas of concern identified during this investigation included the Farmers Branch Creek area, the Unnamed Stream area, and the area along the West Fork of the Trinity River west of the Jennings Drive bridge. No contaminants were identified at the Farmers Branch Creek investigation area. Contamination identified at the Unnamed Stream area and along the West Fork of the Trinity River is most likely attributable to other upgradient sources. Separate investigations are currently addressing these source areas and the associated contamination. Risk evaluations and the need for further action will be addressed in those reports.

Three site categories are identified in AFCEE guidance with respect to further action at a site. These categories are defined below.

- Category 1 - No further action because no significant impact to human health or the environment exists.
- Category 2 - Further study is required to categorize the site.
- Category 3 - Remedial action is required.

Based on the results of this investigation, it is recommended that the areas adjacent to the pipelines between Highway 183 and the base boundary (includes the Valve Box area) in the Unnamed Stream area and along the West Fork of the Trinity River directly west of the Jennings Bridge be included in Category 1 with respect to the pipeline. As indicated above, further study and/or action at the Unnamed Stream area and areas along the West Fork of the Trinity River may be recommended by other ongoing studies with respect to upgradient sources.

TAB

7

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TAB

A

APPENDIX A

SURVEYING DATA

Coordinates and Elevations

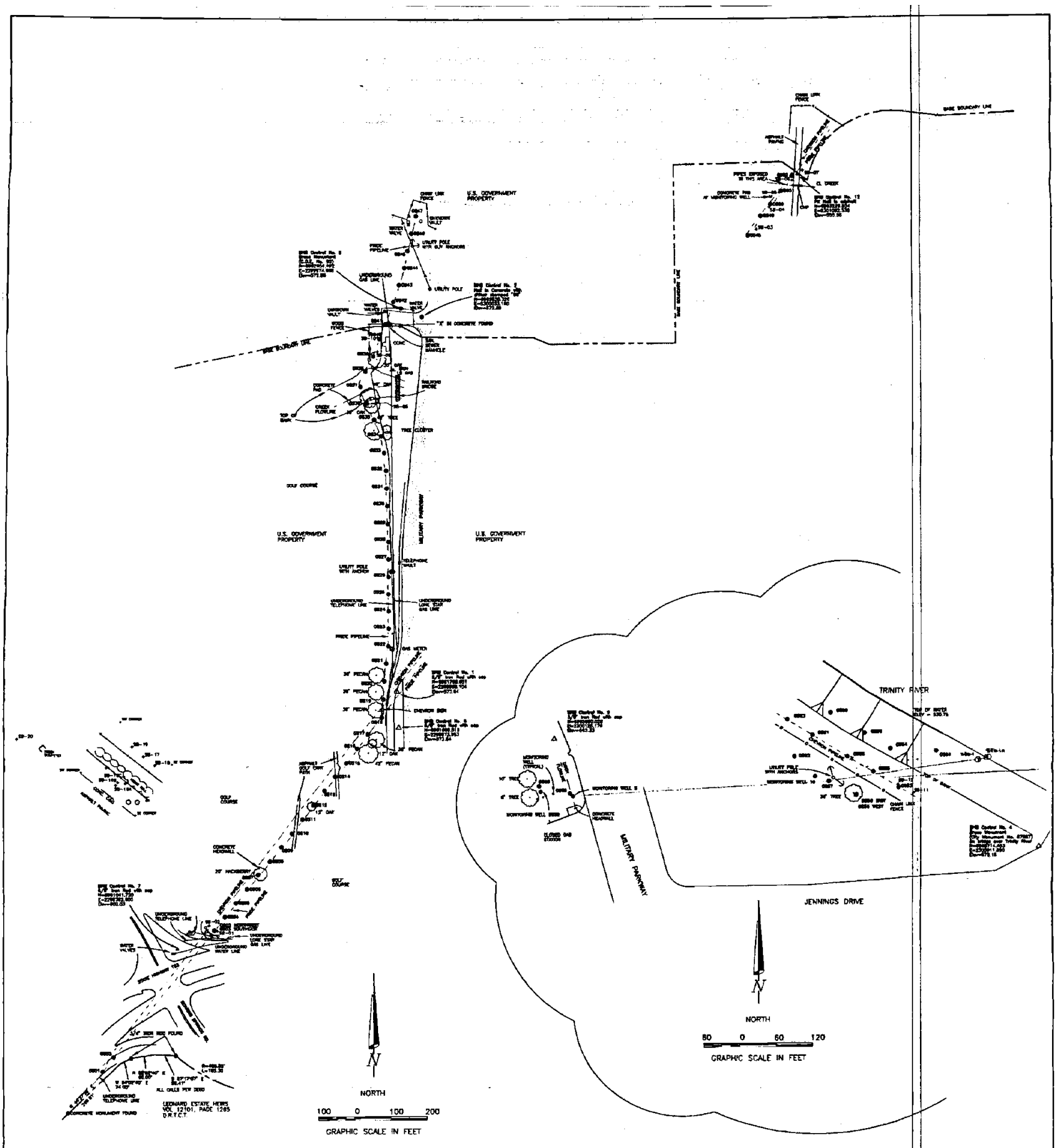
Site Drawing

Coordinates and Elevations

Soil Borehole Coordinates and Elevations

Location	Northing	Easting	Elevation (ft)
SB-01	6961092.73	2299473.27	594.08
SB-02	6961109.22	2299450.68	593.58
SB-03	6963073.73	2300967.99	553.71
SB-04	6963136.27	2301003.71	554.23
SB-05	6963178.87	2301032.44	554.58
SB-06	6963212.68	2301068.38	553.67
SB-07	6963239.43	2301096.70	555.70
SB-08	6962584.94	2299886.15	565.87
SB-09	6962733.15	2299910.48	572.85
SB-10	6962770.93	2299911.39	573.31
SB-11	6965798.31	2300719.51	555.01
SB-12	6965823.69	2300677.47	555.11

Site Drawing



COORDINATE VALUE & ELEVATION OF SOIL SONIC STATIONS

Northing	Easting	Elevation	Description
[illegible]	[illegible]	[illegible]	[illegible]

COORDINATE VALUE & ELEVATION OF GW MONITORING STATIONS

Northing	Easting	Elevation	Description
[illegible]	[illegible]	[illegible]	[illegible]

NOTE:
All coordinate values are NAD83 SPC, NCZ.
Combined scale factor of 0.99985748.

Vertical control utilizing GPS technology and verified using City of Fort Worth vertical monument network.

Baird, Hampton & Brown, Inc. master control established August, 14, 1998 utilizing real time GPS technology provided by Sampco, Inc.

11-5-96

NAS FORT WORTH JRB ENVIRONMENTAL MONITORING WELL LOCATIONS

BHB Baird, Hampton & Brown, Inc.
Engineering & Surveying

TARRANT COUNTY, TEXAS

JOB # 9606.30	AUGUST 22, 1996	SHEET NO.
DRAWN BY: JRH	REVISED NOVEMBER 5, 1996	1 of 1
CHECKED BY: DRJ		

TAB

B

APPENDIX B

SOIL GAS ANALYSIS REPORT

W. L. GORE & ASSOCIATES, INC.

Creative Technologies Worldwide

101 LEWISVILLE ROAD • P.O. BOX 1100 • ELKTON, MARYLAND 21922-1100 PHONE: 410/392-3300
FAX: 410/996-3325 • TELEX 467637 GORE FB ELKT
ENVIRONMENTAL PRODUCTS GROUP

GORE-SORBER[SM] Screening Survey
Final Report

Naval Air Station
Ft. Worth, TX

September 24, 1996

Prepared For:
The Environmental Company, Inc.
1230 Cedars Court, Suite 100
Charlottesville, VA 22905

W.L. Gore & Associates, Inc.
Written/Submitted by

Ray Fenstermacher, P.G.
Associate

W.L. Gore & Associates, Inc.
Reviewed/Approved by

Jay W. Hodny, M.S.
Associate

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FORM 11R.3
Rev 06/13/96

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GORE-SORBER[sm] Screening Survey
Final Report

REPORT DATE: September 24, 1996 **AUTHOR:** RFF

SITE INFORMATION

Site Reference: Naval Air Station, Ft. Worth, TX
Customer Purchase Order Number: 2100
Gore Production Order Number: 069552 **Gore Site Code:** SL

FIELD PROCEDURES

 # Modules shipped: 76
Installation Date(s): August 15 - 16, 1996 **# Modules Installed:** 70
Field work performed by: The Environmental Co., Inc.

Retrieval date(s): August 28 - 29, 1996 **Exposure Time:** 13-14 [days]
 # Modules Retrieved: 69 **# Trip Blanks Returned:** 6
 # Modules Lost in Field: 1 **# Unused Modules Returned:** -0-

Date/Time Received by Gore: August 30, 1996 @ 12:00 **By:** CJ Fondren
Recorded Cooler/Water Temperature Control Blank temperature: 1.4 [°C]
Chain of Custody Form attached: √
Chain of Custody discrepancies: None
Comments: None

GORE-SORBER[sm] Screening Survey 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. The Laboratory is audited regularly by a quality system design, development and auditing company.

Instrumentation consists of Hewlett-Packard 5890 gas chromatographs and 5971 mass selective detectors, as well as Perkin-Elmer ATD 400 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 (sorbers, each containing 40mg of a suitable granular adsorbent) to a thermal desorption tube for analysis. Sorbers remain clean and protected from dirt, soil, and ground water by the insertion/retrieval cord, and require no further sample preparation.

Screening Method Quality Assurance:

Before each run sequence, two instrument blanks, a sorber containing 5µg BFB (Bromofluorobenzene), and a method blank are analyzed. The BFB mass spectra must meet the criteria set forth in our methods before samples can be analyzed. A sorber containing BFB is also analyzed after every 30 samples and/or trip blanks, as is a method blank. Standards containing the selected target compounds at three calibration levels of 5, 20, and 50µg are analyzed at the beginning of each run. The criterion for each target compound is less than 35% 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 20µg 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 the presence of the target ion and at least two secondary ions, retention time versus reference standard, and the analyst's judgment.

NOTE: All data have been archived. Any replicate sorbers 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
Quality Assurance Level: 2 (ANA-4)
Instrument ID: # 3 **Chemist:** JW **Data Subdirectory:** 069552
Compounds/mixtures requested: A1: Gore Standard Target Compound List (A1) plus estimated Petroleum Hydrocarbons.
Deviations from Standard Method: None
Comments: Soil vapor analytes and abbreviations are tabulated in the Data Table Key (page 4).

GORE-SORBER[sm] Screening Survey Final Report

DATA TABULATION

 # CONTOUR MAPS ENCLOSED: None
LIST OF MAPS ENCLOSED:

- Not Applicable

NOTE: All data values presented in Appendix A represent masses of compound(s) desorbed from the GORE-SORBER Screening Modules received and analyzed by W.L. Gore, 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 either a single-level (QA Level 1) or three-level (QA Level 2) standard calibration.

Comments:

- None

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GORE-SORBER[sm] Screening Survey
Final Report

KEY TO DATA TABLE
Naval Air Station, Ft. Worth, TX

UNITS

µg	micrograms (per sorber), reported for compounds for which we run external standards.
MDL	method detection limit

ANALYTES

MTBE	methyl t-butyl ether
t12DCE	trans-1,2-dichloroethene
11DCA	1,1-dichloroethane
c12DCE	cis-1,2-dichloroethene
$CHCl_3$	chloroform
111TCA	1,1,1-trichloroethane
12DCA	1,2-dichloroethane
BENZ	benzene
CCl_4	carbon tetrachloride
TCE	trichloroethylene
TOL	toluene
OCT	octane
PCE	tetrachloroethene
ClBENZ	chlorobenzene
EtBENZ	ethylbenzene
mpXYL	m-, p-xylene
oXYL	o-xylene
135TMB	1,3,5-trimethylbenzene
124TMB	1,2,4-trimethylbenzene
14DCB	1,4-dichlorobenzene
UNDEC	undecane
NAPH	naphthalene
TRIDEC	tridecane
2MeNAPH	2-methyl naphthalene
PENTADEC	pentadecane

BLANKS

TBn	unexposed trip blanks, which traveled with the exposed modules
BLKn	method blank, retained at Gore

APPENDIX A:

1. CHAIN OF CUSTODY
2. DATA TABLE

GORE-SORBER® Screening Survey Chain of Custody

For W.L. Gore & Associates use only
Production Order # 19552

W. L. Gore & Associates, Inc., Environmental Products Group
101 Lewisville Road • Elkton, Maryland 21921 • Tel: (410) 392-3300 • Fax (410) 996-3325

Instructions: Customer must complete ALL shaded cells

Customer Name: ENVIRONMENTAL COMPANY	Site Name: NAVAL AIR STATION
Address: 6550 WHITE SETTLEMENT RD	Site Address:
FT WORTH TX 76114	FT WORTH TX
	Project Manager: ALLEN FLOLO / GLEN METZLER
Phone: 804 245 4446	Customer Project No.:
FAX: 804 295 5535	Customer P.O. #: 2100 Quote #: BK5723

Serial # of Modules Shipped			# of Modules for Installation 70	# of Trip Blanks 6	
# 125685	through	# 125704	Total Modules Shipped: 76	Pieces	
# 125708	through	# 125763	Total Modules Received: 76	Pieces	
#	through	#	Total Modules Installed: 70	Pieces	
#	through	#	Serial # of Trip Blanks (*Client Decides*)		# 125758
#	through	#	# 125759	# 125760	# 125761
#	through	#	# 125762	# 125763	#
#	through	#	#	#	#

Installation Performed By:	Installation Method(s) (*circle those that apply*):
Name (*please print*): Glenn Metzler/Steve Bliley	(Slide Hammer) Hammer Drill Auger
Company/Affiliation: The Environmental Co., Inc.	Other:

Installation Start Date and Time:	8/15/96	7:30	(AM) PM
Installation Complete Date and Time:	8/16/96	5:25	AM (PM)

Retrieval Performed By:	Total Modules Retrieved: 69 Pieces
Name (*please print*): Steve Bliley	Total Modules Lost in Field: 1 Pieces
Company/Affiliation: The Environmental Co. Inc.	Total Unused Modules Returned: 6 Pieces

Retrieval Start Date and Time:	28 AUG '1996 / /	2:30	AM (PM)
Retrieval Complete Date and Time:	29 AUG. 1996 / /	3:20	AM (PM)

Target Analytes to be Mapped (*Check Options or List as appropriate*):	To Be Determined Pending Completion of Lab Analysis [ ] or write "None", if applicable.	None
Analyte #1:	Analyte #2:	Analyte #3:

Other Instructions, if any: Fed Ex Shipment - Airbill # 1315508670

Relinquished By C J Fondren Affiliation: W.L. Gore & Associates, Inc.	Date 8/8/96	Time 15:00	Received By: Glenn Metzler Affiliation: The Environmental Co Inc.	Date 8-12-96	Time 1530
Relinquished By Stephen A B Liley Affiliation: The Environmental Co. Inc.	Date 29 AUG 96	Time 1930	Received By: Affiliation:	Date	Time
Relinquished By Affiliation	Date	Time	Received By: C J Fondren Affiliation: W.L. Gore & Associates, Inc.	Date 8/30/96	Time 12:00
	Temperature of Samples When Received By Gore			1.4	°C

GORE-SORBER ® Screening Survey is a registered service mark of W.L. Gore & Associates, Inc.

GORE Inc. Copy

CORE-SORBER® Screening Survey
Installation and Retrieval Log

Page ___ of ___

SITE NAME & LOCATION
NAVAL AIR STATION
Ft. Worth, TX

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate) LPH	ODOR	NONE	MODULE IN WATER (check one) YES	NO	COMMENTS
1.	125685 ✓	8/15/96 0730	28AUG.96 1430			✓	✓		GS-01
2.	125686 ✓	8/15/96 0800	1445			✓	✓		GS-02
3.	125687 ✓	8/15/96 0810	1500			✓		✓	GS-03
4.	125688 ✓	8/15/96 0845	1505			✓		✓	GS-03-02
5.	125689 ✓	8/15/96 0910	1512			✓		✓	GS-04
6.	125690 ✓	8/15/96 0925	1518			✓		✓	GS-05
7.	125691 ✓	8/15/96 0940	1523			✓		✓	GS-06
8.	125692 ✓	8/15/96 0945	1532			✓	✓		GS-07
9.	125693 ✓	8/15/96 1000	Lost	in	Field				GS-08
10.	125694 ✓	8/15/96 1020	1541			✓		✓	GS-09
11.	125695 ✓	8/15/96 1030	1548			✓		✓	GS-10
12.	125696 ✓	8/15/96 1040	1553			✓		✓	GS-11
13.	125697 ✓	8/15/96 1050	1650			✓		✓	GS-12
14.	125698 ✓	8/15/96 1105	1654			✓		✓	GS-13
15.	125699 ✓	8/15/96 1115	1708			✓		✓	GS-14
16.	125700 ✓	8/15/96 1130	1710			✓		✓	GS-15
17.	125701 ✓	8/15/96 1140	1715			✓		✓	GS-16
18.	125702 ✓	8/15/96 1145	1718			✓		✓	GS-17
19.	125703 ✓	8/15/96 1155	1723			✓		✓	GS-18
20.	125704 ✓	8/15/96 1330	1727			✓		✓	GS-19
21.	125708 ✓	8/15/96 1335	1734			✓		✓	GS-20
22.	125709 ✓	8/15/96 1340	1738			✓		✓	GS-21
23.	125710 ✓	8/15/96 1350	1742			✓		✓	GS-22
24.	125711 ✓	8/15/96 1355	1745			✓		✓	GS-23
25.	125712 ✓	8/15/96 1410	29AUG.96 - 0802			✓		✓	GS-24
26.	125713 ✓	8/15/96 1415	0806			✓		✓	GS-24-02
27.	125714 ✓	8/15/96 1420	0811			✓		✓	GS-25
28.	125715 ✓	8/15/96 1430	0814			✓		✓	GS-26
29.	125716 ✓	8/15/96 1440	0835			✓		✓	GS-27
30.	125717 ✓	8/15/96 1450	0837			✓		✓	GS-28
31.	125718 ✓	8/15/96 1500	0840			✓		✓	GS-29
32.	125719 ✓	8/15/96 1505	0843			✓		✓	GS-30
33.	125720 ✓	8/15/96 1515	0845			✓		✓	GS-31
34.	125721 ✓	8/15/96 1535	0902			✓		✓	GS-32
35.	125722 ✓	8/15/96 1545	0905			✓		✓	GS-33
36.	125723 ✓	8/15/96 1555	0907			✓		✓	GS-34
37.	125724 ✓	8/15/96 1625	0910			✓		✓	GS-35
38.	125725 ✓	8/15/96 1635	0913			✓		✓	GS-36
39.	125726 ✓	8/15/96 1645	0932			✓		✓	GS-37
40.	125727 ✓	8/15/96 1700	0936			✓		✓	GS-38
41.	125728 ✓	8/15/96 1710	0938			✓		✓	GS-39
42.	125729 ✓	8/15/96 1715	0941			✓		✓	GS-39-02

GORE-SORBER® Screening Survey
Installation and Retrieval Log

Page ____ of ____

SITE NAME & LOCATION

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	
43.	125730 ✓	8/15/96 1725	29 Aug 96 - 0958			✓		✓	GS-40
44.	125731 ✓	8/15/96 1800	1002			✓		✓	GS-41
45.	125732 ✓	8/15/96 1835	1006			✓	✓		GS-42
46.	125733 ✓	8/16/96 0735	1010			✓		✓	GS-43
47.	125734 ✓	8/16/96 0800	1013			✓		✓	GS-44
48.	125735 ✓	8/16/96 0820	1015			✓		✓	GS-45
49.	125736 ✓	8/16/96 0830	1026			✓		✓	GS-46
50.	125737 ✓	8/16/96 0840	1030			✓		✓	GS-47
51.	125738 ✓	8/16/96 0925	1104			✓	✓		GS-48
52.	125739 ✓	8/16/96 0935	1108			✓	✓		GS-49
53.	125740 ✓	8/16/96 0950	1112			✓		✓	GS-50
54.	125741 ✓	8/16/96 1015	1115			✓		✓	GS-51
55.	125742 ✓	8/16/96 1020	1118			✓		✓	GS-52
56.	125743 ✓	8/16/96 1250	1447			✓		✓	GS-53
57.	125744 ✓	8/16/96 1315	1512			✓		✓	GS-54
58.	125745 ✓	8/16/96 1330	1449			✓		✓	GS-55
59.	125746 ✓	8/16/96 1600	1420			✓		✓	GS-56
60.	125748 ✓	8/16/96 1620	1422			✓		✓	GS-56-02
	125747 ✓	8/16/96 1610	1425			✓		✓	GS-57
	125749 ✓	8/16/96 1345	1452			✓		✓	GS-58
	125750 ✓	8/16/96 1700	1507			✓		✓	GS-59
	125751 ✓	8/16/96 1725	1503			✓		✓	GS-60
	125752 ✓	8/16/96 1400	1455			✓	✓		GS-61
	125753 ✓	8/16/96 1625	1428			✓		✓	GS-62
	125754 ✓	8/16/96 1415	1458			✓		✓	GS-63
	125755 ✓	8/16/96 1305	1518			✓		✓	GS-64
	125756 ✓	8/16/96 1445	1146			✓	✓		GS-65
	125757 ✓	8/16/96 1430	1151			✓		✓	GS-66
	125758 ✓								Trip Bl
	125759 ✓								Trip Bl.
	125760 ✓								Trip Bl.
	125761 ✓								Trip Bl.
	125762 ✓								Trip Bl
	125763 ✓								Trip Bl

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GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	DATE ANALYZED	MTBE, ug	t12DCE, ug	11DCA, ug	c12DCE, ug	CHCl3, ug	111TCA, ug	12DCA, ug	BENZ, ug	CCl4, ug	TCE, ug	TOL, ug	OCT, ug	PCE, ug	ClBENZ, ug
MDL =		0.10	0.06	0.06	0.02	0.03	0.08	0.02	0.02	0.07	0.02	0.02	0.02	0.02	0.01
125685	09/12/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
125686	09/12/96	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
125687	09/12/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
125688	09/12/96	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
125689	09/12/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
125690	09/12/96	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
125691	09/12/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00
125692	09/12/96	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
125694	09/12/96	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
125695	09/12/96	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
125696	09/12/96	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
125697	09/12/96	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
125698	09/12/96	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
125699	09/12/96	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
125700	09/12/96	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
125701	09/12/96	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
125702	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00
125703	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.09	0.00
125704	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.39	0.00
125708	09/13/96	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.12	0.00	0.24	0.00
125709	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.14	0.00
125710	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.12	0.00
125711	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
125712	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.04	0.00
125713	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.16	0.00
125714	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
125715	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00
125716	09/13/96	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
125717	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.00
125718	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
125719	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.12	0.00
125720	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.10	0.00
125721	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	DATE ANALYZED	MTBE, ug	t12DCE, ug	11DCA, ug	c12DCE, ug	CHCl3, ug	111TCA, ug	12DCA, ug	BENZ, ug	CCl4, ug	TCE, ug	TOL, ug	OCT, ug	PCE, ug	ClBENZ, u
MDL =		0.10	0.06	0.06	0.02	0.03	0.08	0.02	0.02	0.07	0.02	0.02	0.02	0.02	0.0
125722	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.0
125723	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.0
125724	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.06	0.0
125725	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.02	0.0
125726	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.14	0.00	0.00	0.0
125727	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.0
125728	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.04	0.0
125729	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.0
125730	09/13/96	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	0.0
125731	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.0
125732	09/13/96	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.0
125733	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.04	0.0
125734	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.0
125735	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.05	0.0
125736	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.0
125737	09/13/96	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	0.0
125738	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.0
125739	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00
125740	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.00
125741	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00
125742	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	5.71	0.00
125743	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
125744	09/14/96	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
125745	09/14/96	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
125746	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00
125747	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00
125748	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00
125749	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
125750	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	2.54	0.00	0.00	0.00
125751	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00
125752	09/14/96	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
125753	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00	0.00
125754	09/14/96	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	DATE ANALYZED	MTBE, ug	t12DCE, ug	11DCA, ug	c12DCE, ug	CHCl3, ug	111TCA, ug	12DCA, ug	BENZ, ug	CCl4, ug	TCE, ug	TOL, ug	OCT, ug	PCE, ug	ClBENZ, ug
MDL =		0.10	0.06	0.06	0.02	0.03	0.08	0.02	0.02	0.07	0.02	0.02	0.02	0.02	0.0
125755	09/14/96	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.0
125756	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.56	0.00	0.00	105.34	7.49	0.00	0.0
125757	09/14/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.0
Max. Detected		0.00	0.00	0.00	0.00	0.22	0.03	0.00	42.56	0.00	0.05	105.34	7.49	5.71	0.0
TB1 - 125758	09/12/96	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	0.0
TB2 - 125759	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.0
TB3 - 125760	09/13/96	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	0.0
TB4 - 125761	09/13/96	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	0.0
TB5 - 125762	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.0
TB6 - 125763	09/13/96	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	0.0
method blank	09/12/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.0
method blank	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.0
method blank	09/13/96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.0

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	EtBENZ, ug	mpXYL, ug	oXYL, ug	135TMB, ug	124TMB, ug	14DCB, ug	UNDEC, ug	NAPH, ug	TRIDEC, ug	2MeNAPH, ug	PENTADEC, ug	Petroleum Hydrocarbons, est. ug
MDL =	0.01	0.03	0.01	0.01	0.02	0.01	0.03	0.01	0.01	0.01	0.01	
125685	0.11	0.32	0.18	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	3.00
125686	0.10	0.28	0.13	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	2.65
125687	0.00	0.00	0.00	0.00	0.00	0.00	1.46	0.00	1.16	0.00	0.42	173.13
125688	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.77
125689	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.12
125690	0.03	0.11	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.11
125691	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80
125692	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25
125694	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	1.80
125695	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.15
125696	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	7.00
125697	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.41
125698	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56
125699	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63
125700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16
125701	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59
125702	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79
125703	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12
125704	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.13
125708	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.41
125709	0.00	0.03	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	2.42
125710	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.86
125711	0.00	0.07	0.04	0.26	0.58	0.00	0.35	0.73	0.00	0.00	0.00	2.40
125712	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59
125713	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.22
125714	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	2.82
125715	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
125716	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55
125717	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51
125718	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.78
125719	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60
125720	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.77
125721	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	EtBENZ, ug	mpXYL, ug	oXYL, ug	135TMB, ug	124TMB, ug	14DCB, ug	UNDEC, ug	NAPH, ug	TRIDEC, ug	2MeNAPH, ug	PENTADEC, ug	Petroleum Hydrocarbons, est. ug
MDL =	0.01	0.03	0.01	0.01	0.02	0.01	0.03	0.01	0.01	0.01	0.01	
125722	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.03
125723	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65
125724	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
125725	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
125726	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	2.07
125727	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.49
125728	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32
125729	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37
125730	0.13	0.45	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
125731	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62
125732	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57
125733	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	3.61
125734	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
125735	0.00	0.04	0.03	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	2.57
125736	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37
125737	0.18	0.72	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06
125738	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.73
125739	0.09	0.33	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57
125740	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31
125741	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
125742	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57
125743	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
125744	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
125745	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
125746	0.03	0.13	0.09	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	2.20
125747	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.00
125748	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30
125749	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62
125750	0.00	0.04	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	5.26
125751	0.00	0.03	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	3.79
125752	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
125753	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72
125754	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	1.19

GORE SORBER SCREENING SURVEY ANALYTICAL RESULTS
ENVIRONMENTAL COMPANY, FT. WORTH, TX
GORE STANDARD TARGET VOCs/SVOCs (A1)
NAVAL AIR STATION, FT. WORTH, TX
SITE SL - PRODUCTION ORDER #069552

SAMPLE NAME	EtBENZ, ug	mpXYL, ug	oXYL, ug	135TMB, ug	124TMB, ug	14DCB, ug	UNDEC, ug	NAPH, ug	TRIDEC, ug	2MeNAPH, ug	PENTADEC, ug	Petroleum Hydrocarbons, est. ug
MDL =	0.01	0.03	0.01	0.01	0.02	0.01	0.03	0.01	0.01	0.01	0.01	
125755	0.00	0.07	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.00	0.00	3.83
125756	2.70	84.89	35.63	38.61	14.70	0.00	4.57	0.64	0.42	0.18	0.06	819.64
125757	0.00	0.04	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	2.03
Max. Detected	2.70	84.89	35.63	38.61	14.70	0.00	4.57	0.73	1.16	0.18	0.42	819.64
TB1 - 125758	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75
TB2 - 125759	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.79
TB3 - 125760	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.16
TB4 - 125761	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.52
TB5 - 125762	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	2.11
TB6 - 125763	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
method blank	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49
method blank	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.71
method blank	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41

TAB

C

APPENDIX C

SAMPLE IDENTIFICATION CROSS REFERENCE

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	SAMPLE DEPTHS (FT) END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SBO1	22-Oct-1996	0940	N1	SO	7.50	10.00	FC-SB01-01	012A	D96-12056-4	D2216	889063D
SBO1	22-Oct-1996	0940	N1	SO	7.50	10.00	FC-SB01-01	012A	D96-12056-4	SW8020	AB903-85
SBO1	22-Oct-1996	0940	N1	SO	7.50	10.00	FC-SB01-01	012A	D96-12056-4	SW8270	1029801501
SBO1	22-Oct-1996	0940	N1	SO	7.50	10.00	FC-SB01-01	012A	D96-12056-4	M8015D	1029802001
SBO1	22-Oct-1996	0940	N1	SO	7.50	10.00	FC-SB01-01	012A	D96-12056-4	M8015V	AB903-84
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	SW6010	15045
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	D2216	889063D
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	M8015D	AB903-85
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	M8015V	1029801501
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	SW7421	1106742101
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	SW7471	1028747101
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	SW8240	ITS6-863
SBO1	22-Oct-1996	1005	N1	SO	10.00	12.50	FC-SB01-02	012A	D96-12056-5	SW8270	AB903-84
SBO1	22-Oct-1996	1020	N1	SO	12.50	15.00	FC-SB01-03	012A	D96-12056-6	D2216	889063D
SBO1	22-Oct-1996	1020	N1	SO	12.50	15.00	FC-SB01-03	012A	D96-12056-6	M8015D	AB903-85
SBO1	22-Oct-1996	1020	N1	SO	12.50	15.00	FC-SB01-03	012A	D96-12056-6	M8015V	1029801501
SBO1	22-Oct-1996	1020	N1	SO	12.50	15.00	FC-SB01-03	012A	D96-12056-6	SW8020	1029802001
SBO2	22-Oct-1996	1300	N1	SO	5.00	7.50	FC-SB02-01	012A	D96-12056-7	D2216	889063D
SBO2	22-Oct-1996	1300	N1	SO	5.00	7.50	FC-SB02-01	012A	D96-12056-7	M8015D	AB903-85
SBO2	22-Oct-1996	1300	N1	SO	5.00	7.50	FC-SB02-01	012A	D96-12056-7	M8015V	1029801501
SBO2	22-Oct-1996	1300	N1	SO	5.00	7.50	FC-SB02-01	012A	D96-12056-7	SW8020	1029802001
SBO2	22-Oct-1996	1300	N1	SO	5.00	7.50	FC-SB02-01	012A	D96-12056-7	SW8270	AB903-84
SBO2	22-Oct-1996	1320	N1	SO	7.50	10.00	FC-SB02-02	012A	D96-12056-8	D2216	889063D
SBO2	22-Oct-1996	1320	N1	SO	7.50	10.00	FC-SB02-02	012A	D96-12056-8	M8015D	AB903-85
SBO2	22-Oct-1996	1320	N1	SO	7.50	10.00	FC-SB02-02	012A	D96-12056-8	M8015V	1029801501
SBO2	22-Oct-1996	1320	N1	SO	7.50	10.00	FC-SB02-02	012A	D96-12056-8	SW8020	1029802001

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SBO2	22-Oct-1996	1320	N1	SO	7.50	10.00	FC-SB02-02	012A	D96-12056-8	SW8270	AB903-84
SBO2	22-Oct-1996	1420	N1	SO	10.00	12.50	FC-SB02-03	012A	D96-12056-9	D2216	889064E
SBO2	22-Oct-1996	1420	N1	SO	10.00	12.50	FC-SB02-03	012A	D96-12056-9	M8015D	AB903-85
SBO2	22-Oct-1996	1420	N1	SO	10.00	12.50	FC-SB02-03	012A	D96-12056-9	M8015V	1029801501
SBO2	22-Oct-1996	1420	N1	SO	10.00	12.50	FC-SB02-03	012A	D96-12056-9	SW8020	1029802001
SBO3	22-Oct-1996	1710	N1	SO	10.00	12.50	FC-SB03-01	011B	D96-12056-1	D2216	889063D
SBO3	22-Oct-1996	1710	N1	SO	10.00	12.50	FC-SB03-01	011B	D96-12056-1	M8015D	AB903-85
SBO3	22-Oct-1996	1710	N1	SO	10.00	12.50	FC-SB03-01	011B	D96-12056-1	M8015V	1029801501
SBO3	22-Oct-1996	1710	N1	SO	10.00	12.50	FC-SB03-01	011B	D96-12056-1	SW8020	1029802001
SBO3	22-Oct-1996	1710	N1	SO	10.00	12.50	FC-SB03-01	011B	D96-12056-1	SW8270	AB903-84
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	SW6010	15045
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	D2216	889063D
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	M8015D	AB903-85
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	M8015V	1029801501
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	SW7421	1106742101
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	SW7471	1028747101
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	SW8240	ITS6-863
SBO3	22-Oct-1996	1725	N1	SO	15.00	17.50	FC-SB03-02	011B	D96-12056-2	SW8270	AB903-84
SBO3	22-Oct-1996	1745	N1	SO	20.00	21.50	FC-SB03-03	011B	D96-12056-3	D2216	889063D
SBO3	22-Oct-1996	1745	N1	SO	20.00	21.50	FC-SB03-03	011B	D96-12056-3	M8015D	AB903-85
SBO3	22-Oct-1996	1745	N1	SO	20.00	21.50	FC-SB03-03	011B	D96-12056-3	M8015V	1029801501
SBO3	22-Oct-1996	1745	N1	SO	20.00	21.50	FC-SB03-03	011B	D96-12056-3	SW8020	1029802001
SBO4	23-Oct-1996	0840	N1	SO	5.00	7.50	FC-SB04-01	011A	D96-12056-10	D2216	889064E
SBO4	23-Oct-1996	0840	N1	SO	5.00	7.50	FC-SB04-01	011A	D96-12056-10	M8015D	AB903-85
SBO4	23-Oct-1996	0840	N1	SO	5.00	7.50	FC-SB04-01	011A	D96-12056-10	M8015V	1029801501

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SB04	23-Oct-1996	0840	N1	SO	5.00	7.50	FC-SB04-01	011A	D96-12056-10	SW8020	1029802001
SB04	23-Oct-1996	0840	N1	SO	5.00	7.50	FC-SB04-01	011A	D96-12056-10	SW8270	AB903-84
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	D2216	889064E
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	M8015D	AB903-85
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	M8015V	1029801501
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	SW6010	15045
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	SW7421	1106742101
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	SW7471	1028747101
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	SW8240	ITS6-863
SB04	23-Oct-1996	0840	N1	SO	7.50	8.50	FC-SB04-02	011A	D96-12056-11	SW8270	AB903-84
SB05	23-Oct-1996	1115	N1	SO	7.50	10.00	FC-SB05-01	011A	D96-12056-12	D2216	889064E
SB05	23-Oct-1996	1115	N1	SO	7.50	10.00	FC-SB05-01	011A	D96-12056-12	M8015D	AB903-85
SB05	23-Oct-1996	1115	N1	SO	7.50	10.00	FC-SB05-01	011A	D96-12056-12	M8015V	1029801501
SB05	23-Oct-1996	1115	N1	SO	7.50	10.00	FC-SB05-01	011A	D96-12056-12	SW8020	1029802001
SB05	23-Oct-1996	1115	N1	SO	7.50	10.00	FC-SB05-01	011A	D96-12056-12	SW8270	AB903-84
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	D2216	889064E
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	M8015D	AB903-85
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	M8015V	1029801501
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	SW6010	15045
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	SW7421	1106742101
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	SW7471	1028747101
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	SW8240	ITS6-863
SB05	23-Oct-1996	1135	N1	SO	13.50	16.00	FC-SB05-02	011A	D96-12056-13	SW8270	AB903-84
SB05	23-Oct-1996	1150	N1	SO	18.50	21.00	FC-SB05-03	011A	D96-12056-14	D2216	889064E
SB05	23-Oct-1996	1150	N1	SO	18.50	21.00	FC-SB05-03	011A	D96-12056-14	M8015D	AB903-85
SB05	23-Oct-1996	1150	N1	SO	18.50	21.00	FC-SB05-03	011A	D96-12056-14	M8015V	1029801501

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SBO5	23-Oct-1996	1150	N1	SO	18.50	21.00	FC-SB05-03	011A	D96-12056-14	SW8020	1029802001
SBO5	23-Oct-1996	1115	FD1	SO	7.50	10.00	FC-SB05-04	011A	D96-12056-15	D2216	889064E
SBO5	23-Oct-1996	1115	FD1	SO	7.50	10.00	FC-SB05-04	011A	D96-12056-15	M8015D	AB903-85
SBO5	23-Oct-1996	1115	FD1	SO	7.50	10.00	FC-SB05-04	011A	D96-12056-15	M8015V	1029801501
SBO5	23-Oct-1996	1115	FD1	SO	7.50	10.00	FC-SB05-04	011A	D96-12056-15	SW8020	1029802001
SBO5	23-Oct-1996	1115	FD1	SO	7.50	10.00	FC-SB05-04	011A	D96-12056-15	SW8270	AB903-84
SBO6	23-Oct-1996	1450	N1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-16	D2216	889064E
SBO6	23-Oct-1996	1450	N1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-16	M8015D	AB903-85
SBO6	23-Oct-1996	1450	N1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-16	M8015V	1029801501
SBO6	23-Oct-1996	1450	N1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-16	SW8020	1029802001
SBO6	23-Oct-1996	1450	N1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-16	SW8270	AB903-84
SBO6	23-Oct-1996	1450	MS1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-21	M8015D	AB903-85
SBO6	23-Oct-1996	1450	MS1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-21	M8015V	1029801501
SBO6	23-Oct-1996	1450	MS1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-21	SW8020	1029802001
SBO6	23-Oct-1996	1450	MS1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-21	SW8270	AB903-84
SBO6	23-Oct-1996	1450	SD1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-22	M8015D	AB903-85
SBO6	23-Oct-1996	1450	SD1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-22	M8015V	1029801501
SBO6	23-Oct-1996	1450	SD1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-22	SW8020	1029802001
SBO6	23-Oct-1996	1450	SD1	SO	7.50	10.00	FC-SB06-01	011A	D96-12056-22	SW8270	AB903-84
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	D2216	889064E
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	M8015D	AB903-85
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	M8015V	1029801501
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	SW6010	15045
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	SW7421	1106742101
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	SW7471	1028747101

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	SW8020	1029802001
SBO6	23-Oct-1996	1450	N1	SO	10.00	12.50	FC-SB06-02	011A	D96-12056-17	SW8270	AB903-84
SBO6	23-Oct-1996	1520	N1	SO	15.00	17.50	FC-SB06-03	011A	D96-12056-18	D2216	889064E
SBO6	23-Oct-1996	1520	N1	SO	15.00	17.50	FC-SB06-03	011A	D96-12056-18	M8015D	AB903-85
SBO6	23-Oct-1996	1520	N1	SO	15.00	17.50	FC-SB06-03	011A	D96-12056-18	M8015V	1029801501
SBO6	23-Oct-1996	1520	N1	SO	15.00	17.50	FC-SB06-03	011A	D96-12056-18	SW8020	1029802001
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	D2216	889065F
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	M8015D	AB903-96
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	M8015V	1101801502
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	SW6010	15045
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	SW7421	1106742101
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	SW7471	1028747101
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	SW8240	ITS6-863
SBO7	24-Oct-1996	0845	N1	SO	5.00	7.00	FC-SB07-01	011A	D96-12092-6	SW8270	AB903-98
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	D2216	889065F
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	M8015D	AB903-96
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	M8015V	1101801502
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	SW6010	15045
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	SW7421	1106742101
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	SW7471	1028747101
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	SW8240	ITS6-863
SBO8	24-Oct-1996	1105	N1	SO	8.50	12.00	FC-SB08-01	011A	D96-12092-7	SW8270	AB903-98
SBO9	24-Oct-1996	1340	N1	SO	10.00	12.50	FC-SB09-01	011A	D96-12092-8	D2216	889065F
SBO9	24-Oct-1996	1340	N1	SO	10.00	12.50	FC-SB09-01	011A	D96-12092-8	M8015D	AB903-96
SBO9	24-Oct-1996	1340	N1	SO	10.00	12.50	FC-SB09-01	011A	D96-12092-8	M8015V	1101801502
SBO9	24-Oct-1996	1340	N1	SO	10.00	12.50	FC-SB09-01	011A	D96-12092-8	SW8020	1101802001

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SB09	24-Oct-1996	1340	N1	SO	10.00	12.50	FC-SB09-01	011A	D96-12092-8	SW8270	AB903-98
SB09	24-Oct-1996	1354	N1	SO	15.00	17.50	FC-SB09-02	011A	D96-12092-9	D2216	889065F
SB09	24-Oct-1996	1354	N1	SO	15.00	17.50	FC-SB09-02	011A	D96-12092-9	M8015D	AB903-96
SB09	24-Oct-1996	1354	N1	SO	15.00	17.50	FC-SB09-02	011A	D96-12092-9	M8015V	1101801502
SB09	24-Oct-1996	1354	N1	SO	15.00	17.50	FC-SB09-02	011A	D96-12092-9	SW8020	1101802001
SB09	24-Oct-1996	1354	N1	SO	15.00	17.50	FC-SB09-02	011A	D96-12092-9	SW8270	AB903-98
SB09	24-Oct-1996	1340	FD1	SO	10.00	12.50	FC-SB09-03	011A	D96-12092-10	D2216	889065F
SB09	24-Oct-1996	1340	FD1	SO	10.00	12.50	FC-SB09-03	011A	D96-12092-10	M8015D	AB903-96
SB09	24-Oct-1996	1340	FD1	SO	10.00	12.50	FC-SB09-03	011A	D96-12092-10	M8015V	1101801502
SB09	24-Oct-1996	1340	FD1	SO	10.00	12.50	FC-SB09-03	011A	D96-12092-10	SW8020	1101802001
SB09	24-Oct-1996	1340	FD1	SO	10.00	12.50	FC-SB09-03	011A	D96-12092-10	SW8270	AB903-98
SB10	24-Oct-1996	1435	N1	SO	7.50	10.00	FC-SB10-01	011A	D96-12092-12	D2216	889065F
SB10	24-Oct-1996	1435	N1	SO	7.50	10.00	FC-SB10-01	011A	D96-12092-12	M8015D	AB903-96
SB10	24-Oct-1996	1435	N1	SO	7.50	10.00	FC-SB10-01	011A	D96-12092-12	M8015V	1101801502
SB10	24-Oct-1996	1435	N1	SO	7.50	10.00	FC-SB10-01	011A	D96-12092-12	SW8020	1101802001
SB10	24-Oct-1996	1435	N1	SO	7.50	10.00	FC-SB10-01	011A	D96-12092-12	SW8270	AB903-98
SB10	24-Oct-1996	1525	N1	SO	15.00	19.00	FC-SB10-02	011A	D96-12092-11	D2216	889065F
SB10	24-Oct-1996	1525	N1	SO	15.00	19.00	FC-SB10-02	011A	D96-12092-11	M8015D	AB903-96
SB10	24-Oct-1996	1525	N1	SO	15.00	19.00	FC-SB10-02	011A	D96-12092-11	M8015V	1101801502
SB10	24-Oct-1996	1525	N1	SO	15.00	19.00	FC-SB10-02	011A	D96-12092-11	SW8020	1101802001
SB10	24-Oct-1996	1525	N1	SO	15.00	19.00	FC-SB10-02	011A	D96-12092-11	SW8270	AB903-98
SB11	26-Oct-1996	0905	N1	SO	10.00	12.50	FC-SB11-01	011A	D96-12170-13	D2216	889074G
SB11	26-Oct-1996	0905	N1	SO	10.00	12.50	FC-SB11-01	011A	D96-12170-13	M8015D	AB925-13
SB11	26-Oct-1996	0905	N1	SO	10.00	12.50	FC-SB11-01	011A	D96-12170-13	M8015V	1031801501
SB11	26-Oct-1996	0905	N1	SO	10.00	12.50	FC-SB11-01	011A	D96-12170-13	SW8020	1031802001

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SB11	26-Oct-1996	0905	N1	SO	10.00	12.50	FC-SB11-01	011A	D96-12170-13	SW8270	AB925-10
SB11	26-Oct-1996	0925	N1	SO	17.50	20.00	FC-SB11-02	011A	D96-12170-14	D2216	889075H
SB11	26-Oct-1996	0925	N1	SO	17.50	20.00	FC-SB11-02	011A	D96-12170-14	M8015D	AB925-13
SB11	26-Oct-1996	0925	N1	SO	17.50	20.00	FC-SB11-02	011A	D96-12170-14	M8015V	1031801501
SB11	26-Oct-1996	0925	N1	SO	17.50	20.00	FC-SB11-02	011A	D96-12170-14	SW8020	1031802001
SB11	26-Oct-1996	0925	N1	SO	17.50	20.00	FC-SB11-02	011A	D96-12170-14	SW8270	AB925-10
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	D2216	889075H
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	M8015D	AB925-13
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	M8015V	1031801501
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	SW6010	15053
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	SW7421	1106742101
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	SW7471	1031747101
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	SW8240	ITS6-863
SB11	26-Oct-1996	0940	N1	SO	22.50	25.00	FC-SB11-03	011A	D96-12170-15	SW8270	AB925-10
SB12	26-Oct-1996	1120	N1	SO	10.00	12.50	FC-SB12-01	011A	D96-12170-18	D2216	889075H
SB12	26-Oct-1996	1120	N1	SO	10.00	12.50	FC-SB12-01	011A	D96-12170-18	M8015D	AB925-13
SB12	26-Oct-1996	1120	N1	SO	10.00	12.50	FC-SB12-01	011A	D96-12170-18	M8015V	1031801501
SB12	26-Oct-1996	1120	N1	SO	10.00	12.50	FC-SB12-01	011A	D96-12170-18	SW8020	1031802001
SB12	26-Oct-1996	1120	N1	SO	10.00	12.50	FC-SB12-01	011A	D96-12170-18	SW8270	AB925-10
SB12	26-Oct-1996	1140	N1	SO	17.50	20.00	FC-SB12-02	011A	D96-12170-19	D2216	889075H
SB12	26-Oct-1996	1140	N1	SO	17.50	20.00	FC-SB12-02	011A	D96-12170-19	M8015D	AB925-13
SB12	26-Oct-1996	1140	N1	SO	17.50	20.00	FC-SB12-02	011A	D96-12170-19	M8015V	1031801501
SB12	26-Oct-1996	1140	N1	SO	17.50	20.00	FC-SB12-02	011A	D96-12170-19	SW8020	1031802001
SB12	26-Oct-1996	1140	N1	SO	17.50	20.00	FC-SB12-02	011A	D96-12170-19	SW8270	AB925-10
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	D2216	889075H

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	M8015D	AB925-13
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	M8015V	1031801501
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	SW6010	15053
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	SW7421	1106742101
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	SW7471	1031747101
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	SW8240	ITS6-863
SB12	26-Oct-1996	1205	N1	SO	22.50	25.00	FC-SB12-03	011A	D96-12170-20	SW8270	AB925-10
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	M8015D	AB903-91
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	M8015V	1028801501
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	SW6010	1027601002
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	SW7421	1027742101
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	SW7470	1029747001
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	SW8240	1031824001
FIELDQC	22-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-01	011B	D96-12092-1	SW8270	AB925-4
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	M8015D	AB903-91
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	M8015V	1028801501
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	SW6010	1027601002
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	SW7421	1027742101
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	SW7470	1029747001
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	SW8240	1031824001
FIELDQC	23-Oct-1996	1600	EB1	WQ	0.00	0.00	FC-WQ-EB-02	011A	D96-12092-4	SW8270	AB925-4
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	M8015D	AB903-91
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	M8015V	1028801501
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	SW6010	1027601002
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	SW7421	1027742101
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	SW7470	1029747001
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	SW8240	1031824001

SAMPLE IDENTIFICATION CROSS REFERENCE
FAMILY CAMPGROUND AREA DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	SAMPLE DATE	SAMPLE TIME	SAMPLE TYPE	SAMPLE MATRIX	SAMPLE DEPTHS (FT) START	END	FIELD SAMPLE NO	FIELD LOT CONTROL NO	LABORATORY SAMPLE NO	ANALYTICAL METHOD	LAB LOT CONTROL NO
FIELDQC	24-Oct-1996	1615	EB1	WQ	0.00	0.00	FC-WQ-EB-03	011A	D96-12092-13	SW8270	AB925-4
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	M8015D	AB925-19
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	M8015V	1101801501
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	SW6010	103160100S
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	SW7421	1105742101
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	SW7470	1030747001
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	SW8240	1031824001
FIELDQC	26-Oct-1996	1245	EB1	WQ	0.00	0.00	FC-WQ-EB-05	011A	D96-12170-17	SW8270	AB925-18
FIELDQC	22-Oct-1996	2218	TB1	WQ	0.00	0.00	FC-WQ-TB-01	011B	D96-12092-2	SW8240	1031824001
FIELDQC	22-Oct-1996	2220	TB2	WQ	0.00	0.00	FC-WQ-TB-02	012A	D96-12092-3	SW8240	1031824001
FIELDQC	23-Oct-1996	1730	TB1	WQ	0.00	0.00	FC-WQ-TB-03	011A	D96-12092-5	SW8240	1031824001
FIELDQC	24-Oct-1996	1605	TB1	WQ	0.00	0.00	FC-WQ-TB-04	011A	D96-12092-14	SW8240	1031824001
FIELDQC	26-Oct-1996	1245	TB1	WQ	0.00	0.00	FC-WQ-TB-07	011A	D96-12170-16	SW8240	1031824001

TAB

D

APPENDIX D

BOREHOLE LOGS

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB01

Site	CRSWL	SiteID	Location Type: Borehole (BH)
Location Description	Near Highway 183 at white painted gates, 8 feet south of valve box		
Establishing Company	The Environmental Co	Geologist: K. Troensegaard	Drilling Company: Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation: 594.08 ft	Datum: Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches): 7	Total Depth (Feet): 17.0
Date/Time Drilling Started	10/22/96 08:45	Date/Time Total Depth Reached	10/22/96 11:02

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.9	0-2.5		49.5		OH	STCL	0-1.9' Organic topsoil: Dark gray silty clay firm, moist, moderately plastic, 7.5 YR 3/1		Clear, cool, windy approx 40 deg. F
4		2.5-5		47		ML	STCL	1.9-5' Silt/Clay: Light olive gray, firm, slightly moist to dry, speckled with decomposed limestone chips, 10 YR 6/2		09:05
6	3.8	5-7.5		21		CL	STCL	5-7.5' Clay and Silt: light gray silty clay with 0.25-0.5 inch limestone pebbles, firm, slightly moist, slightly to moderately plastic, trace petroleum odor, 10YR 7/2		
8		7.5-10		152		CL	STCL	7.5-10' Clay and Silt: Medium gray silty clay with limestone pebbles up to 1 inch, moist, soft, moderately plastic, moderate petroleum odor, 5Y 6/1		*FC-SB01-01* 7.5-10': BTEX, SVOA, TPH-D, TPH-G 09:40
10	2.0	10-12.5		329		CL	STCL	10-15' Clay and Silt: Light to medium gray-brown silty clay with limestone pebbles, sl. moist, moderately plastic, stiff to hard, 5Y 5/2 at 12', shale layers which plugged bit and caused poor recovery		*FC-SB01-02* 10-12.5': VOA, SVOA, TPH-D, TPH-G, INORG *FC-SB01-03* 12.5-15': BTEX, TPH-D, TPH-G
12		12.5-15		74						10:20
16	1.4	15-17		41		CM	SHLE	15-17' Shale: Dark gray, silty/limy shale, very stiff to hard, slightly moist, non-plastic, 5Y 4/1		11:02
18								Refusal at 17.0 feet No water encountered		10/28/1996 8:30 No water in boring
20										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB02

AFIID	CRSWL	SiteID	Location Type: Borehole (BH)
Location Description	Near Highway 183 at white painted gates, 15 feet north of valve box		
Establishing Company	The Environmental Co	Geologist: K. Troensegaard	Drilling Company: Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation: 593.58 ft	Datum: Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches): 7	Total Depth (Feet): 17.5
Date/Time Drilling Started	10/22/96 12:50	Date/Time Total Depth Reached	10/22/96 14:30

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	5.0	0-2.5		15		OH	STCL	0-1.9' Topsoil: Dark gray-brown organic silt and clay, firm, moist, moderately plastic, 7.5 YR 3/1		
						CL	STCL	1.9-2.7' Silt and Clay: mixed organic/non-organic silt and clay		
4		2.5-5		32				2.7-5' Silty clay: Light gray non-organic silty clay with limestone pebbles (0.1-0.25") dry, stiff, slightly plastic 2.5 Y 6/1		13:00
6	2.0	5-7.5		159		CL	STCL	5-8' As above		*FC-SB02-01* 5-7.5' : BTEX, SVOA, TPH-D, TPH-G
8		7.5-10		370				8-10' As above, but with slight petroleum odor		*FC-SB02-02* 7.5-10' : BTEX, SVOA, TPH-D, TPH-G 13:20
10										
12	1.7	10-12.5		69		CL	STCL	10-14.8' Silty Clay: medium gray-brown with 0.25-0.5" limestone pebbles, firm, slightly moist, moderately plastic, no petroleum odor, 10 YR 5/4		*FC-SB02-03* 10-12.5': BTEX, TPH-D, TPH-G
14		12.5-15		35				13' Hard shale parting, caused loss of core		14:30
16	2.8	15-17.5		24.5		CM	SHLE	14.8-16.5' Shale: dark gray, well bedded, highly fissile, organic shale, 5Y 4/1		
						CM	LSSL	16.5-17.5' Limestone: light gray, silty, 2.5 Y 7/1		14:30
18								Refusal at 17.5 feet		No water in boring
20										

GEOLOGIC BOREHOLE LOG

158

Borehole (Location) ID: SB03

AFI	CRSWL	SiteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	553.71 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	21.5
Date/Time Drilling Started	10/22/96 16:10			Date/Time Total Depth Reached	10/22/96 17:45

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2		0-2.5		24		OH	STCL	0-2' Topsoil: organic rich silt and clay, moist, soft, slightly plastic, 10 YR 3/3		
4	5.0	2.5-5		21		OL	STCL	2-5' Silty clay: Dark brown/gray silty clay with ~15% fine limestone chips and pebbles, dry, stiff, slightly plastic, 2.5 Y 3/1, freshwater mussel and land snail shells		16:20
6		5-7.5		16				5-10' As above, slight petroleum odor at base		
8	2.5	7.5-10		15						16:45
10										
12		10-12.5		701				10-15' As above, moderate petroleum odor		*FC-SB03-01* 10-12.5': BTEX, SVOA, TPH-D, TPH-G, grain size analysis
14	4.8	12.5-15		674						17:10
16		15-17.5		704		CL	CVCL	15-20' Decomposed limestone: clay and limestone chips, light gray, stiff, moist, slightly plastic, moderate to strong petroleum odor, 2.5 Y 6/1		*FC-SB03-02* 15-17.5': VOA, SVOA, TPH-D, TPH-G, inorganics, grain size analysis Water at 15.5', 7:45 on 10/24/96
18	2.0	17.5-20		754						
20										17:25

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB03

AFID	CRSWL	SiteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	553.71 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	21.5
Date/Time Drilling Started	10/22/96 16:10	Date/Time Total Depth Reached	10/22/96 17:45		

Depth (feet)	Sampling: % Recov	Sampling: Sample Depth	Sampling: Blow Counts	Sampling: PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
	1.5	20-21.5		124		CL	CVCL	20-21.5': Same as 15-20' above, but soft, saturated, moderately plastic, moderate petroleum odor		17:45
22								Refusal at 21.5' against limestone Note: Water at 20' at time of drilling		*FC-SB03-03* 20-21.5': BTEX, TPH-D, TPH-G, grain size analysis
24										
26										
28										
30										
32										
34										
36										
38										
40										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB04

Site Name	CRSWL	Site ID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	554.23 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	8.5
Date/Time Drilling Started	10/23/96 08:00			Date/Time Total Depth Reached	10/23/96 08:40

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.8	0-2.5		32		OL	STCL	0-2.8' Topsoil: silt and clay, medium brown, moist, firm, slightly plastic, 10 YR 2/4		Clear, cool, ~45F
4		2.5-5		29		OH	STCL	2.8-8' Silt and Clay: organic, dark gray-brown, slightly moist, firm, slightly plastic, with 10% limestone chips up to 0.25" and ~2% freshwater mussel shells		8:15
6	3.3	5-7.5		22						*FC-SB04-01* 5-7.5': BTEX, SVOA, TPH-D, TPH-G
8		7.5-8.5		10		CM	LS	8-8.5' Weathered limestone		8:40
10								Refusal at 8.5'		*FC-SB04-02* 7.5-8.5': VOA, SVOA, TPH-D, TPH-G, inorganics
12										No water in boring
14										
16										
18										
20										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB05

AFIID	CRSWL	SiteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	554.58 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	21.0
Date/Time Drilling Started	10/23/96 10:00	Date/Time Total Depth Reached	10/23/96 11:50		

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.0	0-2.5		1		OL	STCL	0-1.8' Topsoil: organic-rich silt and clay with ~ 5% limestone chips, slightly moist, firm, slightly plastic, 2.5 Y 3/1		1st run: 0-4'
4		2.5-5		1		OL	STCL	1.8-7.5' Silt: moderately organic, silt with some clay, firm, dry, non-plastic (friable), 10 YR 2/4		10:15
6	3.6	5-7.5		7						2nd Run: 4-8.5'
8		7.5-10		5		ML	SILT	7.5-9' Silt: non-organic silt, very stiff, dry, friable, probably decomposed shaly limestone		10:35
10	4.8					CH	CLAY	9-13.5' Clay: dark chocolate brown clay veined with caliche, firm, slightly moist, very plastic, 2.5 Y 1/4, moderate petroleum odor at 9' and below		3rd Run: 8.5-13.5' *FC-SB05-01* 7.5-10': BTEX, SVOA, TPH-D, TPH-G
12		10-13.5		497 540						*FC-SB05-04* Field duplicate of *FC-SB05-01* 11:15
14	4.9	13.5-16		660		MH	SILT	13.5-15' Silt: dark brown clay-rich silt, veined with caliche, firm, slightly moist, sl. plastic, moderate pet. odor, 2.5 Y 4/1		*FC-SB05-02* 13.5-16': VOA, SVOA, TPH-D, TPH-G, inorganics, grain size analysis
16						CH	CLAY	15-18.5' Clay: dark chocolate brown clay veined with caliche, firm, slightly moist, very plastic, moderate petroleum odor, 2.5 Y 4/1		Water at 16.3' 10/24/96 7:45
18		16-18.5		615						11:35
20	2.0	18.5-21		58		CL	GVCL	18.5-21' Mixed limestone and clay: gray-tan, soft; hard at base, saturated		Water at 18.5' at time of drilling

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB05

A CRSWL		SiteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
E lishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	554.58 ft	Datum	Mean Sea Level
S mpling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	21.0
D /Time Drilling Started	10/23/96 10:00			Date/Time Total Depth Reached	10/23/96 11:50

Depth (feet)	Sampling % Recov	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description SOIL TYPE, modifiers/grain size, sorting, color, cement/ lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
						CL	GVCL	As above		11:50
22								Refusal at 21' against limestone		*FC-SB05-03* 18.5-21': BTEX, TPH-D, TPH-G
24										
26										
28										
30										
32										
34										
36										
38										
40										

GEOLOGIC BOREHOLE LOG

153

Borehole (Location) ID: SB06

AFIID	CRSWL	SteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	553.67 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	17.5
Date/Time Drilling Started	10/23/96 13:56			Date/Time Total Depth Reached	10/23/96 15:20

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
	2.5	0-2.5		0		OL	STCL	0-1' Topsoil: dark brown, silt and clay, 10 YR 2/3		1st run to 2.5'
2						MH	SILT	1-7.5' Silt: medium brown silt, firm, slightly moist, non-plastic, friable, 7.5 YR 4/3		14:16
4	1.1	2.5-5		0						Core loss due to shale-plugged shoe
6		5-7.5		0						14:35
8	5.0	7.5-10		0		CH	CLAY	7.5-16.5' Clay: very dark gray, fat clay with caliche veins, trace freshwater mussel shells, soft, slightly moist, plastic, 2.5 Y 3/1		*FC-SB06-01* 7.5-10': BTEX, SVOA, TPH-D, TPH-G; *MS/MSD taken in this interval
10		10-12.5		16				Water at 8.7 ft, 7:45 10/24/96		*FC-SB06-02* 10-12.5': BTEX, SVOA, TPH-D, TPH-G, inorganics 14:50
12										
14	5.0	12.5-15		0				Fairly abundant limestone pebbles in last 2 feet		
16		15-17.5		0						*FC-SB06-03* 15-17.5': BTEX, TPH-D, TPH-G
						CM	LS	16.5-17.5' Weathered Limestone: partially decomposed, mixed with silty clay		15:20
18								Refusal at 17.5' in limestone		
20										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB07

Site	CRSWL	SiteID	16	Location Type	Borehole (BH)
Location Description	Unnamed Stream				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	555.70 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	7.0
Date/Time Drilling Started	10/24/96 08:05			Date/Time Total Depth Reached	10/24/96 08:45

Depth (feet)	Sampling: Recov (feet)	Sampling: Sample Depth	Sampling: Blow Counts	Sampling: PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.2	0-2.5		0		OH	STCL	0-2' Topsoil: mixed silt and clay, medium brown, soft, slightly moist, slightly plastic, 10 YR 2/4		
						MH	SILT	2-3' Silt: medium brown silt, trace clay, soft, sl. moist, friable, 10 YR 5/3		
4		2.5-5		0		CH	CLAY	3-7' Clay: very dark brown clay with some silt, firm, slightly moist, moderately plastic, 2.5 YR 2.5/1, limestone in last 0.2'		8:20
6	2.0	5-7		0						8:45
8								Refusal at 7.0'		*FC-SB07-01* 5-7': VOA, SVOA, TPH-D, TPH-G, inorganics
10										No water in boring
12										
14										
16										
18										
20										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB08

AFIID	CRSWL	SiteID	Location Type: Borehole (BH)
Location Description	Golf Course, Farmers Branch Creek		
Establishing Company	The Environmental Co	Geologist: K. Troensegaard	Drilling Company: Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation: 565.87 ft	Datum: Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches): 7	Total Depth (Feet): 12.0
Date/Time Drilling Started	10/24/96 10:15	Date/Time Total Depth Reached	10/24/96 11:05

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	2.6	0-3.5				ML	SILT	0-3.5' Silt: Medium brown, silt and fine sand, firm, dry, friable, no petroleum odors, 10 YR 4/3		Partly cloudy, cool, 50's 1st Run: 0-3.5' due to 1.5' stick-up 10:26
4, 6, 8	2.1	3.5-8.5		0		SM	SDMD	3.5-10' Sand: fine to medium sand with fine gravel at base, medium tan, soft, dry, no petroleum odors, 10 YR 6/4 NB: No samples collected from 0 to 8.5' as this interval is above the pipeline.		10:45
10	2.3	8.5-12		0		SP	GVCL	10-12' Gravel: clay-cemented tan gravel, soft, water-saturated, no petroleum odor, 10 YR 5/3 Last 0.2' gray, fine-grained limestone		Water at 10.1' 10/24/96 15:00 11:05
12, 14, 16, 18, 20								Refusal at 12' against limestone		*FC-SB08-01* 8.5-12': VOA, SVOA, TPH-D, TPH-G, inorganics

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB09

Project	CRSWL	SiteID	Location Type: Borehole (BH)
Location Description	Golf Course, Farmers Branch Creek		
Establishing Company	The Environmental Co	Geologist: K. Troensegaard	Drilling Company: Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation: 572.85 ft	Datum: Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches): 7	Total Depth (Feet): 19.0
Date/Time Drilling Started	10/24/96 13:00	Date/Time Total Depth Reached	10/24/96 13:54

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.2	No samples				OL	STCL	0-2.2' Topsoil: medium brown, organic silt and clay, soft, moist, slightly to moderately plastic, 7.5 YR 4/2		Cloudy, mild, 60's
4						ML	SILT	2.2-8' Silt: light brown silt with chips and small pebbles of white decomposed limestone, firm, dry, friable, no odor, 10 YR 6/3		13:07
6	2.1	5-7.5		25						
8		7.5-10		21		ML	SILT	8-12' Silt: light gray silt cemented with CaCO3, 0.125 - 0.25" lime concretions common, possible caliche layer, very stiff, dry, friable, no odor, 2.5 Y 7/1		13:25
10										
12	2.4	10-12.5		27						*FC-SB09-01* 10-12.5' : BTEX, SVOA, TPH-D, TPH-G
14		12.5-15		19		ML	SILT	12-17' Silt: light grey limy silt, cemented with CaCO3, slightly moist, stiff, friable, no odor, 10 YR 7/2		*FC-SB09-03* Field duplicate of *FC-SB09-01* 13:40
16		15-17		18.5				Water at 15', 10/24/96 15:00		*FC-SB09-02* 15-17.5' : BTEX, SVOA, TPH-D, TPH-G
18	3.2	17-19		15		SP	SDFN	17-18' Sand: fine, lt ylw-brn sand w/~5% peb., soft, saturated, friable, no odor, 10 YR 7/4		17.5': Water at time of drilling
						GP	SDGR	18-19' Gravel: coarse sand, gravel, fossil shells, & cobbles, soft, saturated, no cement		13:54
20								Refusal at 19.0 feet on limestone		

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB10

AFID	CRSWL	SiteID	
Location Type	Borehole (BH)		
Location Description	Golf Course, Farmers Branch Creek		
Establishing Company	The Environmental Co	Geologist	K. Troensegaard
Drilling Company	Rone Engineers, Inc.		
Drilling Foreman	Tim Branco	Ground Surface Elevation	573.31 ft
Datum	Mean Sea Level		
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7
Total Depth (Feet)	19.0		
Date/Time Drilling Started	10/24/96 14:15	Date/Time Total Depth Reached	10/24/96 15:25

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
		No samples				OL	STCL	0-1.2' Topsoil: silt and clay, organic, moist, soft, slightly plastic, 10 YR 3/2		Cloudy, mild, ~65F Light rain
2						SW	SDMD	1.2-2' Sand: medium gray & orange sand, slightly moist, friable, soft, 10 YR 6/7		
4	2.8					ML	SILT	2-8' Silt: Limy silt with ~15% pebbles, limestone clasts, and CaCO3 concretions, moderately cemented with CaCO3, stiff, dry, friable, 2.5 Y 6/2		14:20
6		5-7.5		23						
8	2.4	7.5-10		18				8-15' Silt: CaCO3 cemented silt and some clay, dry, very stiff, indurated, no pebbles, very homogeneous, possible caliche layer 10 YR 6/2		FC-SB10-01 7.5-10' : BTEX, SVOA, TPH-D, TPH-G 14:35
10										
12		10-12.5		14		ML	SILT			
14	3.1	12.5-15		12				@ 13' as above, but moist and slightly plastic		15:06
16								15-19' Sand: medium grained, yellow-brown, saturated, soft, friable, 10 YR 6/6		FC-SB10-02 15-19' : BTEX, SVOA, TPH-D, TPH-G
18	1.8	15-19		12		SW	SDMD	Water at 15.5' ; 10/24/96 17:15		15:25
20								Refusal at 19.0 feet against limestone		

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB11

Site	CRSWL	SiteID	7	Location Type	Borehole (BH)
Location Description	Trinity River, easternmost boring, Base Service Station				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	555.01 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	25.0
Date/Time Drilling Started	10/26/96 8:20			Date/Time Total Depth Reached	10/26/96 9:40

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	5.0	0-2.5		0		OL	STCL	0-2.2' Topsoil: medium brown, mixed silt & clay, moist, soft, slightly plastic, 7.5 YR 3/2		Cloudy, very humid warm, 60's, abundant mosquitos
4		2.5-5		0		ML	SILT	2.2-19' Silt: silt and very fine sand, light brown, slightly moist, firm, friable, with occasional freshwater mussel shells, 7.5 YR 5/2		8:30
6	2.3	5-7.5		0				@ 7 ft, change from firm to stiff		
8		7.5-10		0						Hard drilling to 10' 8:45
12	2.5	10-12.5		0				@ 12 ft, moist, still stiff		*FC-SB11-01* 10-12.5' : BTEX, SVOA, TPH-D, TPH-G
14		12.5-15		3						9:05
16	5.0	15-17.5		36				@ 16 ft, becomes very moist and has mod. petroleum odor with gray petroleum staining		Petroleum contamination below this point
18		17.5-20		85				Water at 19' at time of drilling		*FC-SB11-02* 17.5-20' : BTEX, SVOA, TPH-D, TPH-G
20						SM	SDMD	19-25' Sand: fine to medium grained, med. tan, soft, saturated, non-plastic, with		9:25

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB11

AFID	CRSWL	SiteID	7	Location Type	Borehole (BH)
Location Description	Trinity River, easternmost boring, Base Service Station				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	555.01 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	25.0
Date/Time Drilling Started	10/26/96 8:20	Date/Time Total Depth Reached	10/26/96 9:40		

Depth (feet)	Sampling: % Recov	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
22	5.0	20-22.5		350		SM	SDMD	moderate to strong petroleum odor and slight to moderate petroleum staining. 10 YR 5/3		
24		22.5-25		940						*FC-SB11-03* 22.5-25': VOA, SVOA, TPH-D, TPH-G, inorganics 9:40
26								Total Depth 25'		
28										
30										
32										
34										
36										
38										
40										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB12

AFI	CRSWL	SiteID	7	Location Type	Borehole (BH)
Location Description	Trinity River, 2nd boring from the east, Base Service Station				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	555.11 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	25.0
Date/Time Drilling Started	10/26/96 10:31			Date/Time Total Depth Reached	10/26/96 12:05

Depth (feet)	Sampling: Recov (feet)	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
2	4.5	0-2.5		30		OL	STCL	0-1.8' Topsoil: Silt with some clay, med. brown, soft, moist, friable, organic, 10 YR 3/3		Cloudy, partially sunny, humid, warm (70's)
4		2.5-5		17		MLOL	SILT	1.8-6' Silt: well bedded light to medium brown silt with some very fine sand, firm, slightly moist, friable, 10 YR 3/4. Slightly organic to 4'		10:35
6	3.1	5-7.5		22		ML		6-10' As above, but dry, stiff to very stiff		Hard drilling to 10'
10		7.5-10		26						10:50
12	3.8	10-12.5		25		SM	SDSL	10-15' Sand: fine grained silty sand, light brown, moist, soft, friable, no petroleum odor, 10 YR 5/4		*FC-SB12-01* 10-12.5': BTEX, SVOA, TPH-D, TPH-G
14		12.5-15		36						11:20
16	4.6	15-17.5		495		SMML	SILT	15-20' Silt and fine sand: interbedded layers of silt and fine silty sand, medium brown to gray-brown (due to petroleum staining), soft, moist, friable, moderate to strong petroleum odor and stain, 10 YR 5/3 to 5/2		Petroleum contamination, partially degraded
18		17.5-20		610				Water at 19' at time of drilling		*FC-SB12-02* 17.5-20': BTEX, SVOA, TPH-D, TPH-G 11:40
20										

GEOLOGIC BOREHOLE LOG

Borehole (Location) ID: SB12

AFIID	CRSWL	SiteID	7	Location Type	Borehole (BH)
Location Description	Trinity River, 2nd boring from the east, Base Service Station				
Establishing Company	The Environmental Co	Geologist	K. Troensegaard	Drilling Company	Rone Engineers, Inc.
Drilling Foreman	Tim Branco	Ground Surface Elevation	555.11 ft	Datum	Mean Sea Level
Sampling Device	Split Spoon (5 ft)	Borehole Diameter (inches)	7	Total Depth (Feet)	25.0
Date/Time Drilling Started	10/26/96 10:31			Date/Time Total Depth Reached	10/26/96 12:05

Depth (feet)	Sampling: % Recov	Sample Depth	Blow Counts	PID	GRAPH	ASTM CODE	Lithologic Codes	Lithology Description: SOIL TYPE, modifiers/grain size, sorting, color, cement/lithification, moisture content, porosity, permeability/fracturing	Strat-order	Remarks: Drilling Problems, Equipment, Water levels, Weather, Time, Samples
22		20-22.5		625		CH	CLAY	20-20.5' Clay layer, moderate petroleum odor and staining 20.5-25' Sand: strong petroleum contamination, dark gray, 2.5 Y 4/1, strong odor, strong staining		Strong petroleum contamination, partially degraded
24	4.2	22.5-25		479		SM	SDSL			*FC-SB12-03* 22.5-25': VOA, SVOA, TPH-D, TPH-G, inorganics 12:05
26								Total Depth 25'		
28										
30										
32										
34										
36										
38										
40										

TAB

E

APPENDIX E

INVESTIGATION DERIVED WASTE MANAGEMENT DOCUMENTATION

WASTE INVENTORY TRACKING FORM

LOCATION: NAS Fort Worth JRB Carswell Field, TX

PROJECT NAME: RV Fam Camp AREA

ACTIVITIES: Soil Borings 10/22/96 – 10/26/96

Date Waste Generated	Activity Generating Waste (borehole # / well #)	Description of Waste	Field Evidence of Contamination	Estimated Volume Gal.	Type of Container (storage ID#) Drums	Location of Container	Waste Characterization	Comments
10/22 96	SB01 SB02	Soil	None	20	FC-D-1	On site		SB01 75% SB02 25%
10/22 96	SB01 SB02	"	odor	50	FC-D-2	"		SB01 20% SB02 80%
10/23 96	SB 03	"	odor	50	FC-D-3	"		SB03 100%
10/23 96	SB04 SB05	"	odor	50	FC-D-4	"		SB04 20% SB05 80%
10/23 96	SB06	"	None	50	FC-D-5	"		SB06 100%
10/24 96	SB07 SB08	"	None	30	FC-D-6	"		SB07 40% SB08 60%
10/24 96	SB09 SB10	"	None	50	FC-D-7	"		SB09 50% SB10 50%
10/25 96	SB16A-SB20	"	None	40	FC-D-8 SS6a1	"		SB16-19 50% SB20 50%
10/26 96	SB-11 SB-12	"	PET Odor	55	FC-D-9	"		SB11 - 75% SB12 - 25%
10/26 96	SB12	"	Odor	20	FC-D-10	"		SB12 100%
10/25 96	~~DECON~~ SB-01-SB10	Water	None	30	FC-D-11	"		SB1 THRU SB10
10/26 96	DECON SB11&12	Water	None	10	FC-D-12	"		SB 11 & SB 12

Note: Describe whether soil or water samples have been collected for waste characterization, include date, if known.

KW Troonsegaard Site Geologist

Signature: Ken Troonsegaard 10/29/96

Soils Collected as 3 Composites 10/28/96
One Water Composite Collected 10/28/96

NAS Forth Worth, Carswell Field, TX
RV Fam Camp and Pipeline Investigation Derived Waste Sample Results

Analyses	Detection Limit	Drilling Soil Cuttings			Regulatory Limits		
		SO-DC01	SO-DC02	SO-DC03	Haz Waste TCLP Max Concentration Limits	Non Haz Waste Class I Max Concentration Limits	Hydrocarbons
TCLP Volatile Organics							
Benzene	0.10 mg/L	ND	ND	ND	0.5 mg/L	0.5 mg/L	
Carbon tetrachloride	0.10 mg/L	ND	ND	ND	0.5 mg/L	0.5 mg/L	
Chlorobenzene	0.10 mg/L	ND	ND	ND	100.0 mg/L	70.0 mg/L	
Chloroform	0.10 mg/L	ND	ND	ND	6.0 mg/L	6.0 mg/L	
1,2-Dichloroethane	0.10 mg/L	ND	ND	ND	0.5 mg/L	0.5 mg/L	
1,1-Dichloroethene	0.10 mg/L	ND	ND	ND	0.7 mg/L	0.6 mg/L	
Methyl ethyl ketone	1.00 mg/L	ND	ND	ND	200.0 mg/L	200.0 mg/L	
Tetrachloroethene	0.10 mg/L	ND	ND	ND	0.7 mg/L	0.005 mg/L	
Trichloroethene	0.10 mg/L	ND	ND	ND	0.5 mg/L	0.005 mg/L	
Vinyl chloride	0.10 mg/L	ND	ND	ND	0.2 mg/L	0.2 mg/L	
Total Extractable Hydrocarbons	2.00 mg/Kg	3.53 mg/Kg	153 mg/Kg	313 mg/Kg			1500 mg/Kg
Total Volatile Hydrocarbons	0.04-10.0 mg/Kg	ND	117 mg/Kg	70 mg/Kg			1500 mg/Kg
TCLP Metals							
Silver	0.0200 mg/L	ND	ND	ND	5.0 mg/L	5.0 mg/L	
Arsenic	1.00 mg/L	ND	ND	ND	5.0 mg/L	1.8 mg/L	
Barium	1.00 mg/L	ND	1.04 mg/L	1.11 mg/L	100.0 mg/L	100.0 mg/L	
Cadmium	0.020 mg/L	0.038 mg/L	0.039 mg/L	0.039 mg/L	1.0 mg/L	0.5 mg/L	
Chromium	0.0200 mg/L	ND	ND	ND	5.0 mg/L	5.0 mg/L	
Mercury	0.0010 mg/L	ND	ND	ND	0.2 mg/L	0.2 mg/L	
Lead	0.100 mg/L	ND	ND	ND	5.0 mg/L	1.5 mg/L	
Selenium	0.800 mg/L	ND	ND	ND	1.0 mg/L	1.0 mg/L	
Miscellaneous Analyses							
Total Solids	0.01%	89.10%	89.10%	88.80%			

NAS. .th Worth, Carswell Field, TX
RV Fam Camp and Pipeline Investigation Derived Waste Sample Results

Analyses	Decontamination Water		Regulatory Limits		
			Haz Waste TCLP Max Concentration	Non Haz Waste Class I Max	Hydrocarbons
Tentatively Identified Compounds, cont.					
1,1,1,5,7,7,7-Heptamethyl-3,3-bis	17.86	50 ug/L			
Trisiloxane, 1,1,1,5,5,5-hexamethy	18.83	55 ug/L			
1,1,1,5,7,7,7-Heptamethyl-3,3-bis	19.75	68 ug/L			
Ethanedioic acid, bis(trimethylsil	20.61	68 ug/L			
Trisiloxane, 1,1,1,5,5,5-hexamethy	21.40	66 ug/L			
Mercaptoacetic acid, bis(trimethyl	22.18	28 ug/L			
3,6-Dioxa-2,4,5,7-tetrasilaoctane,	23.68	22 ug/L			
1,2-Benzenedicarboxylic acid, bis	24.45	20 ug/L			
1-Monolinoleoylglycerol trimethyls	25.29	52 ug/L			
Total Extractable Hydrocarbons	30.0 ug/L	2870 ug/L			1500 mg/Kg
Total Volatile Hydrocarbons	300 ug/L	729 ug/L			1500 mg/Kg
Total Metals					
Aluminum	0.02 mg/L	58.51 mg/L			
Arsenic	0.02 mg/L	ND	5.0 mg/L	1.8 mg/L	
Barium	0.001 mg/L	0.181 mg/L	100.0 mg/L	100.0 mg/L	
Beryllium	0.0003 mg/L	0.0030 mg/L			
Cadmium	0.001 mg/L	0.005 mg/L	1.0 mg/L	0.5 mg/L	
Calcium	1.00 mg/L	55.2 mg/L			
Chromium	0.002 mg/L	0.074 mg/L	5.0 mg/L	5.0 mg/L	
Colbalt	0.001 mg/L	0.004 mg/L			
Copper	0.004 mg/L	0.052 mg/L			
Iron	0.018 mg/L	54.711 mg/L			
Lead	0.0015 mg/L	0.0250 mg/L	5.0 mg/L	1.5 mg/L	
Magnesium	0.07 mg/L	18.40 mg/L			
Manganese	0.004 mg/L	1.186 mg/L			
Mercury	0.0001 mg/L	0.0003 mg/L	0.2 mg/L	0.2 mg/L	
Potassium	0.05 mg/L	15.98 mg/L			
Selenium	0.02 mg/L	ND	1.0 mg/L	1.0 mg/L	
Silver	0.003 mg/L	ND	5.0 mg/L	5.0 mg/L	
Sodium	3.0 mg/L	1050.0 mg/L			
Vanadium	0.002 mg/L	0.075 mg/L			
Zinc	0.016 mg/L	0.790 mg/L			

NAS Forth Worth, Carswell Field, TX
RV Fam Camp and Pipeline Investigation Derived Waste Sample Results

Analyses	Decontamination Water		Regulatory Limits		
	Detection Limit	WW-DC04	Haz Waste TCLP Max Concentration Limits	Non Haz Waste Class I Max Concentration Limits	Hydrocarbons
Volatile Organics					
Acetone	6.50 ug/L	32.1 ug/L			
Benzene	1.10 ug/L	ND	0.5 mg/L	0.5 mg/L	
Carbon tetrachloride	0.80 ug/L	ND	0.5 mg/L	0.5 mg/L	
Chlorobenzene	0.80 ug/L	ND	100.0 mg/L	70.0 mg/L	
Chloroform	1.40 ug/L	ND	6.0 mg/L	6.0 mg/L	
1,2-Dichloroethane	1.20 ug/L	ND	0.5 mg/L	0.5 mg/L	
1,1-Dichloroethene	1.30 ug/L	ND	0.7 mg/L	0.6 mg/L	
Methyl ethyl ketone	7.70 ug/L	ND	200.0 mg/L	200.0 mg/L	
Tetrachloroethene	0.90 ug/L	ND	0.7 mg/L	0.005 mg/L	
Trichloroethene	1.70 ug/L	ND	0.5 mg/L	0.005 mg/L	
Vinyl chloride	2.30 ug/L	ND	0.2 mg/L	0.2 mg/L	
Tentatively Identified Compounds	Retention Time				
Chloroacetamide	1.77	12 ug/L			
Methoxytrimethylsilane	3.18	21 ug/L			
Trimethylsilanol	4.21	11 ug/L			
Octanal	9.76	10 ug/L			
Bis(2-chloroisopropyl)ether	2.30 ug/L	ND			
Chrysene	1.60 ug/L	ND			
Di-n-butylphthalate	1.60 ug/L	6.51 ug/L			
Pyrene	2.20 ug/L	ND			
Tentatively Identified Compounds	Retention Time				
Octene	3.10	26 ug/L			
Hexanoic acid	5.44	20 ug/L			
Octanol	6.51	21 ug/L			
Octanoic Acid	7.96	14 ug/L			
Methyldecane	9.09	18 ug/L			
Cyclododecane	13.52	71 ug/L			
Methyldecylbenzene	13.78	14 ug/L			
Dodecanoic acid	14.31	37 ug/L			
1,1,1,5,7,7,7-Heptamethyl-3,3-bis	14.37	21 ug/L			
1,3-Dioxolane, 2-(4-methoxyphenyl)	15.26	15 ug/L			
1-Monolinoleoylglycerol trimethyls	15.64	19 ug/L			
Trisiloxane, 1,1,1,5,5,5-hexamethy	16.81	17 ug/L			

CACTUS VACUUM TRUCK SERVICE, INC.
COMPLETE WASTE TRANSPORTATION

199 W. Rock Island • Grand Prairie, Texas 75050
972/446-0200 • FAX 972/313-0949

MANIFEST # 500636
MAP CODE _____ DATE 9-2-97
CUSTOMER P.O. NUMBER 2380
ORDERED BY Steve Clay

WORK AUTHORIZATION ORDER

CUSTOMER
The Environmental Co.
710 NW Juniper, Suite 208
Issaquah, WA 98027
Phone No. (804) 295-4446

SITE OF SERVICE (IF DIFFERENT)
Contact: ~~Bob Duffner~~ Karen Cain
NAS Fort Worth, JRB
Fort Worth, TX
Phone No.

	✓	GAL./HRS.	AMOUNT
SERVICE FEE	425-559 7898		
DISPOSAL			
DISPOSAL			
GREASE TRAP			
SAND TRAP			
HYDROJET			
TRANSPORTATION	✓		
DEMURRAGE			
BOX RENT			
IP			
ER			
TRUCK NUMBER	T-5		

RECEIVED
SEP 18 1997
BY: _____

SUB TOTAL	
SALES TAX %	
TOTAL	

Load drums @ site & transport to BFI Itasca for disposal.
12 drums

OUT: 8:45 Am
IN PLANT: 9:40 Am
OUT PLANT: _____
IN PLANT: _____
OUT PLANT: _____
IN PLANT: _____
OUT PLANT: _____

X _____
SERVICE WORK INSPECTED BY

Karen Kane — AUTHORIZED SIGNATURE FOR CUSTOMER
X Ray Morris — CACTUS OPERATOR
X Jan — ORDER-WRITER

WHITE: CUSTOMER CANARY: ACCTS. REC. PINK: CONTROL COPY GOLDENROD: OFFICE COPY CVTS-03

TEXAS
NON-HAZARDOUS SPECIAL WASTE MANIFEST

RECEIVED SEP 18 1997

NO. 500636

GENERATOR

GENERATOR NAME: Air Force Base Conversion Agency
ADDRESS: 6550 White Settlement Rd
Fort Worth, TX 76114-3520

GENERATING LOCATION: Air Force Base Conversion Agenc
ADDRESS: 6550 White Settlement Rd.
Fort Worth, TX 76114-3520

PHONE NO. 817 7318973

STATE GENERATOR ID NUMBER 65004

T.N.R.C.C.	DESCRIPTION OF WASTE	QUANTITY	UNITS
	Investigative Derived Waste Water	00002	D
WASTE CODE	TX 759 980826 257640 D Aut		
	Investigative Derived Waste Soil	00010	D
WASTE CODE	TX 759 980826 257641		
WASTE CODE			

UNITS: D-DRUM, C-CARTON, B-BAG, T-TRUCK, P-POUNDS, Y-YARDS, O-OTHER

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

GENERATOR AUTHORIZED AGENT NAME: Alan Flolo
SIGNATURE: Alan W. Flolo
SHIPMENT DATE: 090297

TRANSPORTER

TRUCK NO. TID
PHONE NO. 972 446 0200
TRANSPORTER NAME: CACTUS VTS
DRIVER NAME (PRINT): DANNY MOORHEAD
ADDRESS: 199 W ROCK ISLAND RD
GRAND PRAIRE TX
VEHICLE LICENSE NO./STATE: R171734
STATE TRANSPORTER ID NO. 40041

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS PICKED UP AT THE GENERATOR SITE LISTED ABOVE.

DRIVER SIGNATURE: [signature] SHIPMENT DATE: 090297

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL WAS DELIVERED WITHOUT INCIDENT TO THE DESTINATION LISTED BELOW.

DRIVER SIGNATURE: [signature] DELIVERY DATE: 090297

DESTINATION

SITE NAME: BROWNING FERRIS - ITASCA GARDENS LANDFILL
PHONE NO. ___-___
ADDRESS: ROUTE 1 BOX 23 K
ITASCA, TEXAS 76055
PHONE 254-687-2156

I HEREBY CERTIFY THAT THE ABOVE NAMED MATERIAL HAS BEEN ACCEPTED AND TO THE BEST OF MY KNOWLEDGE THE FORESGOING IS TRUE AND ACCURATE.

TNRCC # 241-B E.P.A. # TXD988048419

NAME OF AUTHORIZED AGENT: ____ SIGNATURE: ____

REORDER ONLY THROUGH BFI / UARCO CONTRACT

100-720TX (3/90)

DESTINATION RETAIN

TAB

F

APPENDIX F

FIELD DATA FORMS

Soil Gas Survey Data Sheets

Waste Inventory Tracking Forms

Field Sampling Reports

Health and Safety Monitoring Sheets

Instrument Calibration Logs

Equipment Decontamination Log Sheet

Soil Gas Survey Data Sheets

GORE-SORBER® Screening Survey Chain of Custody

For W.L. Gore & Associates use only
Production Order # 69552

W. L. Gore & Associates, Inc., Environmental Products Group
101 Lewisville Road • Elkton, Maryland 21921 • Tel: (410) 392-3300 • Fax (410) 996-3325

Instructions: Customer must complete ALL shaded cells

Customer Name: ENVIRONMENTAL COMPANY	Site Name: NAVAL A.R STATION
Address: 6550 WHITE SETTLEMENT RD	Site Address:
FT WORTH TX 76114	FT WORTH TX
	Project Manager: ALLEN FLOLO / GLEN METZLER
Phone: 804 295 4444	Customer Project No.:
FAX: 804 295 5535	Customer P.O. #: 2100 Quote #: BK5723

Serial # of Modules Shipped			# of Modules for Installation 70	# of Trip Blanks 6
# 125685	through	# 125704	Total Modules Shipped: 76	Pieces
# 125708	through	# 125763	Total Modules Received: 76	Pieces
#	through	#	Total Modules Installed: 70	Pieces
	through	#	Serial # of Trip Blanks (*Client Decides*)	# 125758
	through	#	# 125759 / # 125760	# 125761
#	through	#	# 125762 / # 125763	#
#	through	#	# / #	#

Installation Performed By:	Installation Method(s) (*circle those that apply*):
Name (*please print*): Glenn Metzler/Steve Bailey	(Slide Hammer) Hammer Drill Auger
Company/Affiliation: The Environmental Co., Inc.	Other:
Installation Start Date and Time: 8/15/96 7:30	(AM) PM
Installation Complete Date and Time: 8/16/96 5:25	AM (PM)
Retrieval Performed By:	Total Modules Retrieved: 69 Pieces
Name (*please print*): Steve Bailey	Total Modules Lost in Field: 1 Pieces
Company/Affiliation: The Environmental Co. Inc.	Total Unused Modules Returned: 6 Pieces
Retrieval Start Date and Time: 28 AUG 1996 / / 2:30	AM (PM)
Retrieval Complete Date and Time: 29 AUG 1996 / / 3:20	AM (PM)
Target Analytes to be Mapped (*Check Options or List as appropriate*):	To Be Determined Pending Completion of Lab Analysis [ ] or write "None", if applicable: None
Analyte #1:	Analyte #2: / Analyte #3:
Other Instructions, if any: Fed Ex Shipment Airbill # 1315508670	

Relinquished By: CJ Fowler	Date 8/8/96	Time 15:00	Received By: Glenn Metzler	Date 8/8/96	Time 1530
Affiliation: W.L. Gore & Associates, Inc.			Affiliation: The Environmental Co Inc.		
Relinquished By: Stephen A B Bailey	Date 29 AUG 96	Time 1930	Received By:	Date	Time
Affiliation: The Environmental Co Inc.			Affiliation:		
Relinquished By:	Date	Time	Received By:	Date	Time
Affiliation:			Affiliation: W.L. Gore & Associates, Inc.		
	Temperature of Samples When Received By Gore			°C	

GORE-SORBER ® Screening Survey is a registered service mark of W.L. Gore & Associates, Inc.

TEC Office Copy

GORE-SORBER® Screening Survey
Installation and Retrieval Log

Page 1 of 2

SITE NAME & LOCATION
NAS Ft. Worth
Fam Camp

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate) LPH	ODOR	NONE	MODULE IN WATER (check one) YES	NO	COMMENTS
1.	125685	8/15/96 0730	26AUG.96 1420			✓	✓		GS-01
2.	125686	8/15/96 0800	1445			✓	✓		GS-02
3.	125687	8/15/96 0840	1500			✓		✓	GS-03
4.	125688	8/15/96 0845	1505			✓		✓	GS-03-02
5.	125689	8/15/96 0910	1512			✓		✓	GS-04
6.	125690	8/15/96 0925	1518			✓		✓	GS-05
7.	125691	8/15/96 0940	1523			✓		✓	GS-06
8.	125692	8/15/96 0945	1532			✓	✓		GS-07
9.	125693	8/15/96 1000	Lost in	Field					GS-08
10.	125694	8/15/96 1020	1541			✓		✓	GS-09
11.	125695	8/15/96 1030	1548			✓		✓	GS-10
12.	125696	8/15/96 1040	1553			✓		✓	GS-11
13.	125697	8/15/96 1050	1650			✓		✓	GS-12
14.	125698	8/15/96 1105	1654			✓		✓	GS-13
15.	125699	8/15/96 1115	1706			✓		✓	GS-14
16.	125700	8/15/96 1130	1710			✓		✓	GS-15
17.	125701	8/15/96 1140	1715			✓		✓	GS-16
18.	125702	8/15/96 1145	1718			✓		✓	GS-17
19.	125703	8/15/96 1155	1723			✓		✓	GS-18
20.	125704	8/15/96 1330	1727			✓		✓	GS-19
21.	125708	8/15/96 1335	1734			✓		✓	GS-20
22.	125709	8/15/96 1340	1738			✓		✓	GS-21
23.	125710	8/15/96 1350	1742			✓		✓	GS-22
24.	125711	8/15/96 1355	1745			✓		✓	GS-23
25.	125712	8/15/96 1410	29AUG.96 -0802			✓		✓	GS-24
26.	125713	8/15/96 1415	-0806			✓		✓	GS-24-02
27.	125714	8/15/96 1420	0811			✓		✓	GS-25
28.	125715	8/15/96 1430	0814			✓		✓	GS-26
29.	125716	8/15/96 1440	0835			✓		✓	GS-27
30.	125717	8/15/96 1450	0837			✓		✓	GS-28
31.	125718	8/15/96 1500	0840			✓		✓	GS-29
32.	125719	8/15/96 1505	0843			✓		✓	GS-30
33.	125720	8/15/96 1515	0845			✓		✓	GS 31
34.	125721	8/15/96 1535	0902			✓		✓	GS-32
35.	125722	8/15/96 1545	0905			✓		✓	GS-33
36.	125723	8/15/96 1555	0907			✓		✓	GS-34
37.	125724	8/15/96 1625	0910			✓		✓	GS-35
38.	125725	8/15/96 1635	0913			✓		✓	GS-36
39.	125726	8/15/96 1645	0932			✓		✓	GS-37
40.	125727	8/15/96 1700	0936			✓		✓	GS-38
41.	125728	8/15/96 1710	0938			✓		✓	GS-39
42.	125729	8/15/96 1715	0941			✓		✓	GS-39-02

GORE-SORBER® Screening Survey Installation and Retrieval Log

SITE NAME & LOCATION
NAS Ft. Worth
Fin Camp

LINE #	MODULE #	INSTALLATION DATE/TIME	RETRIEVAL DATE/TIME 29 Aug 96 - 0958	EVIDENCE OF LIQUID HYDROCARBONS (LPH) or HYDROCARBON ODOR (Check as appropriate) LPH	ODOR	NONE	MODULE IN WATER (check one) YES	NO	COMMENTS
43.	125730	8/15/96 1725	[redacted]			✓		✓	GS-40
4	125731	8/15/96 1800	1002 [redacted]			✓		✓	GS-41
4	125732	8/15/96 1835	1006 [redacted]			✓	✓		GS-42
45.	125733	8/16/96 0735	1010 [redacted]			✓		✓	GS-43
4	125734	8/16/96 0800	1013 [redacted]			✓		✓	GS-44
4	125735	8/16/96 0820	1015 [redacted]			✓		✓	GS-45
49.	125736	8/16/96 0830	1026 [redacted]			✓		✓	GS-46
	125737	8/16/96 0840	1030 [redacted]			✓		✓	GS-47
5	125738	8/16/96 0925	1104			✓	✓		GS-48
52.	125739	8/16/96 0935	1108			✓	✓		GS-49
5	125740	8/16/96 0950	1112			✓		✓	GS-50
5	125741	8/16/96 1015	1115			✓		✓	GS-51
55.	125742	8/16/96 1020	1118			✓		✓	GS-52
5	125743	8/16/96 1250	1447			✓		✓	GS-53
5	125744	8/16/96 1315	1512			✓		✓	GS-54
5	125745	8/16/96 1330	1449			✓		✓	GS-55
5	125746	8/16/96 1600	1420			✓		✓	GS-56
60.	125748	8/16/96 1620	1422			✓		✓	GS-56-02
61.	125747	8/16/96 1610	1425			✓		✓	GS-57
6	125749	8/16/96 1345	1452			✓		✓	GS-58
63.	125750	8/16/96 1700	1507			✓		✓	GS-59
64.	125751	8/16/96 1725	1503			✓		✓	GS-60
	125752	8/16/96 1400	1455			✓	✓		GS-61
66.	125753	8/16/96 1625	1428			✓		✓	GS-62
7	125754	8/16/96 1415	1458			✓		✓	GS-63
	125755	8/16/96 1305	1518			✓		✓	GS-64
69.	125756	8/16/96 1445	1146			✓	✓		GS-65
70.	125757	8/16/96 1430	1151			✓		✓	GS 66
7	125758								Trip Bl
72.	125759								Trip Bl.
7	125760								Trip Bl.
	125761								Trip Bl.
75.	125762								Trip Bl
7	125763								Trip Bl
7									
78.									
7									
8									
8									
8									
8									
8									

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SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-01

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0730 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 18"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125685

Surface conditions (pavement, wet, frost, etc.) dry, grass - roadside

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 50 %
Silt 20 %
Sand 20 %
Gravel 10 %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments Very hard packed road bed

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent

( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-02

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0800 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 18"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125686

Surface conditions (pavement, wet, frost, etc.) dry, gravelly - roadside

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill (✓) Rock

Soil composition:

Clay _____%
Silt 60 %
Sand 30 %
Gravel 10 %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments Dry roadside - hole not staying open

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

John Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-03

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0840 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125687

Surface conditions (pavement, wet, frost, etc.) Moist

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay _____%
Silt 80 %
Sand 20 %
Gravel _____%

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Comments Probe placed in access box depth from ground surf to probes ~ 2'

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-03-02

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

( ) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
(✓) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0845 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125486

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay _____%
Silt 80 %
Sand 20 %
Gravel _____%

Moisture content of sampling horizon (qualitative):

( ) Very (Dry)
( ) Slightly (Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments Same as GS-03

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. G5-04

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0910 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125689

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay _____%
Silt 80 %
Sand 20 %
Gravel _____%

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-05

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0925 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125690

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 20 %
Silt 70 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-D6

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

( ) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
(✓) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0940 (AM)/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125691

Surface conditions (pavement, wet, frost, etc.) grass golf course

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other:

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-07

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 0945 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125692

Surface conditions (pavement, wet, frost, etc.) grass-golf course

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-08

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:00 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 402 glass Sample container no. 125693

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 20 %
Silt 70 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-09

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:20 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125694

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-10

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:30 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125695

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-11

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:40 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125696

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-12

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:50 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125697

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____%

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-13

Sampled by: Glenn Metzler, Steve Billey

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
( ) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

( ) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:05 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125698

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-14

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 1/15 (AM)/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125699

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-15

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:30 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125700

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 70 %
Sand 10 %
Gravel _____%

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

John Smith
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-16

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:40 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 402 glass Sample container no. 125701

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-17

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:45 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125702

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-178 b.24.

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:55 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125703

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-19

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:30 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125704

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill (✓) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler — Investigator Signature

8-15-96 — Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-20

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: 1 Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:35 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125708

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments
Sample 175 shifts from
-5704 to -5708

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-21

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:40 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4025/432 Sample container no. 125709

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-22

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:50 (AM/PM), 8/15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 12570

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8/15/96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-23

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:55 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125711

Surface conditions (pavement, wet, frost, etc.) grass - gel/coarse

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

John Smith
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-24

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:10 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4 oz glass Sample container no. 125712

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-24-02

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
(✓) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:15 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: _____ Sample container no. 125713

Surface conditions (pavement, wet, frost, etc.) grass - golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-25

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:20 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125714

Surface conditions (pavement, wet, frost, etc.) grass-golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-26

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:30 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125715

Surface conditions (pavement, wet, frost, etc.) grass - golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

IMPORTANT -- READ THIS FIRST

GORE-SORBER® Screening Survey
Module Storage, Installation, and Retrieval Information

NOTE: If you have any questions regarding installation and retrieval of your modules, please call Mark Wrigley, Ray Fenstermacher, Jay Hodny or Barbara Keaveney (410) 392-3300

STORAGE

GORE-SORBER Modules are specially cleaned and stored after manufacturing. They must remain sealed in their vials in the shipping coolers until deployment. **DO NOT** store them near potential sources of organic vapors, including petroleum fuels, fuel exhaust, solvents, or in areas of new construction or remodeling where paints, adhesives, foam insulating materials, etc. may be present.

REQUIRED TOOLS/SUPPLIES

GORE-SORBER Modules can be installed at any depth. Usually they require only a narrow pilot hole (approximately 1/2-inch to 3/4-inch in diameter) typically drilled or driven to a depth of 2 to 3 feet using hand tools (depending on project objectives, installation depth may vary at your site).

The following items are provided by GORE:

- Shipping coolers containing individually numbered passive soil gas collectors (Modules), including trip blanks;
- Stainless steel insertion rod, in threaded sections (for placement of modules in pre-drilled/driven pilot holes);
- Corks with screw eyes attached;
- Chain of Custody and Installation/Retrieval Log;
- Cooler temperature control blank and blue-ice packs (for use when returning the modules to GORE for analysis).

Additional tools (to be supplied by the customer) required for installation may include:

- Equipment to lay out and mark sample locations (scaled map, measuring tapes, pin flags, spray paint);
- Disposable gloves and equipment decontamination supplies
- Slide hammer/tile probe (slam bar) or electric rotary hammer drill (AC power outlet or portable generator and extension cords required) with carbide-tipped bits or augers (1/2 to 1-inch diameter up to 36 inches long) - information on where these items can be purchased is provided below as a courtesy and does not represent any endorsement of these products or suppliers:

Item	Supplier	Phone No.
Slide Hammer/Tile Probes	Forestry Supplies	(800) 647-5368
Carbide Drill Bits (36" long)	KV Associates, Inc.	(508) 540-0561
Rotary Hammer Drill	SKILL-BOSCH Power Tools	(800) 334-5730

GORE
Creative Technologies Worldwide

W. L. Gore & Associates
101 Lewisville Rd., P.O. Box 1100, Elkton, MD 21922-1100
Phone: 410-392-3300 Fax: 410-996-3325

GORE-TEX is a registered trademark of W. L. Gore & Associates
GORE-SORBER Screening Survey is a registered Service mark of W. L. Gore & Associates
GORE-SORBER is a registered trademark of W. L. Gore & Associates

Form 18 R2
5/28/96

Printed on Recycled Paper

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-27

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199__ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:40 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125716

Surface conditions (pavement, wet, frost, etc.) grass - soft earth

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-28

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:50 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4 oz Glass Sample container no. 125717

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 40 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-29

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 15:00 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4 oz glass Sample container no. 12578

Surface conditions (pavement, wet, frost, etc.) soft ground

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-30

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 1505 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125719

Surface conditions (pavement, wet, frost, etc.) grass · golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-31

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 15:15 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: _____ Sample container no. 125720

Surface conditions (pavement, wet, frost, etc.) golf course grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-32

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 15:35 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 402 glass Sample container no. 125721

Surface conditions (pavement, wet, frost, etc.) grass - golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-33

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 15:45 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125722

Surface conditions (pavement, wet, frost, etc.) grass - golf course

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments May have hit pipe or rock!

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-34

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 15:55 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: Glass Sample container no. 125783

Surface conditions (pavement, wet, frost, etc.) golf course - grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-35

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:25 (AM/PM) 9-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125724

Surface conditions (pavement, wet, frost, etc.) golf course - grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

9-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-36

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:35 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125725

Surface conditions (pavement, wet, frost, etc.) grass-golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 5 %
Gravel 5 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments At South Bank of Fairway Branch

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. 65-37

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 16:45 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 8'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 402 glass Sample container no. 125726

Surface conditions (pavement, wet, frost, etc.) grass - golf course

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 5 %
Gravel 5 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-38

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:00 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125727

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 70 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-39

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:10 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125728

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-39-02

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

( ) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
(✓) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:15 (AM/PM) 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 3'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125729

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-15-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-40

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:25 (AM/PM) 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4 oz glass Sample container no. 125730

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments Broke Tile probe (very hard surf. soil).

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-41

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 18:00 (AM/PM), 8-15, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125731

Surface conditions (pavement, wet, frost, etc.) grass near pavement

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 5 %
Gravel 5 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Smith
Investigator Signature

8-15-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-42

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 18:35 (AM/PM), 8-15, 199 6

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

used 1" auger for top 1 foot

Sample/Location Data

Sample container type: 40z glass Sample container no. 125732

Surface conditions (pavement, wet, frost, etc.) gravel parking area

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 60 %
Sand 17 %
Gravel 13 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-15-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-43

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 7:35 (AM/PM), 8-16, 1996
Recovered _____ (AM/PM), _____, 199__
Depth of hole for sorbent device: 2'
PID reading at surface of hole punched: _____

- Used auger (1") for first 1 foot
- cork recessed in ground several inches

Sample/Location Data

Sample container type: 40z glass Sample container no. 125733

Surface conditions (pavement, wet, frost, etc.) Hard packed ground-gravel

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:
Clay 10 %
Silt 60 %
Sand 15 %
Gravel 15 %

Moisture content of sampling horizon (qualitative):
(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments This area was old roadbed

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-44

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 8:00 (AM/PM), 8-16, 199__ used auger for top 6"

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125734

Surface conditions (pavement, wet, frost, etc.) old roadbed or just next to it

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 50 %
Sand 40 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-45

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 8:20 (AM/PM), 8-16, 1996 Cork recessed in ground ~1"

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: _____

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4 oz glass Sample container no. 125735

Surface conditions (pavement, wet, frost, etc.) near or on old roadbed

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments
Some asphalt in upper 6" ?

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-16-95
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-46

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 8:30 (AM/PM), 8-16, 1996 - 1" auger used for top 8"

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2' - cork recessed 1" in ground

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125736

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 5 %
Gravel 5 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-47

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 8:40 (AM/PM), 8-16, 1996 1 inch auger used for top 8"

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 9'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125737

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camo Sample No. GS-48

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 9:25 (AM/PM), 8-14, 1991 Top 1 foot augered with 1" auger.

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 8"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125738

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 70 %
Sand 15 %
Gravel 5 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-14-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-49

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 9:35 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 1996

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125739

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-50

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 9:50 (AM/PM), 8-16, 1996 Cork recessed in ground 2"

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125740

Surface conditions (pavement, wet, frost, etc.) gravel roadbed

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 70 %
Sand 15 %
Gravel 13 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-51

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:15 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2' 6"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125741

Surface conditions (pavement, wet, frost, etc.) sparse vegetation near Unnamed Cr.

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments 5' from creek bank pipeline ~ 7' deep

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-52

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 10:20 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125742

Surface conditions (pavement, wet, frost, etc.) side of access road, sparse veg.

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-53

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 12:50 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125743

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-54

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 1315 (AM/PM), 8/6, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 105744

Surface conditions (pavement, wet, frost, etc.) rocky soil - ~~bank of river~~ near top of bank

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 60 %
Sand 15 %
Gravel 15 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8/6-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-55

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:30 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125745

Surface conditions (pavement, wet, frost, etc.) Grass - above pipeline

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 90 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler
Investigator Signature

8-16-95
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-56

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 16:05 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: Teflon Sample container no. 125746

Surface conditions (pavement, wet, frost, etc.) grass - under tree

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-56-02

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

D.M. (✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
(✓) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 16:20 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 4oz glass Sample container no. 125748

Surface conditions (pavement, wet, frost, etc.) Grass under tree

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS:57

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 16:10 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: _____

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125747

Surface conditions (pavement, wet, frost, etc.) grass - near MW-10

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-58

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 1345 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. _____

Surface conditions (pavement, wet, frost, etc.) 125749

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-59

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:00 (AM/PM), 8/16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 18"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 105750

Surface conditions (pavement, wet, frost, etc.) side of bank - stone

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 60 %
Sand 15 %
Gravel 15 %

Moisture content of sampling horizon (qualitative):

( ) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8/16-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-60

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 17:35 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: _____

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40ml glass Sample container no. 125751

Surface conditions (pavement, wet, frost, etc.) side of bank - stony

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 10 %
Sand 15 %
Gravel 15 %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-61

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:00 (AM/PM), 8-16, 199_

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 40z glass Sample container no. 125752

Surface conditions (pavement, wet, frost, etc.) grass - over gas line

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 40 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glen Metzler
Investigator Signature

8-16-96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-62

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 11:25 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: Glass Sample container no. 125753

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-16-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-63

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:15 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 2

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 1oz fan Sample container no. ~~[illegible]~~ T25754

Surface conditions (pavement, wet, frost, etc.) grass. poor popular

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly
(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments _____

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

[signature]
Investigator Signature

8/16/96
Date

The Environmental Company, Inc.
Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-64

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 13:05 (AM/PM) 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 1'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 1 oz glass Sample container no. 12.5755

Surface conditions (pavement, wet, frost, etc.) rocky soil - bank of river

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 40 %
Sand 15 %
Gravel 15 %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments very rocky - refusal at 1' to 1.5'

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Glenn Metzler

Investigator Signature

8-16-96

Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-65

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Field blank
( ) Travel blank
( ) Sample container blank
( ) Sample probe blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199____ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:45 (AM/PM), 8-11, 1996

Recovered _____ (AM/PM): _____, 199__

Depth of hole for sorbent device: 0'

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 1/2 glass Sample container no. 12576

Surface conditions (pavement, wet, frost, etc.) _____

Sample horizon data-visual estimates:

Vadose zone make-up: (✓) Native soil+rock ( ) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 80 %
Sand 10 %
Gravel _____ %

Moisture content of sampling horizon (qualitative):

(✓) Very
( ) Slightly

(Dry)
(Damp)
(Moist)
(Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

8-16-96
Date

The Environmental Company, Inc.

Investigator Affiliation

SOIL GAS SAMPLE DATA SHEET

Project No. P3103 NAS Ft. Worth RV/FAM Camp Sample No. GS-66

Sampled by: Glenn Metzler, Steve Bliley

Sampling System (check one):

( ) Whole air-active approach
( ) Whole air-passive approach
( ) Sorbed contaminants-active approach
(✓) Sorbed contaminants-passive approach
( ) Headspace or extraction approach
( ) Soil pore liquid headspace approach

Sample Type (check one)

(✓) Direct field sample
( ) Sample container blank
( ) Field blank
( ) Sample probe blank
( ) Travel blank
( ) Sample duplicate

Active Approach

System purge volume: _____ Volumes purged: _____ Sample volume: _____

Sample depth _____ Sampling rate _____

Date of Reading (Active Approach):: _____, 199___ Time: _____(AM/PM)

Passive Approach

Sorbent device: Installed 14:30 (AM/PM), 8-16, 1996

Recovered _____ (AM/PM), _____, 199__

Depth of hole for sorbent device: 18"

PID reading at surface of hole punched: _____

Sample/Location Data

Sample container type: 1/2 glass Sample container no. 125757

Surface conditions (pavement, wet, frost, etc.) grass

Sample horizon data-visual estimates:

Vadose zone make-up: ( ) Native soil+rock (✓) Fill ( ) Rock

Soil composition:

Clay 10 %
Silt 70 %
Sand 10 %
Gravel 10 %

Moisture content of sampling horizon (qualitative):

(✓) Very (Dry)
( ) Slightly (Damp) (Moist) (Wet)

Other characteristics of the sampling horizon:

Comments

( ) Free water present
( ) Contaminant odors
( ) Poor perm. to vapors
( ) Near slope or vent
( ) Free product present
( ) Indurated
( ) Soil discoloration
( ) Other

Investigator Signature

Date 8-16-96

The Environmental Company, Inc.

Investigator Affiliation

Waste Inventory Tracking Forms

WASTE INVENTORY TRACKING FORM

LOCATION: NAS Fort Worth JRB Carswell Field, TX

PROJECT NAME: RV Fam Camp Area

ACTIVITIES: Soil Borings 10/22/96 – 10/26/96

Date Waste Generated	Activity Generating Waste (borehole # / well #)	Description of Waste	Field Evidence of Contamination	Estimated Volume gal	All 55 gal Type of Container (storage ID#) Drums	Location of Container	Waste Characterization	Comments
10/22 96	SB01 SB02	Soil	None	20	FC-D-1	Drill Site		SB01 75% SB02 25%
10/22 96	SB01 SB02	"	odor	50	FC-D-2	"		SB01 20% SB02 80%
10/23 96	SB 03	"	odor	50	FC-D-3	"		SB03 100%
10/23 96	SB04 SB05	"	odor	50	FC-D-4	"		SB04 20% SB05 80%
10/23 96	SB06	"	None	50	FC-D-5	"		SB06 100%
10/24 96	SB07 SB08	"	None	30	FC-D-6	"		SB07 40% SB08 60%
10/24 96	SB09 SB10	"	None	50	FC D-7	"		SB09 50% SB10 50%
10/25 96	SB16A- SB20	"	None	40	FC-D-8 55 gal	"		SB16-19 50% SB20 50%
10/26 96	SB-11 SB-12	"	PET Odor	55	FC-D-9	"		SB 11 - 75% SB 12 - 25%
10/26 96	SB 12	"	Odor	20	FC-D-10	"		SB12 100%
10/25 96	DECON SB-01- SB 10	Water	None	30	FC-D-11	"		SB1 Thru SB 10
10/26 96	DECON SB11&12	Water	None	10	FC-D-12	"		SB 11 & SB 12

Note: Describe whether soil or water samples have been collected for waste characterization, include date, if known.

KW Troensegaard Site Geologist

Signature: [signature] 10/29/96

Soils Collected as 3 Composites 10/28/96
One Water Composite Collected 10/28/96

Field Sampling Reports

FIELD SAMPLING REPORT

LOCATION: SB01 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX DESO SAMPLE ID: ~~SB01~~ FC-SB01-01

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10.0'

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 9:40 Am

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030 A	8020A	BTEX
32oz Jar	1	Ice	3550 A	8270B	Semivolatiles
		Ice	3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 152	COLOR: Medium gray	
2nd	ODOR: —	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ~~X~~ RMD OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A (LLM)

SAMPLER: B. Dufner OBSERVER: K. Troesegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB01 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: ~~DC~~ SO SAMPLE ID: FC-SB01-02

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 10.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 12.5

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 10:05

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile Organics
32oz Jar	1	Ice	3550A	8270B	Semivolatile Organics
~~[illegible]~~			3550A	8015	TPH - Deisel
4oz Jar	1	Ice	5030 um	8015 mod	TPH - Gasoline
8oz Jar	1	Ice	~~3015~~ 3051	6010A	Inorganic Metals
		(um) 3051	~~3030A~~/NONE	7421/7471A	Lead / Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 329.0	COLOR: Light - med. gray-brown	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A (LLM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB01 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX ~~DC~~ SO SAMPLE ID: FC-SB01-03

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 12.5 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 15.0

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 10:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8020A	BTEX
~~4 oz Jar~~	~~1~~	~~Ice~~	~~35 50A~~	~~8270B~~	~~TPH Gasoline~~
32 oz Jar	1	Ice	35 50A	8015	TPH - Diesel
4 oz Jar	1	Ice	5030	8015 mod	TPH Gasoline

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	~~74.0~~ 74.0	COLOR: Light-med. gray-brown	
2nd		ODOR: —	
		OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A (LLM)

SAMPLER: B. Duffner OBSERVER: K. Trocsegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX DC SO SAMPLE ID: FC-SB02-01

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 5.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 7.5

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 1300

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semivolatiles
			3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 159	COLOR: light gray	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A (LLM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB02-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 7.5 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10.0

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 13:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8020A	BTEX
32 oz Jar	1	Ice	3550A	8270B	Semi Volatile Organics
			3550A	8015	TPH - Diesel
4 oz Jar	1	Ice	5030	8015 mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 370.0	COLOR: light gray	
2nd	ODOR: slight petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55° F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A CLLM

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB02-03

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 10.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12.5

GRAB (X) COMPOSITE ( ) DATE: 10/22 TIME: 14:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8015	TPH Diesel
4oz Jar	1	Ice	5030	8015mod	TPH Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 69.0	COLOR: medium gray-brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 012A (LUM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB03-01

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 10.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12.5

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 1710

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8020A	BTEX
32 oz Jar	1	Ice	3550A	8270B	Semivolatile Organics
			3550A	8015	TPH - Diesel
4 oz Jar	1	Ice	5030	8015mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 701.0	COLOR: ~~orange~~ dark brown ~~to~~/gray	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55° F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011B (LLM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB03-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 15.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 17.5

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 1725

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile Organics
32oz Jar	1	Ice	3550A	8270B	Semi Volatile Organics
			3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015 mod	TPH ~~Inorg~~ Gasoline
8oz Jar	1	Ice	(LUM) ~~3015~~ 3051	6010A	Inorganics
			(3051) ~~3050A~~ NONE	7421/7471A	Lead / Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 704.	COLOR: light gray	
2nd	ODOR: petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55° F

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011B (LUM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB03-03

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 20.0 MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 21.5

GRAB (X) COMPOSITE ( ) DATE: 10/22/96 TIME: 1745

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8020 A	BTEX
32 oz Jar	1	Ice	3550A	8015	TPH Diesel
4 oz Jar	1	Ice	5030	8015 mod	TPH Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 124	COLOR: light gray	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR X OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 55°

SHIPMENT VIA: FED-X ____ HAND DELIVER X COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011B (LM)

SAMPLER: B. Duffner OBSERVER: K. Troesegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB04 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB04-01

SAMPLING METHOD SS DUP./REP. OF: _____

BEGINNING DEPTH 5.0' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 7.5'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 8:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatiles
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015 Mod	TPH-Gasoline.

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	22	COLOR: Dark gray/brown	
2nd		ODOR: none	
		OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB04 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB04-02

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 8.5'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 8:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8240B	Volatile organics
32 oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
			3550A	8015	TPH - Diesel
4 oz Jar	1	Ice	5030	8015 mod	TPH - Gasoline
8 oz Jar	1	Ice, 3051	~~3015~~	6010A	Inorganic Metals
		(LUM) 3051	~~3020A~~/NONE	7421/7471A	Lead/ Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 10	COLOR: dark gray/brown to chalky white	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LUM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB05 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB05-01

SAMPLING METHOD SS DUP./REP. OF: _____

BEGINNING DEPTH 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 11:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 5.0	COLOR: 10 YR 2/4 & 2.5 Y 1/4	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB05 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB05-02

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 13.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 16.0'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 11:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile organics
32oz Jar	1	Ice	3550A	8270B	Semi-Volatile organics
		Ice	3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015 mod.	TPH - Gasoline
8oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
		(LLM) 3051	~~3020A~~/NONE	7421/7471A	Lead/Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 660	COLOR: Dark brown	* Grain Size
2nd	ODOR: Moderate petroleum odor	Analysis also
	OTHER:	requested.

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB05 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB05-03

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 18.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 21'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 11:50

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
cooler A	4 oz Jar	1	Ice	5030A	8020A	BTEX
cooler A	4 oz Jar	1	Ice	5030	8015 mod.	TPH - Gasoline
cooler B	32 oz Jar	1	Ice	3550A	8015	TPH - Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR: gray/tan	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP 75°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control #011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB05 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB05-04

SAMPLING METHOD SS DUP./REP. OF: FC-SB05-01

BEGINNING DEPTH 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 10'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 11:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015 mod	TPH-Gasoline

colorA
colorB

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 5.0	COLOR: 10YR 2/4 & 2.5Y 1/4	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAB/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB06 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB06-01

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES (X) NO ( )

END DEPTH: 10'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 14:50

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
cooler A	4oz Jar	1	Ice	5030A	8020A	BTEX
cooler B	32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
			Ice	3550A	8015	TPH - Diesel
cooler A	4oz Jar	1	Ice	5030	8015 mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS		MISCELLANEOUS
1st	Ø	COLOR:	very dark gray	
2nd		ODOR:	none	
		OTHER:		

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 75°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB06 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB06-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 10' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12.5'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 14:50

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
cooler A	4 oz Jar	1	Ice	5030A	~~8240B~~ 8240B	~~Volatile Organics~~ Volatile Organics ~~BTEX~~
cooler B	32 oz Jar	1	Ice	3550A	8270B	Semi-volatile Organics
			Ice	3550A	8015	TPH-Diesel
cooler A	4 oz Jar	1	Ice (LLM)	5030	8015 mod	TPH-Gasoline
cooler B	8 oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
			3051/NONE	~~3020A~~	7421/7471A	Lead/Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 16	COLOR: very dark gray	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 75°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Service

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB06 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB06-03

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 15' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 17.5'

GRAB (X) COMPOSITE ( ) DATE: 10/23/96 TIME: 15:20

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
cooler A	4oz Jar	1	Ice	5030A	8020A	BTEX
	4oz Jar	1	Ice	5030	8015 mod	TPH-Gasoline
cooler B	32oz Jar	1	Ice	3550A	8270B	semi-volatile organics
			Ice	3550A	8015	TPH-Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st Ø	COLOR: very dark gray w/chalky white	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ✓ OVERCAST/RAIN ____ WIND DIRECTION S AMBIENT TEMP 75°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB07 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB07-01

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 7'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 8:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile Organics
32oz Jar	1	Ice	3550A	8270B	Semi-volatile Organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice UM	5030	8015 mod	TPH-Gasoline
8oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
		3051/NON ~~3020A~~		7421/7471A	Lead/Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st Ø	COLOR: very dark brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ___ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ___ HAND DELIVER ✓ COURIER ___ OTHER ___

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A UM

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB08 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB08-01

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 8.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 11:05

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4 oz Jar	1	Ice	5030A	8240B	Volatile Organics
32 oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
			3550A	8015	TPH-Diesel
4 oz Jar	1	Ice LLM	5030	8015 mod	TPH-Gasoline
8 oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
		3051/NONE	~~3020A~~	7421/7471A	Lead/Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR: 10 YR 5/3	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ___ OVERCAST/RAIN ✓ WIND DRIECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ___ HAND DELIVER ✓ COURIER ___ OTHER ___

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB09 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB09-01

SAMPLING METHOD SS DUP./REP. OF: _____

BEGINNING DEPTH 10' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12.5'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 13:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
			3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS		SAMPLE CHARACTERISTICS		MISCELLANEOUS
1st	27	COLOR:	light gray	
2nd		ODOR:	none	
		OTHER:		

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB09 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB09-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 15' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 17.5'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 13:54

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4/oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	semi-volatile organics
			3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015 mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 18.5	COLOR: light gray to lt yellow br	
2nd	ODOR: no odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB09 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB09-03

SAMPLING METHOD: SS DUP./REP. OF: FC-SB09-01

BEGINNING DEPTH: 10' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 12.5'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 13:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	semi-volatile organics
			3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015 mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 27	COLOR: light gray	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ___ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ___ HAND DELIVER ✓ COURIER ___ OTHER ___

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB10 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB10-01

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 7.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 10'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 14:35

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
Cooler A	4oz Jar	1	Ice	5030A	8020A	BTEX
	4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline
Cooler B	32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
				3550A	8015	TPH-Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 18	COLOR: 10 YR 6/2	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

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FIELD SAMPLING REPORT

LOCATION: _____ PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB10-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 15' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 19'

GRAB (X) COMPOSITE ( ) DATE: 10/24/96 TIME: 15:25

	CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
Cooler A	4oz Jar	1	Ice	5030A	8020A	BTEX
	4oz Jar	1	Ice	5030	8015mod	TPH - Gasoline
Cooler B	32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
				3550A	8015	TPH - Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 12	COLOR: yellow-brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION S AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A (LLM)

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB11 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB11-01

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 10' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 12.5'

GRAB (X) COMPOSITE ( ) DATE: 10/26/96 TIME: 9:05

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod.	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st Ø	COLOR: light brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ___ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ___ HAND DELIVER ✓ COURIER ___ OTHER ___

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB11 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB11-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 17.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 20'

GRAB (X) COMPOSITE ( ) DATE: 10/26/96 TIME: 9:25

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 36	COLOR: Lt brown w/gray pet. staining	
2nd	ODOR: moderate petroleum odor	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB11 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB11-03

SAMPLING METHOD SS DUP./REP. OF: _____

BEGINNING DEPTH 22.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 25'

GRAB (X) COMPOSITE ( ) DATE: 10/26/96 TIME: 9:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile Organics
32oz Jar	1	Ice	3550A	8270B	Semi-volatile organics
		Ice	3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015mod	TPH - Gasoline
8oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
		(3051/NONE ~~3020A~~		7421/7471A	Lead / Mercury

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 940	COLOR: 10 YR 5/3	
2nd	ODOR: mod to strong petroleum odor	
	OTHER: slight to moderate	
	petroleum staining	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 65°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAB/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB12 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX: SO SAMPLE ID: FC-SB12-01

SAMPLING METHOD: SS DUP./REP. OF: —

BEGINNING DEPTH: 10' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH: 12.5'

GRAB (X) COMPOSITE ( ) DATE: 10/26/96 TIME: 11:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	semi-volatile organics
		Ice	3550A	8015	TPH - Diesel
4oz Jar	1	Ice	5030	8015mod	TPH - Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 35	COLOR: light brown	
2nd	ODOR: none	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control # 011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB12 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB12-02

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 17.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 20'

GRAB (X) COMPOSITE ( ) DATE: 10/~~29~~ 26/96 TIME: 11:40

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8020A	BTEX
32oz Jar	1	Ice	3550A	8270B	semi-volatile organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice	5030	8015mod	TPH-Gasoline

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 610	COLOR: Med brown to gray brown	
2nd	ODOR: mod to strong petroleum odor	
	OTHER: mod-strong petroleum staining	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ___ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ___ HAND DELIVER ✓ COURIER ___ OTHER ___

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control #011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: SB12 PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX SO SAMPLE ID: FC-SB12-03

SAMPLING METHOD SS DUP./REP. OF: —

BEGINNING DEPTH 22.5' MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH 25'

GRAB (X) COMPOSITE ( ) DATE: 10/26/96 TIME: 12:05

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
4oz Jar	1	Ice	5030A	8240B	Volatile Organics
32oz Jar	1	Ice	3550A	8270B	Semi-volatile Organics
		Ice	3550A	8015	TPH-Diesel
4oz Jar	1	Ice um	5030	8015 mod	TPH - Gasoline
8oz Jar	1	Ice 3051	~~3015~~	6010A	Inorganic Metals
		3051/NONE	~~3020 A/~~	7421/~~7470~~	Lead/Mercury

NOTABLE OBSERVATIONS 7471A um

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st 479	COLOR: 2.5 Y 4/1	
2nd	ODOR: strong petroleum odor	
	OTHER: strong petroleum	
	staining	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ✓ WIND DIRECTION W AMBIENT TEMP 70°F

SHIPMENT VIA: FED-X ____ HAND DELIVER ✓ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Field Lot Control #011A

SAMPLER: L. Myers OBSERVER: K. Troensegaard

MATRIX TYPE CODES	
DC=DRILL CUTTINGS	SL=SLUDGE
WG=GROUND WATER	SO=SOIL
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER
SE=SEDIMENT	SW=SWAP/WIPE

SAMPLING METHOD CODES	
B=BAILER	G=GRAB
BR=BRASS RING	HA=HAND AUGER
CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
DT=DRIVEN TUBE	SS=SPLIT SPOON
W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-EB-01

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/22/96 TIME: 12:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile organics
	2	Ice	5030	8015 mod	TPH-Gasoline
	1	Ice	~~3015~~ 3015	6010A	Inorganic metals
			~~3020A~~ 3020A/NONE	7421/7470A	Lead/Mercury
	1	HCL	3550A	8270B	Semivolatile organics
	1	HCL	3550A	8015	TPH-Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DRIECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Equipment Blank #1, Lot Contrd # 011B

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-EB-02

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH Ø YES ( ) NO (X)

GRAB ( ) COMPOSITE ( ) DATE: 10/23/96 TIME: _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile organics
	2	Ice	5030	8015 mod	TPH- Gasoline
	1	Ice	3015	6010A	Inorganic metals
	1		3020A/-	7421/7470A	Lead/Mercury
	1	HCL	3550A	8270B	Semi-volatile organics
	1	HCL	3550A	8015	TPH- Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Equipment Blank #2, Lot Control # 011 EA

SAMPLER: S. Bliley OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-EB-03

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE

END DEPTH Ø YES ( ) NO (X)

GRAB ( ) COMPOSITE ( ) DATE: 10/24/96 TIME: 16:15

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile organics
	2	Ice	5030	8015 mod	TPH- Gasoline
	1	Ice	3015	6010A	Inorganic metals
			3020A/-	7421/7470A	Lead/ Mercury
	1	HCL	3550A	8270B	Semivolatile organics
	1	HCL	3550A	8015	TPH-Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchrape Testing Services

COMMENTS: Equipment Blank #3, Lot Control # 011A

SAMPLER: B S. Bliley OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-EB-04

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/25/96 TIME: 15:30

CONTAINER SIZE/TYPE	CONTAINER #	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile organics
	2	Ice	5030	8015 mod	TPH - gasoline
	1	Ice	3015	6010A	Inorganic metals
			3020A/—	7421/7470A	Lead / Mercury
	1	HCL	3550A	8270B	Semivolatile organics
	1	HCL	3550A	8015	TPH - Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Equipment Blank #4, Lot Control # 012B

SAMPLER: ~~B. Duffner~~ S. Bliley OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-EB-05

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/26 TIME: 12:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile organics
	2	Ice	5030	8015 mod	TPH- Gasoline
	1	Ice	3015	6010A	Inorganic metals
			3020A/—	7421/7470A	Lead/Mercury
	1	HCL	3550A	8270B	Semivolatile organics
	1	HCL	3550A	8015	TPH-Diesel

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Equipment Blank #5, Lot Control # 011A

SAMPLER: ~~B. Daffner~~ (LLM) OBSERVER: K. Troensegaard

S. Bliley

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: FieldQC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-01

SAMPLING METHOD NA DUP./REP. OF: _____

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/22/96 TIME: 22:18

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
Vial	2	Ice	5030A	8240B	Volatile organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #1, Lot Control # 011B

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field qc PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-02

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/22/96 TIME: 22:20

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
Vial	2	Ice	5030A	8240B	Volatiles organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #2, Lot Control # 012A

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAP/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-03

SAMPLING METHOD NA DUP./REP. OF: _____

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO Ø

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/23/96 TIME: _____

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile Organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #3, Lot Control #011A

SAMPLER: B. Duffner OBSERVER: K. Troensegaard For overall project

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: Ø

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-04

SAMPLING METHOD NA DUP./REP. OF: _____

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/24/96 TIME: 16:05

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile Organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #4 for project, Lot Control #011A

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-400-TB-05

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/25/96 TIME: 15:30

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile Organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #5 for project, Lot Control # 011A

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES

DC=DRILL CUTTINGS
WG=GROUND WATER
LH=HAZARDOUS LIQUID WASTE
SH=HAZARDOUS SOLID WASTE
SE=SEDIMENT
SL=SLUDGE
SO=SOIL
GS=SOIL GAS
WS=SURFACE WATER
SW=SWAB/WIPE

SAMPLING METHOD CODES

B=BAILER
BR=BRASS RING
CS=COMPOSITE SAMPLE
C=CONTINUOUS FLIGHT AUGER
DT=DRIVEN TUBE
W=SWAB/WIPE
G=GRAB
HA=HAND AUGER
H=HOLLOW STEM AUGER
HP=HYDRO PUNCH
SS=SPLIT SPOON
SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-06

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO Ø

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/25/96 TIME: 16:00

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile Organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #6 for project, Lot Control # 012B

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAP/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

FIELD SAMPLING REPORT

LOCATION: Field QC PROJECT: _____

SITE: _____

SAMPLE INFORMATION

MATRIX WQ SAMPLE ID: FC-WQ-TB-07

SAMPLING METHOD NA DUP./REP. OF: —

BEGINNING DEPTH Ø MATRIX SPIKE/MATRIX SPIKE DUPLICATE YES ( ) NO (X)

END DEPTH Ø

GRAB ( ) COMPOSITE ( ) DATE: 10/26/96 TIME: 12:45

CONTAINER SIZE/TYPE	#	PRESERVATIVE/ PREPARATION	EXTRACTION METHOD	ANALYTICAL METHOD	ANALYSIS
	2	Ice	5030A	8240B	Volatile Organics

NOTABLE OBSERVATIONS

PID READINGS	SAMPLE CHARACTERISTICS	MISCELLANEOUS
1st	COLOR:	
2nd	ODOR:	
	OTHER:	

GENERAL INFORMATION

WEATHER: SUN/CLEAR ____ OVERCAST/RAIN ____ WIND DIRECTION ____ AMBIENT TEMP ____

SHIPMENT VIA: FED-X ____ HAND DELIVER ____ COURIER ____ OTHER ____

SHIPPED TO: Inchcape Testing Services

COMMENTS: Trip Blank #7 for project, Lot Control # 01 1A

SAMPLER: B. Duffner OBSERVER: K. Troensegaard

MATRIX TYPE CODES		SAMPLING METHOD CODES	
DC=DRILL CUTTINGS	SL=SLUDGE	B=BAILER	G=GRAB
WG=GROUND WATER	SO=SOIL	BR=BRASS RING	HA=HAND AUGER
LH=HAZARDOUS LIQUID WASTE	GS=SOIL GAS	CS=COMPOSITE SAMPLE	H=HOLLOW STEM AUGER
SH=HAZARDOUS SOLID WASTE	WS=SURFACE WATER	C=CONTINUOUS FLIGHT AUGER	HP=HYDRO PUNCH
SE=SEDIMENT	SW=SWAB/WIPE	DT=DRIVEN TUBE	SS=SPLIT SPOON
		W=SWAB/WIPE	SP=SUBMERSIBLE PUMP

Health and Safety Monitoring Sheets

AFCEE\M20002\FLD'LOG.WK3

CAR-J04-06K69X04-M2-11X12

HEALTH & SAFETY EXPOSURE MONITORING

PROJECT #: 3103
PROJECT LOCATION: Fam Camp
PROJECT ACTIVITY: Drilling

DATE: Oct. 23, 1996
LOCATION MONITORED: Breathing Zone at Drill Rig
ACTIVITY MONITORED: Drilling

DRILL RIG TYPE/NO: Hollow Stm Auger
PERSONNEL AT THIS LOCATION: 8
PERSONNEL AFFECTED BY H&S MONITORING: 4

TIME (24 hr clock)	BACK-GROUND	MONITOR INTERVAL (boreholes depth)	FID (ppm)	PID (ppm)	%O2 (%)	% LEL (%)	H2S (ppm)	RAM (ppm)	OTHER	SAMPLES INITIALS
0830				0.0						LLM
1030				0.0						LLM
1140				0.0						LLM
1430				0.0						LLM
1530				0.0						LLM
Field activities not occurring during hours not recorded.										

INSTRUMENT	MFGR MODEL #	INSTRUMENT SERIAL #	CALIBRATION STANDARD CAL GAS	STD (ppm)	LOT #	END OF DAY CALIBRATION CHECK	END OF DAY CALIBRATION CHECK
FID							
PID							
%O2							
%LEL							
H2S							
RAM							

FIELD TEAM LEADER SIGNATURE _____

HEALTH & SAFETY EXPOSURE MONITORING

PROJECT #: 3103
PROJECT LOCATION: Fam Camp
PROJECT ACTIVITY: Drilling

DATE: Oct. 24, 1996
LOCATION MONITORED: Breathing Zone at Drill Rig
ACTIVITY MONITORED: Drilling

DRILL RIG TYPE/NO: Hollow Stem Auger
PERSONNEL AT THIS LOCATION: 8
PERSONNEL AFFECTED BY H&S MONITORING: 4

TIME (24 hr clock)	BACK-GROUND	MONITOR INTERVAL (boreholes depth)	FID (ppm)	PID (ppm)	%O2 (%)	% LEL (%)	H2S (ppm)	RAM (ppm)	OTHER	SAMPLES INITIALS
0840				0.0						LLM
1045				0.0						LLM
1305				0.0						LLM
1400				0.0						LLM
1500				1.5						LLM

Field activities not occurring during hours not recorded.

INSTRUMENT	MFGR MODEL #	INSTRUMENT SERIAL #	CALIBRATION STANDARD CAL GAS	STD (ppm)	LOT #	END OF DAY CALIBRATION CHECK	END OF DAY CALIBRATION CHECK
FID							
PID							
%O2							
%LEL							
H2S							
RAM							

FIELD TEAM LEADER SIGNATURE _____

HEALTH & SAFETY EXPOSURE MONITORING

PROJECT #: 3103
PROJECT LOCATION: Fam Camp
PROJECT ACTIVITY: Drilling

DATE: 10/25/96
LOCATION MONITORED: Breathing Zone at Drill Rig
ACTIVITY MONITORED: Drilling

DRILL RIG TYPE/NO: Hollow Stem Auger
PERSONNEL AT THIS LOCATION: 8
PERSONNEL AFFECTED BY H&S MONITORING: 4

TIME (24 hr clock)	BACK-GROUND	MONITOR INTERVAL (boreholes depth)	FID (ppm)	PID (ppm)	%O2 (%)	% LEL (%)	H2S (ppm)	RAM (ppm)	OTHER	SAMPLES INITIALS
0825				2.0						LLM
0915				0.4						LLM
1040				0.0						LLM
1140				0.0						LLM
1355				0.0						LLM

Field activities not occurring during hours not recorded.

INSTRUMENT	MFGR/ MODEL #	INSTRUMENT SERIAL #	CALIBRATION STANDARD CAL GAS	STD (ppm)	LOT #	END OF DAY CALIBRATION CHECK	END OF DAY CALIBRATION CHECK
FID							
PID							
%O2							
%LEL							
H2S							
RAM							

FIELD TEAM LEADER SIGNATURE _____

HEALTH & SAFETY EXPOSURE MONITORING

PROJECT #: 3103
PROJECT LOCATION: Fam Camp
PROJECT ACTIVITY: Drilling

DATE: Oct. 26, 1996
LOCATION MONITORED: Breathing zone at drill rig
ACTIVITY MONITORED: Drilling

DRILL RIG TYPE/NO: Hollow Stem Auger
PERSONNEL AT THIS LOCATION: 6
PERSONNEL AFFECTED BY H&S MONITORING: 4

TIME (24 hr clock)	BACK-GROUND	MONITOR INTERVAL (boreholes depth)	FID (ppm)	PID (ppm)	%O2 (%)	% LEL (%)	H2S (ppm)	RAM (ppm)	OTHER	SAMPLES INITIALS
0840				0.0						LLM
0940				0.0						LLM
1050				5.6						LLM
1135				0.0						LLM

Field activities were not occurring when readings not recorded.

INSTRUMENT	MFGR/ MODEL #	INSTRUMENT SERIAL #	CALIBRATION STANDARD CAL GAS	STD (ppm)	LOT #	END OF DAY CALIBRATION CHECK	END OF DAY CALIBRATION CHECK
FID							
PID							
%O2							
%LEL							
H2S							
RAM							

FIELD TEAM LEADER SIGNATURE _____

Instrument Calibration Logs

EQUIPMENT CALIBRATION LOG SHEET

EQUIPMENT NUMBER: Ser. no. 167060

Page 1 of 1

EQUIPMENT DESCRIPTION: H-Nu-DL101 - PID

DATE	TIME	MANUFACTURER OF STANDARD	LIQUID/GAS NAME	STANDARD CONCENTRATION	STANDARD LOT NO.	EXPIRATION DATE	INITIAL READING	CORRECTED READING	OPERATORS SIGNATURE	COMMENTS
22 Oct	0830	RAE Systems	Isobutylene	100 ppm	44136	11/96	114 ppm	99.5 ppm	[illegible]	High humidity - USED HNU Gas Humidifier Kit
23 Oct	0740	"	"	"	"	"	107 ppm	100 ppm	[illegible]	" "
"	1600	"	"	"	"	"	107 ppm	100 ppm	[illegible]	Did not use Humidifier
25 Oct	0730	"	"	"	"	"	96.0 ppm	100 ppm	[illegible]	" " " "
25 Oct	0910	"	"	"	"	"	103 ppm	100-99.5 ppm	[illegible]	" " " "
26 Oct	0740	"	"	"	"	"	85.4 ppm	100 ppm	[illegible]	" " " "

EQUIPMENT CALIBRATION LOG SHEET

EQUIPMENT NUMBER: Ser # 9105088-113

Page 1 of 1

EQUIPMENT DESCRIPTION: Explosivimeter - Industrial Scientific MX251

DATE	TIME	MANUFACTURER OF STANDARD	LIQUID/GAS NAME	STANDARD CONCENTRATION	STANDARD LOT NO.	EXPIRATION DATE	INITIAL READING	CORRECTED READING	OPERATORO SIGNATURE	COMMENTS
22 Oct	0730	Industrial Scientific	N-PENTANE	350% / LEL 25%	29309-70	Not Avail	24-25%	25%	SABlly	

Equipment Decontamination Log Sheet

EQUIPMENT DECONTAMINATION LOG SHEET

EQUIPMENT NUMBER: N/A

EQUIPMENT DESCRIPTION: 5 Foot Split Barrel Sampler + 2 Stainless Steel Bowls

DATE	TIME	DETERGENT WASH	TAP WATER RINSE	SOLVENT RINSE (TYPE)	WATER RINSE (TYPE)	AIR DRY	TYPE OF WRAPPING	RINSATE SAMPLE ID	OPERATOR SIGNATURE	COMMENTS
22 Oct	0900	✓	✓	Methanol ✓ Hexane	Deionized	✓	N/A		SAB	
"	0930	✓	✓	✓	✓	✓	N/A		"	
"	1000	✓	✓	✓	✓	✓	N/A		"	
"	1045	✓	✓	✓	✓	✓	N/A		"	
"	1120	✓	✓	✓	✓	✓	N/A	* FCWQ-EB-01	"	
"	1245	✓	✓	✓	✓	✓	N/A		"	
"	1335	✓	✓	✓	✓	✓	N/A		"	
"	1410	✓	✓	✓	✓	✓	N/A		"	
"	1450	✓	✓	✓	✓	✓	N/A		"	
"	1600	✓	✓	✓	✓	✓	N/A		"	
"	1645	✓	✓	✓	✓	✓	N/A		"	

ITEM		MANUFACTURER	LOT NUMBERS	EXP. DATE
DETERGENT	Alconox	Alconox Inc.	A5G6	N/A
SOLVENT	Methanol	Burdick & Jackson	BN244	N/A
WATER	ASTM I	RICCA Chem Corp	G281	Aug 97
	Pentane	Burdick & Jackson	BM801	N/A

EQUIPMENT DECONTAMINATION LOG SHEET

EQUIPMENT NUMBER: N/A

EQUIPMENT DESCRIPTION: 5 Foot Split Barrel Sampler & Two Stainless Steel Bowls

DATE	TIME	DETERGENT WASH	TAP WATER RINSE	SOLVENT RINSE (TYPE)	WATER RINSE (TYPE)	AIR DRY	TYPE OF WRAPPING	RINSATE SAMPLE ID	OPERATOR SIGNATURE	COMMENTS
22 Oct	1735	✓	✓	Methanol ✓ Pentane	ASTM Type I	✓	N/A		SAB	
"	1810	✓	✓	✓	✓	✓	N/A		SAB	
23 Oct	0830	✓	✓	✓	✓	✓	N/A		SAB	
"	0900	✓	✓	✓	✓	✓	N/A		SAB	
"	1010	✓	✓	✓	✓	✓	N/A		SAB	
"	1040	✓	✓	✓	✓	✓	N/A		SAB	
"	1120	✓	✓	✓	✓	✓	N/A		SAB	
"	1145	✓	✓	✓	✓	✓	N/A		SAB	
"	1215	✓	✓	✓	✓	✓	N/A		SAB	
"	1400	✓	✓	✓	✓	✓	N/A		SAB	
"	1445	✓	✓	✓	✓	✓	N/A		SAB	

ITEM		MANUFACTURER	LOT NUMBERS	EXP. DATE
DETERGENT	Alconox	Alconox Inc	A5G6	N/A
SOLVENT	Methanol	Burdick & Jackson	BN244	N/A
WATER	ASTM I	RICCA Chem Corp	G 281	AUG 97
	Pentane	Burdick & Jackson	BM901	N/A

EQUIPMENT DECONTAMINATION LOG SHEET

EQUIPMENT NUMBER: N/A

EQUIPMENT DESCRIPTION: 5 Foot Split Barrel Sampler & Two Stainless Steel Bowls

DATE	TIME	DETERGENT WASH	TAP WATER RINSE	SOLVENT RINSE (TYPE)	WATER RINSE (TYPE)	AIR DRY	TYPE OF WRAPPING	RINSATE SAMPLE ID	OPERATOR SIGNATURE	COMMENTS
23 Oct	1500	✓	✓	Methanol & Hexane	✓	✓	N/A		[illegible]	
"	1555	✓	✓	✓	✓	✓	"	FC-WQ EB-02	"	
24 Oct	0840	✓	✓		✓	✓	"		"	
"	0905	✓		✓	✓	✓	"		"	
"	1150	✓	✓	✓	✓	✓	"		"	
"	1345	✓	✓	✓	✓	✓	N/A		"	
"	1410	✓	✓	✓	✓	✓	N/A		"	
"	1440	✓	✓	✓	✓	✓	N/A		"	
"	1510	✓	✓	✓	✓	✓	N/A		"	
"	1530	✓	✓	✓	✓	✓	N/A	* FC-WQ EB-03	"	
25 Oct	0815	✓	✓	✓	✓	✓	N/A		[illegible]	

ITEM		MANUFACTURER	LOT NUMBERS	EXP. DATE
DETERGENT	Alconox	Alconox Inc	AS 66	N/A
SOLVENT	Hexane	Burdick & Jackson	BN-244	N/A
WATER	ASTM II	Bicia Chem Corp	G-281	Aug 94
	Pentane	Burdick & Jackson	BM 801	N/A

EQUIPMENT DECONTAMINATION LOG SHEET

EQUIPMENT NUMBER: N/A

EQUIPMENT DESCRIPTION: 5 Foot Split Barrel Sampler & 2 Stainless Steel Bowl's

DATE	TIME	DETERGENT WASH	TAP WATER RINSE	SOLVENT RINSE (TYPE)	WATER RINSE (TYPE)	AIR DRY	TYPE OF WRAPPING	RINSATE SAMPLE ID	OPERATOR SIGNATURE	COMMENTS
25 Oct	0835	✓	✓	Methanol ✓ Hexane	ASTM I ✓	✓	N/A		[signature]	
"	0930	✓	✓	✓	✓	✓	N/A		"	
"	1030	✓	✓	✓	✓	✓	N/A		"	
"	1100	✓	✓	✓	✓	✓	N/A		"	
"	1120	✓	✓	✓	✓	✓	N/A		"	
"	1150	✓	✓	✓	✓	✓	N/A		"	
"	1210	✓	✓	✓	✓	✓	N/A		"	
"	1330	✓	✓	✓	✓	✓	N/A		"	
"	1415	✓	✓	✓	✓	✓	N/A		"	
"	1450	✓	✓	✓	✓	✓	N/A	*FC-WQ EB-04	"	
26 Oct	0815	✓	✓	✓	✓	✓	N/A		"	

ITEM		MANUFACTURER	LOT NUMBERS	EXP. DATE
DETERGENT	Alconox	Alconox Inc	A5G6	N/A
SOLVENT	Methanol	Burdick & Jackson	BN-244	N/A.
WATER	ASTM I	Ricca Chem Corp	G281	Aug 97
	Pentane	Burdick & Jackson	BM801	N/A

EQUIPMENT DECONTAMINATION LOG SHEET

EQUIPMENT NUMBER: N/A

EQUIPMENT DESCRIPTION: 5 Foot Split Barrel Sampler & 2 Stainless Steel Bowls

Page 5 of 5

DATE	TIME	DETERGENT WASH	TAP WATER RINSE	SOLVENT RINSE (TYPE)	WATER RINSE (TYPE)	AIR DRY	TYPE OF WRAPPING	RINSATE SAMPLE ID	OPERATOR SIGNATURE	COMMENTS
26 Oct	0845	✓	✓	methanol ✓ Hexane ✓	✓	✓	N/A		SB Liberty	
"	0915	✓	✓	✓	✓	✓	N/A		"	
"	0940	✓	✓	✓	✓	✓	N/A		"	
"	1000	✓	✓	✓	✓	✓	N/A		"	
"	1050	✓	✓	✓	✓	✓	N/A		"	
"	1110	✓	✓	✓	✓	✓	N/A		"	
"	1135	✓	✓	✓	✓	✓	N/A		"	
"	1155	✓	✓	✓	✓	✓	N/A		"	
"	1230	✓	✓	✓	✓	✓	N/A	FC-WQ EB-05		

ITEM		MANUFACTURER	LOT NUMBERS	EXP. DATE
DETERGENT	Alconox	Alconox Inc	AS-66	N/A
SOLVENT	Methanol	Berdick & Jackson	DN-244	N/A
WATER	ASTM I	Ricca Corp	G-281	Aug 97
	Pentane	Berdick & Jackson	Bm-801	N/A

TAB

G

APPENDIX G

CHAIN-OF-CUSTODY FORMS

Environmental Company, Inc.
1230 [illegible] •Suite [illegible]
Po[illegible] Box 5127
Charlottesville, Virginia 22905
(804)295-4446•fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: FAM CAMP

SAMPLERS: (Signature) Bob Duffner, King Troensegaard

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatile 8240	BTEX 8020	SVOA 8270	TPH-D 8015	TPH-G 8015	INORG 6010/7421/7470/7471					REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
~~FC-SB01-01~~	~~10/22~~	~~09:40~~	~~Soil~~	~~3~~		~~X~~	~~X~~	~~X~~	~~X~~							~~x~~	~~water on Inorg~~
~~FC-SB01-02~~	~~10/22~~	~~10:05~~	~~Soil~~	~~4~~	~~X~~		~~X~~	~~X~~		~~X~~						~~x~~	~~HNO3~~
~~FC-SB01-03~~	~~10/22~~	~~10:20~~	~~Soil~~	~~3~~		~~X~~		~~X~~	~~X~~							~~x~~	~~TPH-D~~
~~FC-SB02-01~~	~~10/22~~	~~13:00~~	~~Soil~~	~~3~~		~~X~~	~~X~~	~~X~~	~~X~~							~~x~~	~~HCl~~
~~FC-SB02-02~~	~~10/22~~	~~13:20~~	~~Soil~~	~~3~~		~~X~~	~~X~~	~~X~~	~~X~~							~~x~~	~~VOAs~~
~~FC-SB02-03~~	~~10/22~~	~~14:20~~	~~Soil~~	~~3~~		~~X~~	~~X~~	~~X~~	~~X~~							~~x~~	~~HCk~~
FC-SB03-01	10/22	17:10	Soil	3		X	X	X	X						✓ 12056-1	x	to
FC-SB03-02	10/22	17:25	Soil	4	X		X	X	X	X					✓ 2	x	<2.0
FC-SB03-03	10/22	17:45	Soil	3		X	[illegible]	X	X						✓ 3	x	
FC-WQ-EB-01	10/22	12:45	Water	8	X		X	X	X	X					✓ 12092-1	x	
~~TEMP BLANK~~				7											~~COOLER TEMP~~		
~~Trip~~																	
FC-WQ-TB-01	10/22	22:18	Water	2	X										✓ 12092-2		
TEMP BLANK		*		1											Cooler Temp		

ORIGINAL

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duff	10/22 20:50		(4)		
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
(2)			C. McNair	10/23/96 1015	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks:		
(3)					

COOLER TEMPERATURE WHEN RECEIVED 3 °C

004

1504

The Environmental Company, Inc.

1230 Cedars Court • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatile 8240	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	Inorg 6010/7421/7470/7471					REMARKS OR SAMPLE LOCATION	PRESERVATION ICED	PRESERVATION SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB01-01	10/22	940	SOIL	3		X	X	X	X						2056-4		
FC-SB01-02	10/22	1005	SOIL	4	X		X	X	X	X					5		
FC-SB01-03	10/22	1020	SOIL	3		X		X	X						6		
FC-SB02-01	10/22	1300	SOIL	3		X	X	X	X						7		
FC-SB02-02	10/22	1320	SOIL	3		X	X	X	X						8		
FC-SB02-03	10/22	1420	SOIL	3		X			X						9		
FC-WQ-TB-02																	
TEMP Blank				1											COOLER TEMP		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duffin	10/22 2050		(4)		
Relinquished by: (Signature) (2)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature) C. McNair	Date / Time 10/23/96 1022	Shipping Ticket No.
Relinquished by: (Signature) (3)	Date / Time	Received by: (Signature)	Remarks:		

R TEMPERATURE
EN RECEIVED
3 °C

005

50

The Environmental Company, Inc.
12[illegible] [illegible]dars [illegible]ort • Suite 100
Po[illegible] e Box [illegible]27
Charlottesv[illegible] Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: #3103 FAM CAMP

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	INORG 6010/7421/7470					REMARKS OR SAMPLE LOCATION 12056-	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB04-01	10/23	0840	SOIL	3		1	1	x	1						SVOA & TPHD is -10		
~~FC-SB0~~															same container		
FC-SB04-02	10/23	0840	SOIL	~~4~~ RMD	1		1	x	1	1					11		
FC-SB05-01	10/23	1035	SOIL	3		1	1	x	1						12		
FC-SB05-02	10/23	1135	SOIL	4	1		1	x	1	1					13		
FC-SB05-03	10/23	1150	SOIL	2		1			1						14		
FC-SB05-04	10/23	1035	SOIL	2		1			1						15		
FC-SB06-01	10/23	1450	SOIL	~~4~~		2			2						MS/MSD(2) 16		
FC-SB06-02	10/23	1520	SOIL	2		1			1						17		
FC-SB06-03	10/23	1520	SOIL	2		1			1						18		
FC-WQ-EB-02	10/23	1630	WATER	4	2				2								
FC-WQ-TB-03	10/23	1740	WATER	2	2												
Temperature Control					1										Cooler Temp QC		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) R.M. Duffner	10/23/96 1745		(4)		
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
(2)			[signature]	10/24/96 1000	
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Remarks:		
(3)					

900

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CHAIN OF CUSTODY RECORD

PROJECT: 3103- FAMCAMP

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	BTEX 8020	Semivolatiles 8270	TPH-D 8015	TPH-G 8015	Inorg 6010/7420/7470/7471					REMARKS OR SAMPLE LOCATION	PRESERVATION: ICED	PRESERVATION: SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB07-01	10/24	0845	Soil	4	1		1	x	1	1				12092-6	semivolatiles and	X	
FC-SB08-01	10/24	1105	Soil	4	1		1	x	1	1				7	TPH-D in	X	
FC-SB09-01	10/24	1340	Soil	3		1	1	x	1					8	same contain	X	
FC-SB09-02	10/24	1354	Soil	3		1	1	x	1					9		X	
FC-SBD09-03	10/24	1340	Soil	3		1	1	x	1					10		X	
FC-SB10-02	10/24	1525	Soil	2		1			1					11		X	
FC-SB10-01	10/24	1435	Soil	2		1			1					12		X	
FC-WQ-EB-03	10/24	1615	water	4	2				2					13		X	HCl
FC-WQ-TB-04	10/24	1605	water	2	2									14		X	HCl

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duffner	10/24 1745		(4)		
Relinquished by: (Signature) (2)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature) David Mey	Date / Time 10/25/96 1100	Shipping Ticket No.
Relinquished by: (Signature) (3)	Date / Time	Received by: (Signature)	Remarks:		

008

50

The Environmental Company, Inc.
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Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3103 - Fam Camp

SAMPLERS: (Signature) Lesley Myers

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles	BTEX	Semi-Volatiles 8250	TPH-D 8015	TPH-G 8015	INORG 6010/7421/7470/7471				REMARKS OR SAMPLE LOCATION	PRESERVATION ICED	PRESERVATION SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB10-01	10/24/96	1435	Soil	1			1	X			1209	2	12	Semi-volatiles and	X	
FC-SB10-02	10/24/96	1525	Soil	1			1	X					11	TPH-D in same	X	
FC-WQ-EB-03	10/24/96	1615	water	3			1	1		1			13	container for	X	TPHD-HCl
														soil samples	X	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Lesley Myers	10/24 1745		(4)		
(2)			Received for Laboratory by: (Signature) [signature]	10/25/96 1100	Shipping Ticket No.
(3)			Remarks:		

009

1508

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CHAIN OF CUSTODY RECORD

PROJECT: #3103 FAM CAMP

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatile 8240	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	IWORQ 6010/7421/7470				REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB05-03	10/23		SOIL	1				1		12056		-14		SVOAQ TPHD	X	
FC-SB05-04	10/23		SOIL	1			1	X				15		in same Jar	X	
FC-SB06-01	10/23		SOIL	2			2	X				16		MS/MSD	X	
FC-SB06-02	10/23		SOIL	2			1	X		1		17			X	
FC-SB06-03	10/23		SOIL	1				1				18			X	
FC-WQ-EB-02	10/23		~~SOIL~~ WATER							1					X	
FC-WQ-EB-02	10/23		WATER	2			1	1							X	HCL

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duff	10/23/96 1755		(4)		
Relinquished by: (Signature) (2)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
			[signature]	10/24/96 1000	
Relinquished by: (Signature) (3)	Date / Time	Received by: (Signature)	Remarks:		

007

The Environmental Company, Inc.
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(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3103- FAM Camp

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	BTEX 8020	Semi-volatiles 8270	TPH-D 8015	TPH-G 8015	Inorganics 6010/7421/7470/7471	Grain Size			REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB11-01	10/26	9:05	Soil	3		1	1	x	1		12170		13		X	
FC-SB11-02	10/26	9:05	Soil	3		1	1	x	1				14			
FC-SB11-03	10/26	9:05	Soil	4	1	2 RMD	1	x	1	1			15	SB11-03 for VOAS NOT BTEX		
FC-WQ-TB-07	10/26	1245	water	2	2								16		X	HCl
FC-WQ-EB-05	10/26	1245	water		2		1	1	2	1			17			
~~FC-SB11-0~~																
FC-SB12-01	10/26		Soil	3		1	1	x	1				18			
FC-SB12-02	10/26		Soil	3		1	1	x	1				19			
FC-SB12-03	10/26		Soil	4	1		1	x	1	1			20			

Relinquished by: (Signature) ①	Date /	Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date /	Time	Shipped via:
Bob Duffner	10/26	1300 ~~1200~~ RMD	Jodi E Block	Jodi E Block	10/26/96	1600	
Relinquished by: (Signature) ②	**Date /**	**Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date /**	**Time**	**Shipping Ticket No.**
				[illegible]	10/26/96	1600	
Relinquished by: (Signature) ③	**Date /**	**Time**	**Received by: (Signature)**	**Remarks:**			
				Rec'd on ice.			

006

TAB

H

APPENDIX H

QUALITY ASSURANCE/QUALITY CONTROL SAMPLE SUMMARY

Quality Assurance/Quality Control Sample Summary

Field Sample[a]	Location	Equipment Blank[a]	Trip Blank[a]	Method Blank[b]	Ambient Blank[a]
FC-SB-01-01					
FC-SB-01-02					
FC-SB-01-03	Valve Box Area		FC-WQ-TB-02		
FC-SB-02-01					
FC-SB-02-02		FC-WQ-EB-01			
FC-SB-02-03					
FC-SB-03-01					
FC-SB-03-02			FC-WQ-TB-01		
FC-SB-03-03				12056-19 (soil)	
FC-SB-04-01					
FC-SB-04-02					
FC-SB-05-01	Unnamed Stream				
FC-SB-05-02	Area				
FC-SB-05-03		FC-WQ-EB-02	FC-WQ-TB-03		
FC-SB-05-04					
FC-SB-06-01					
FC-SB-06-02					
FC-SB-06-03					
FC-SB-07-01					FC-WQ-AB-01
FC-SB-08-01					
FC-SB-09-01	Farmer's			12092-15 (soil)	
FC-SB-09-02	Branch	FC-WQ-EB-03	FC-WQ-TB-04		
FC-SB-09-03	Creek			12092-17 (liquid)	
FC-SB-10-01					
FC-SB-10-02					
FC-SB-11-01					
FC-SB-11-02					
FC-SB-11-03				12170-21 (soil)	
FC-SB-11-03 RE	West Fork				
FC-SB-12-01	Area	FC-WQ-EB-05	FC-WQ-TB-07		
FC-SB-12-02					
FC-SB-12-02 RE				12170-26 (liquid)	
FC-SB-12-03					
FC-SB-12-03 RE					

a: Field Sample ID number

b: Lab Sample ID number

Note: Matrix Spike/Matrix Duplicate analyses completed on sample FC-SB-06-01

TAB

APPENDIX I

LIST OF ANALYTICAL PARAMETERS

Soil Gas Screening Analyte List

Soil Borehole Sample Analyte List

Soil Gas Screening Analyte List

Soil Gas Screening Analyte List

Parameters	Method Detection Limit (ug)
Methyl t-butyl ether	0.1
Trans-1,2-dichloroethene	0.06
1,1-Dichloroethane	0.06
Cis-1,2-dichloroethene	0.02
Chloroform	0.03
1,1,1-Trichloroethane	0.08
1,2-Dichloroethane	0.02
Benzene	0.02
Carbon tetrachloride	0.07
Trichloroethylene	0.02
Toluene	0.02
Octane	0.02
Tetrachloroethene	0.02
Chlorobenzene	0.01
Ethylbenzene	0.01
m-,p-Xylene	0.03
o-Xylene	0.01
1,3,5-Trimethylbenzene	0.01
1,2,4-Trimethylbenzene	0.02
1,4-Dichlorobenzene	0.01
Undecane	0.03
Naphthalene	0.01
Tridecane	0.01
2-Methyl naphthalene	0.01
Pentadecane	0.01
Petroleum Hydrocarbons	NA

NA: Not Available

Soil Borehole Sample Analyte List

Soil Borehole Sample Analyte List

Base/Neutral and Acid Extractable Organics by GC/MS, Method 8270B

1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Methylnaphthalene
2-Nitroaniline
3-Nitroaniline
3,3'-Dichlorobenzidine
4-Bromophenyl phenyl ether
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Nitroaniline
Acenaphthylene
Acenaphthene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene
2,4-Dichlorophenol
Benzo (b) fluoranthene
Benzo (k) fluoranthene
Benzo (g,h,i) perylene
Benzyl alcohol
Bis (2-chloroethyl) ether
Bis (2-chloroethoxy) methane
Bis (2-chloroisopropyl) ether
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
Chrysene
Di-n-butylphthalate
Di-n-octylphthalate
Dibenz (a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
N-Nitrosodiephenylamine
N-Nitrosodi-n-propylamine
Naphthalene
Nitrobenzene
Phenanthrene
Pyrene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2-Chlorophenol
2-Methylphenol
2-Nitrophenol
4,6-Dinitro-2-methyphenol
4-Chloro-3-methylphenol
4-Methylphenol
4-Nitrophenol
Benzoic acid
Pentachlorophenol
Phenol

NOTE: See Appendix L for MDL and PQL values associated with these parameters.

Soil Borehole Sample Analyte List

Inorganics by Inductively Coupled Plasma (ICP), Method 6010A; Atomic Absorption (AA)

Aluminum	Magnesium
Antimony	Manganese
Arsenic	Mercury (Method 7471, by cold vapor)
Barium	Nickel
Beryllium	Potassium
Cadmium	Selenium
Calcium	Silver
Chromium	Sodium
Cobalt	Thallium
Copper	Vanadium
Iron	Zinc
Lead (Method 7421)	

Volatile Organics by GC/MS, Method 8240B

1,1,1-Trichloroethane	Chlorobenzene
1,1,2,2-Tetrachloroethane	Chloroethane
1,1,2-Trichloroethane	Chloroform
1,1-Dichloroethane	Chloromethane
1,1-Dichloroethene	cis 1,2-Dichloroethene
1,2,3-Trichloropropane	cis 1,3-Dichloropropene
1,2-Dichloroethane	Chlorodibromomethane
1,2-Dichloropropane	Ethylbenzene
Methyl ethyl ketone	Methylene chloride
2-Chloroethyl vinyl ether	Styrene
2-Hexanone	Trichloroethene
Methyl isobutyl ketone	Tetrachloroethene
Acetone	Toluene
Benzene	trans 1,2-Dichloroethene
Bromodichloromethane	trans 1,3-Dichloropropene
Bromoform	Vinyl acetate
Bromomethane	Vinyl chloride
Carbon disulfide	m,p-Xylene
Carbon tetrachloride	o-Xylene

TPH Extractable Hydrocarbons as Diesel by GC, Method 8015M

TPH Volatile Hydrocarbons as Gasoline, by GC, Method 8015M

BTEX Volatile Aromatics by GC, Method 8020A

Benzene	m.p.-xylenes
Toluene	o-Xylenes
Ethyl Benzene	Methyl tert-Butyl Ether

NOTE: See Appendix L for MDL and PQL values associated with these parameters.

TAB

J

APPENDIX J

FINGERPRINT CHARACTERIZATION REPORT

Date of Report: November 13, 1996
Date Received: October 31, 1996
Project: Carswell Fam Camp
Date Samples Extracted: October 31, 1996

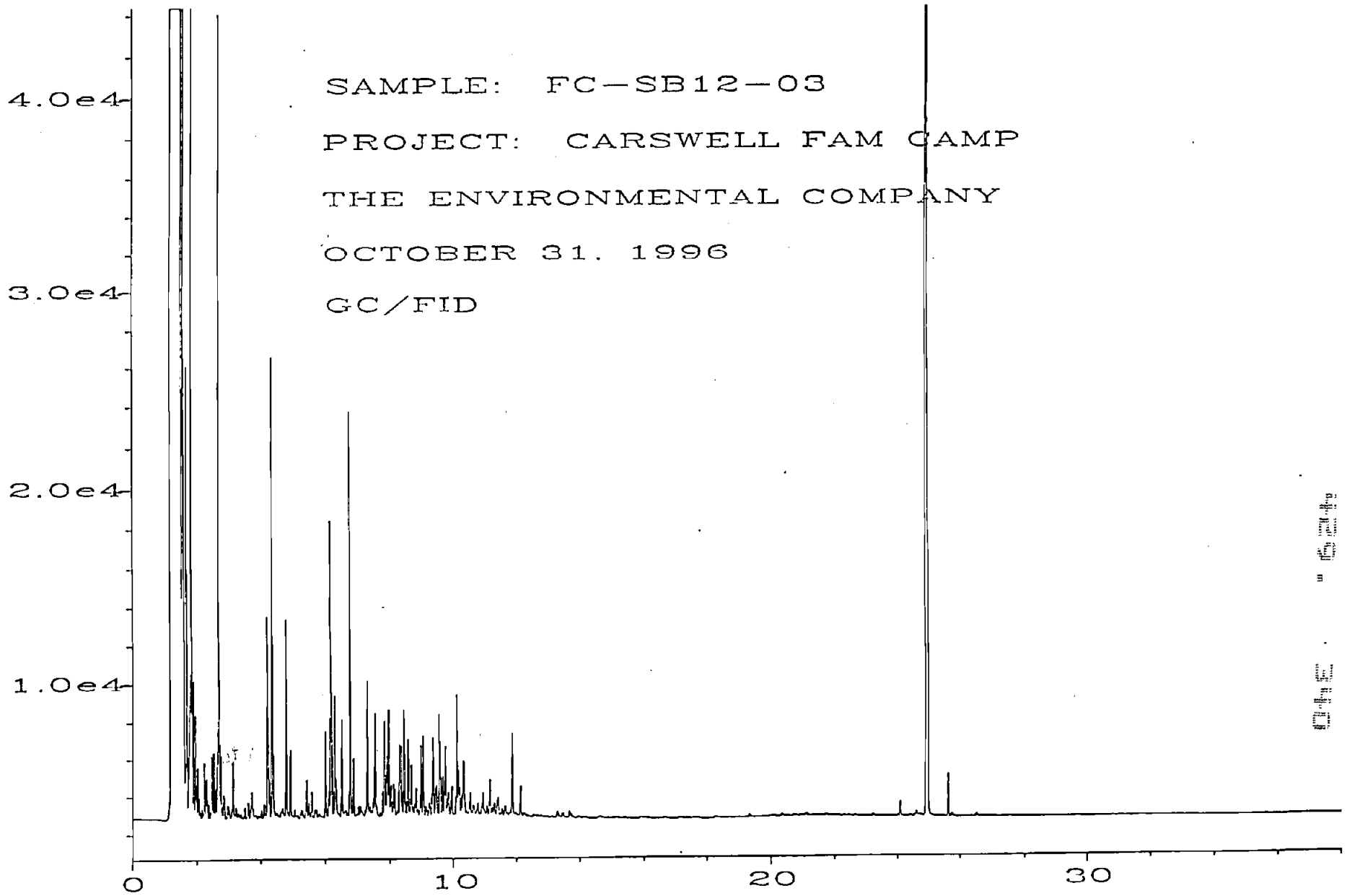
RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR FINGERPRINT CHARACTERIZATION BY CAPILLARY GAS CHROMATOGRAPHY USING A FLAME IONIZATION DETECTOR (FID) AND ELECTRON CAPTURE DETECTOR (ECD)

Sample ID	GC Characterization
FC-SB12-03	The GC trace using the flame ionization detector (FID) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of gasoline. The low boiling compounds appeared as a regular pattern of peaks eluting from n-C_7 to n-C_{13} showing a maximum near n-C_8. The GC/FID trace showed the presence of peaks that appeared to be indicative of benzene, toluene, ethylbenzene, the xylenes and C_3-benzenes. These compounds are characteristic of the constituents commonly found in gasoline. The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.
FC-SB03-01	The GC trace using the flame ionization detector (FID) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of an evaporatively weathered light naphtha such as JP-4. The low boiling compounds appeared as a regular pattern of peaks eluting from n-C_7 to n-C_{17} showing a maximum near n-C_{10}. There is no evidence of a regular pattern of n-alkanes. This suggests that this material has been subjected to extensive bio-degradation. The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.

Date of Report: November 13, 1996
Date Received: October 31, 1996
Project: Carswell Fam Camp
Date Samples Extracted: October 31, 1996

RESULTS FROM THE ANALYSIS OF SOIL SAMPLES FOR FINGERPRINT CHARACTERIZATION BY CAPILLARY GAS CHROMATOGRAPHY USING A FLAME IONIZATION DETECTOR (FID) AND ELECTRON CAPTURE DETECTOR (ECD)

Sample ID	GC Characterization
FC-SB05-02	The GC trace using the flame ionization detector (FID) showed the presence of low boiling compounds. The patterns displayed by these peaks are indicative of an evaporatively weathered light naphtha such as JP-4. The low boiling compounds appeared as a regular pattern of peaks eluting from n-C_8 to n-C_{17} showing a maximum near n-C_{13}. There is no evidence of a regular pattern of n-alkanes. This suggests that this material has been subjected to extensive bio-degradation. The large peak seen near 25 minutes on the GC/FID trace is pentacosane, added as a quality assurance check for this GC analysis. There is a second surrogate present that is seen on the GC/ECD trace at about 26 minutes which is dibutyl chlorendate.



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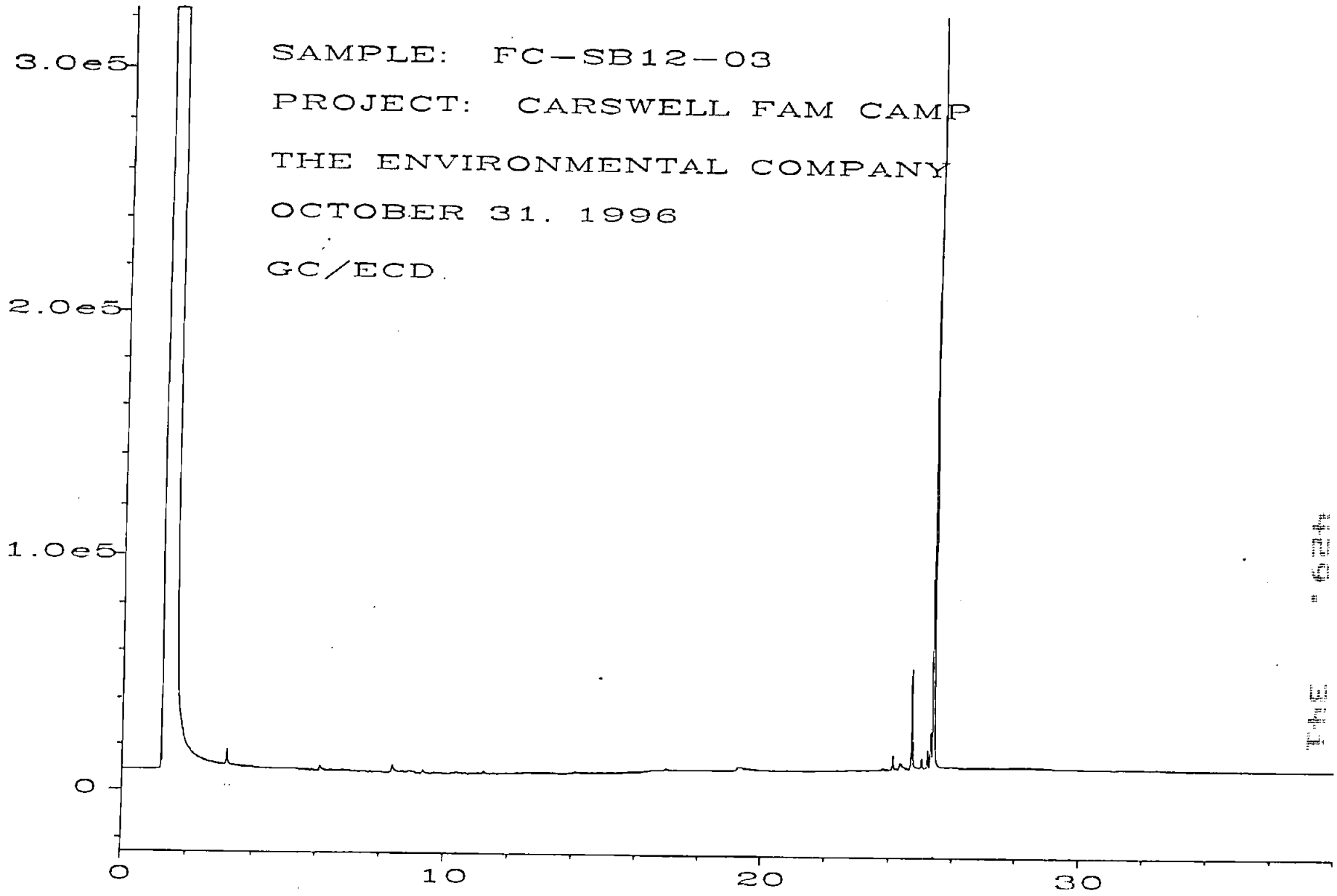

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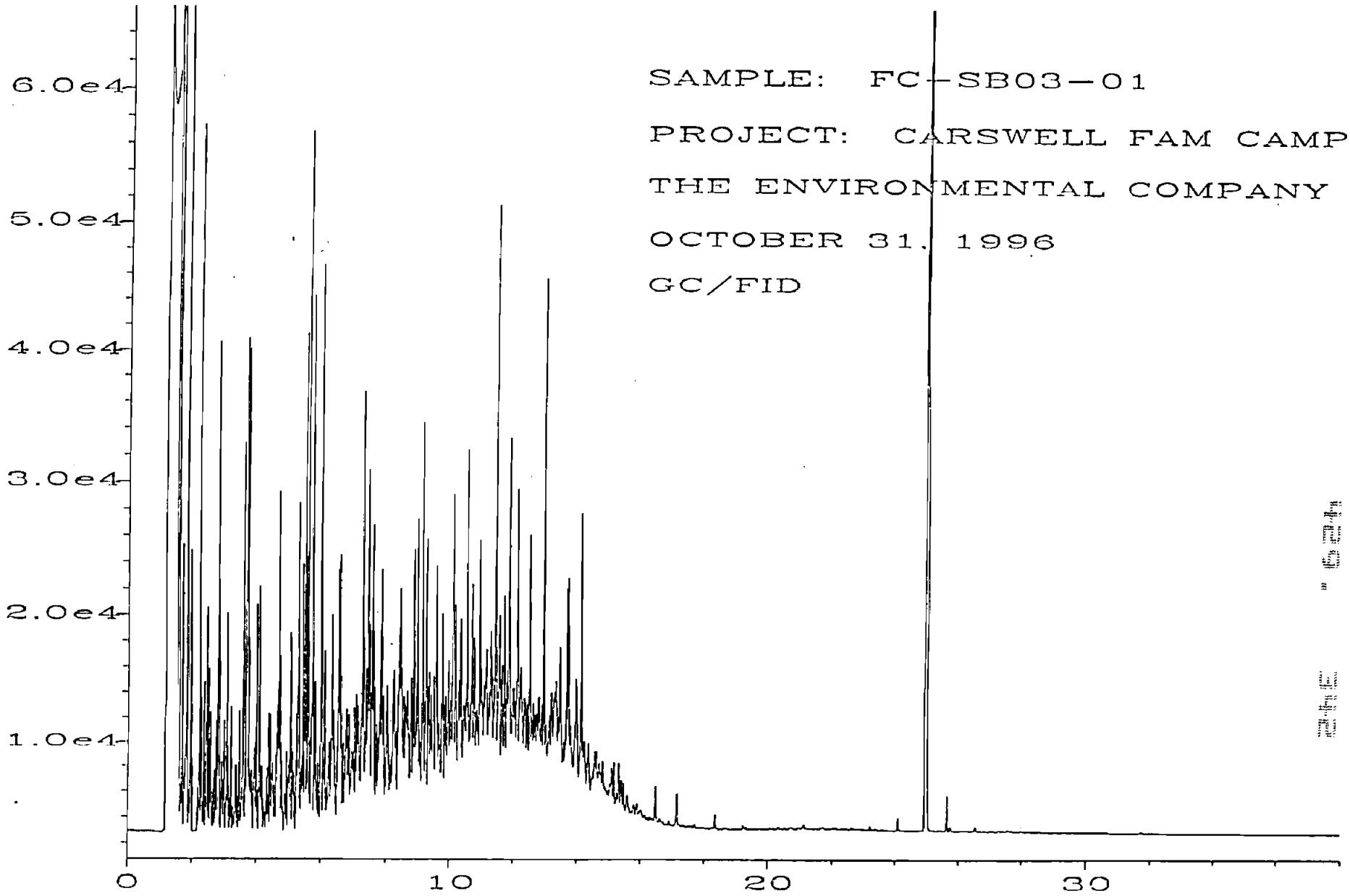

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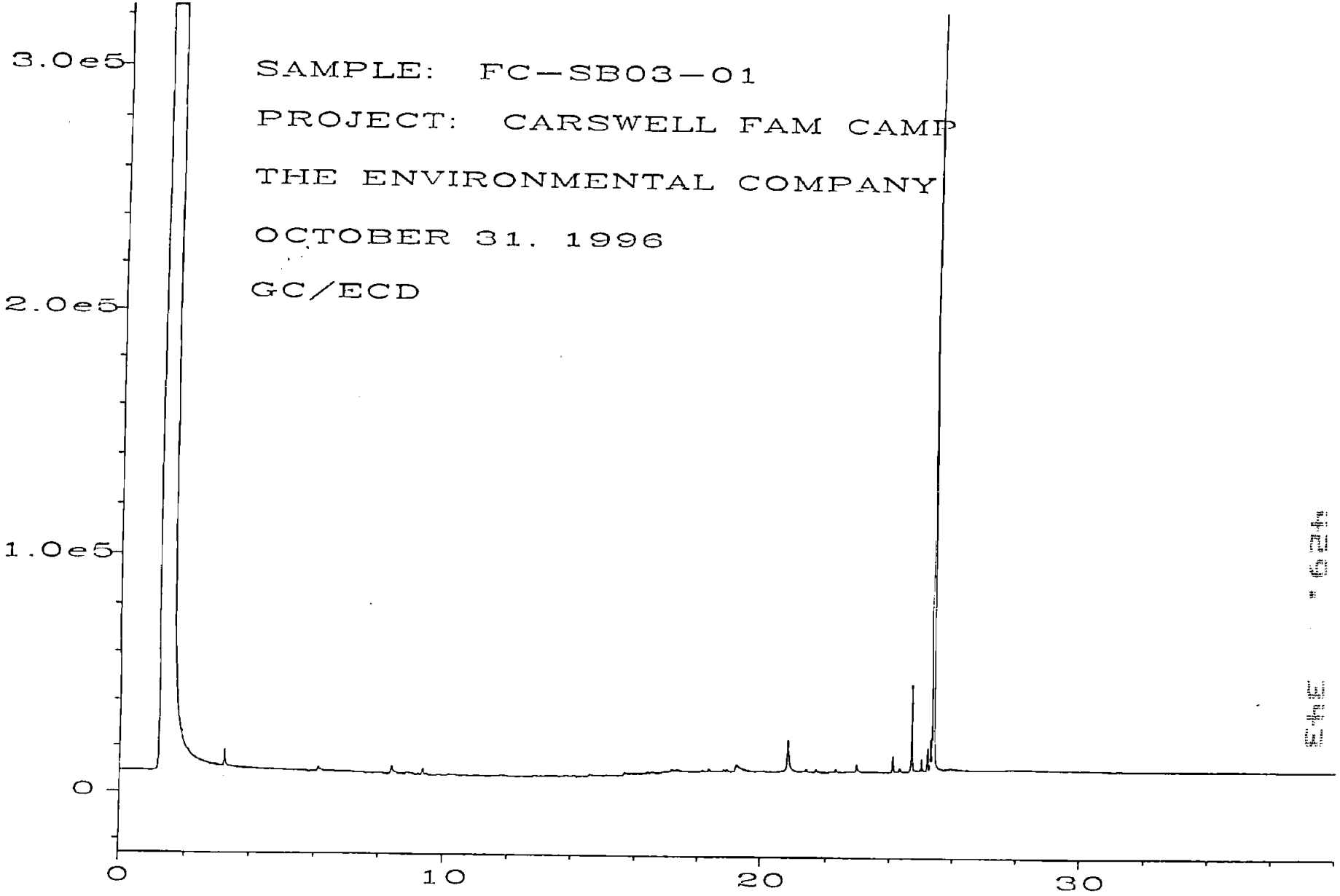

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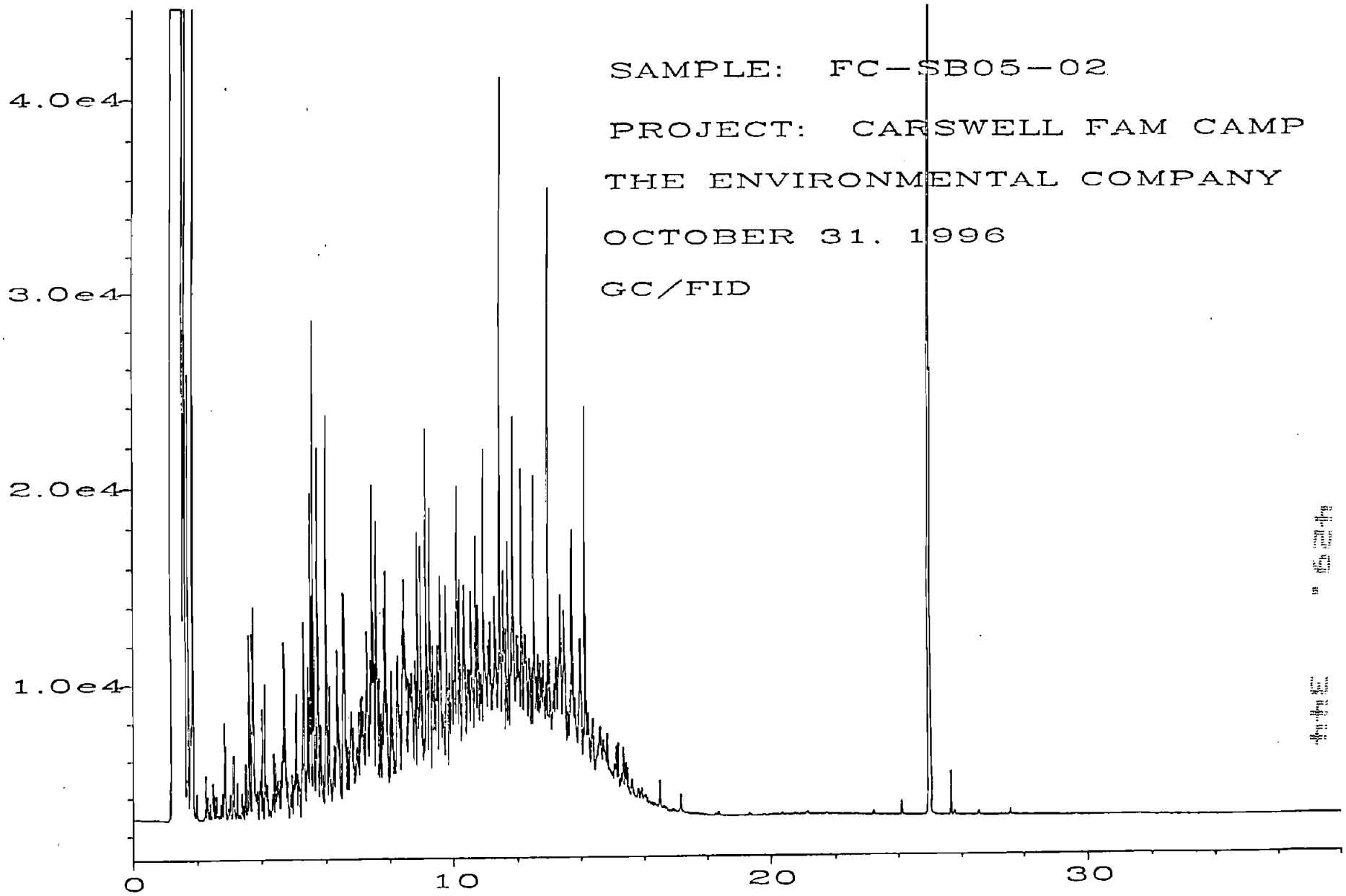

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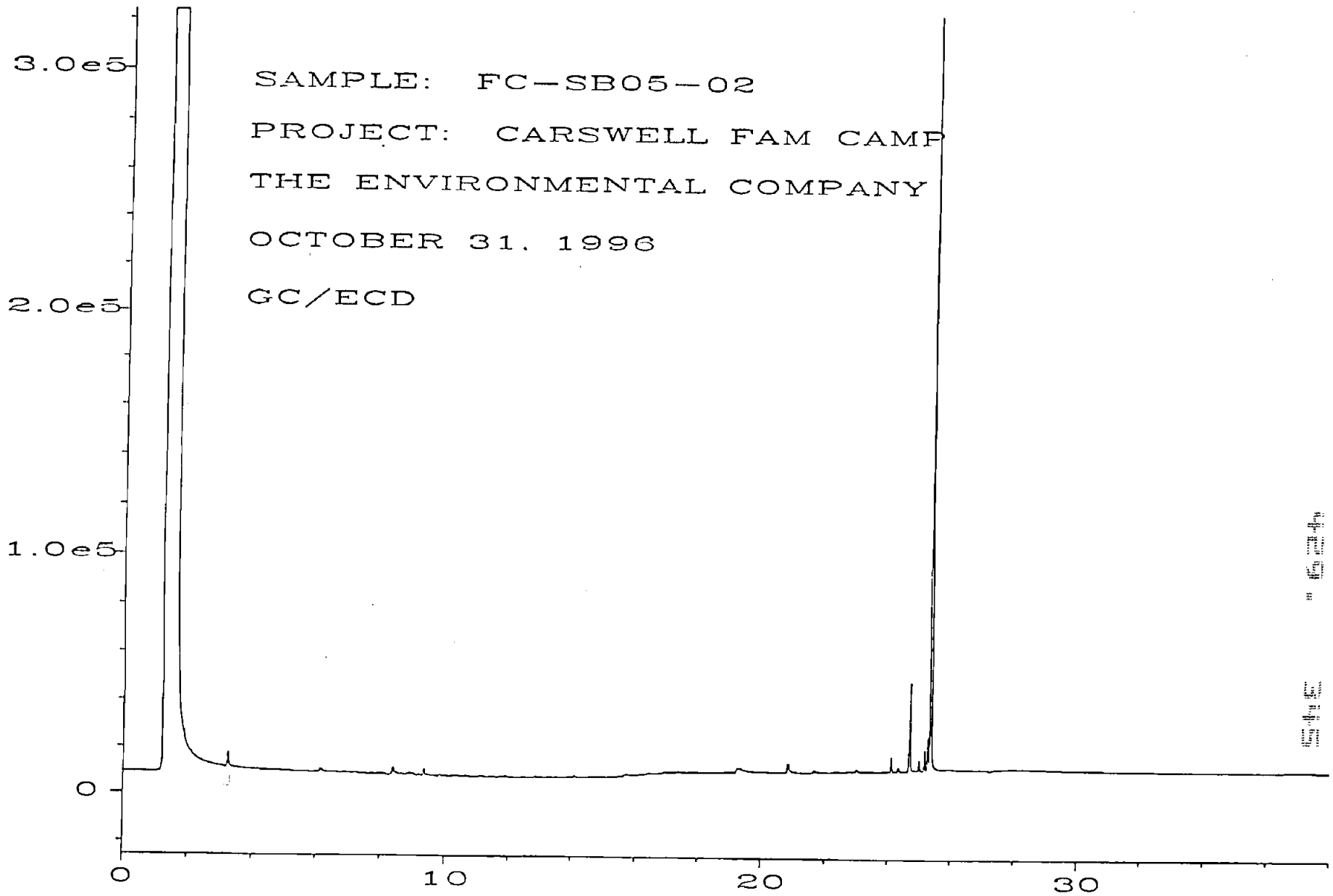

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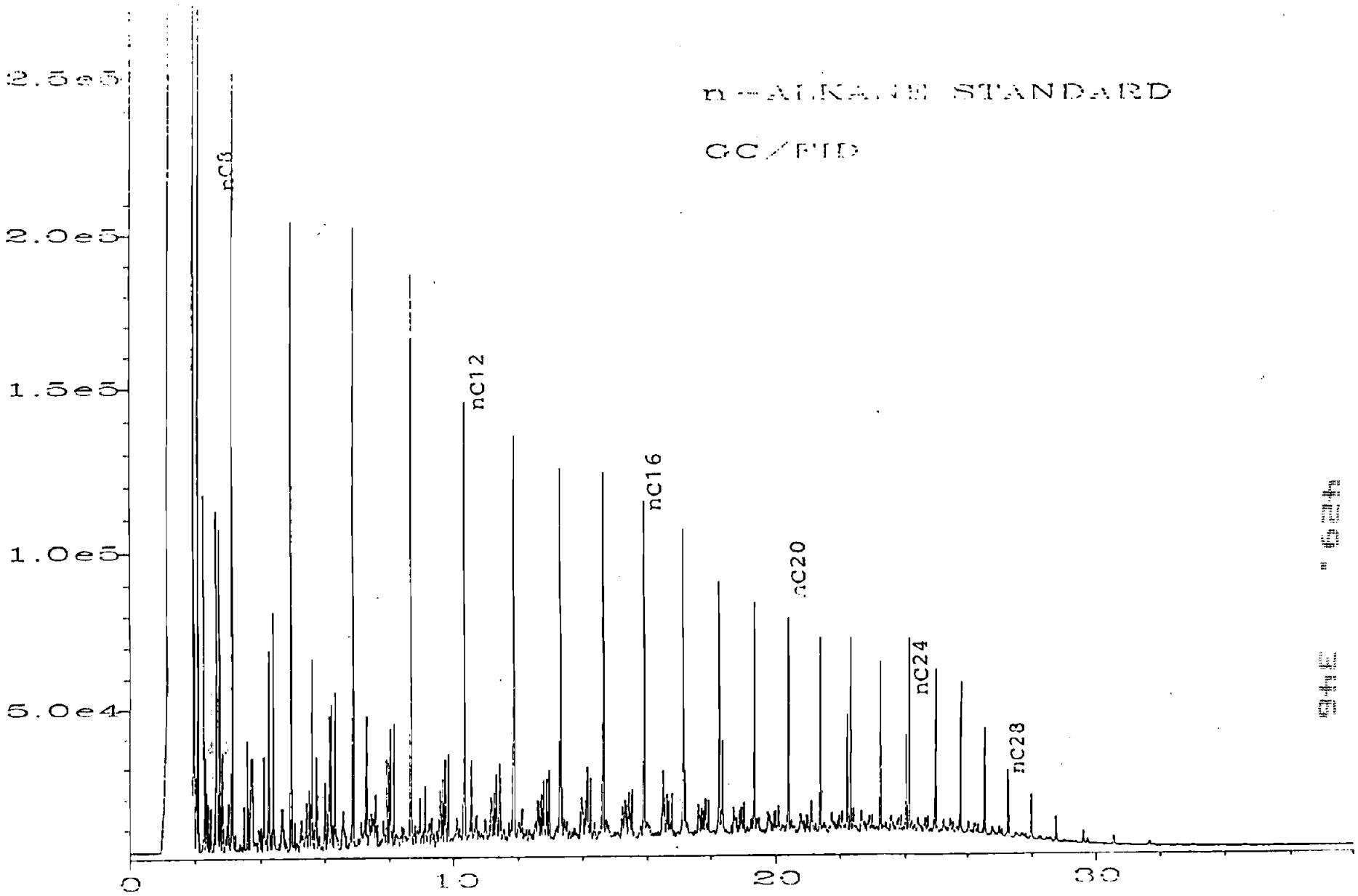

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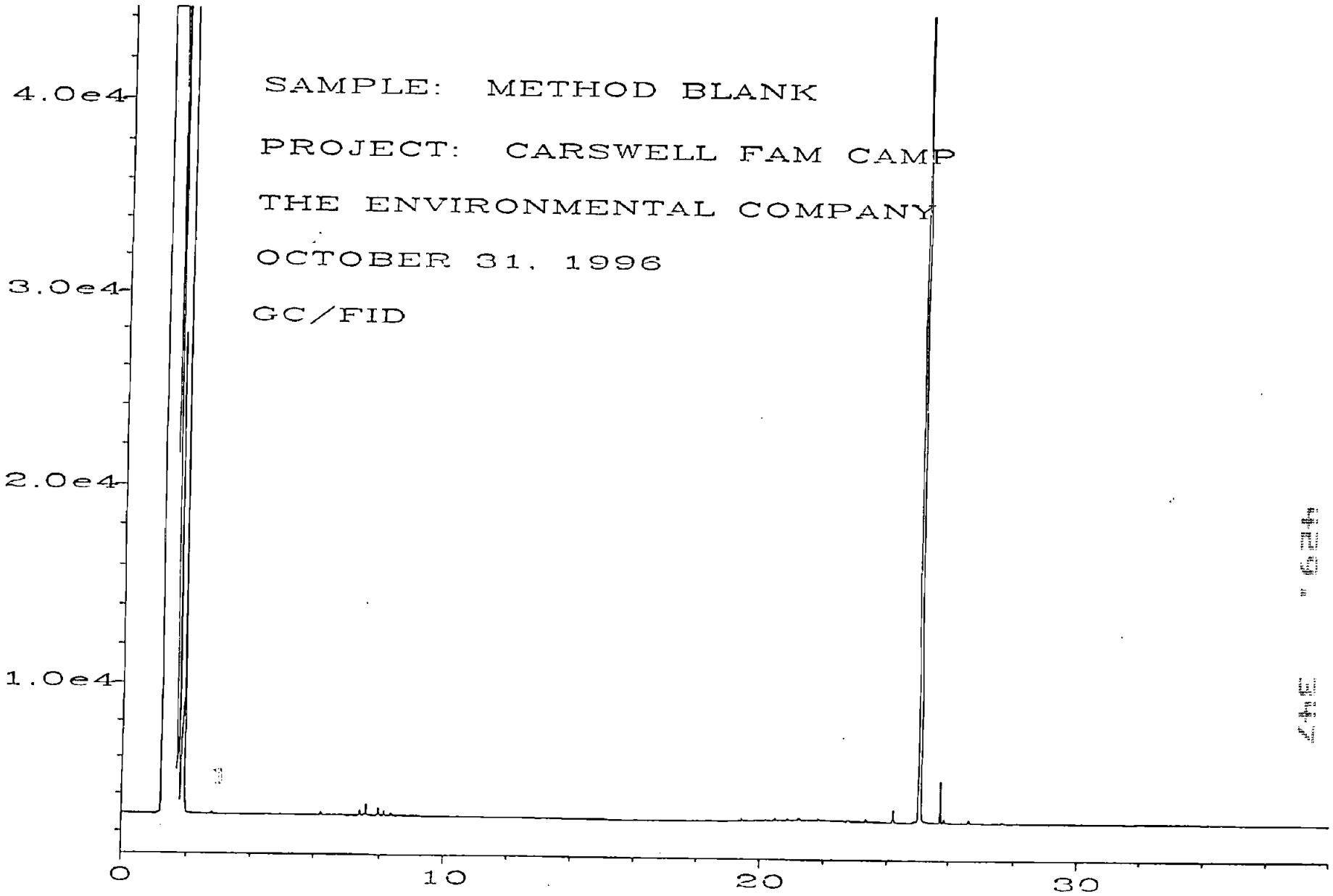

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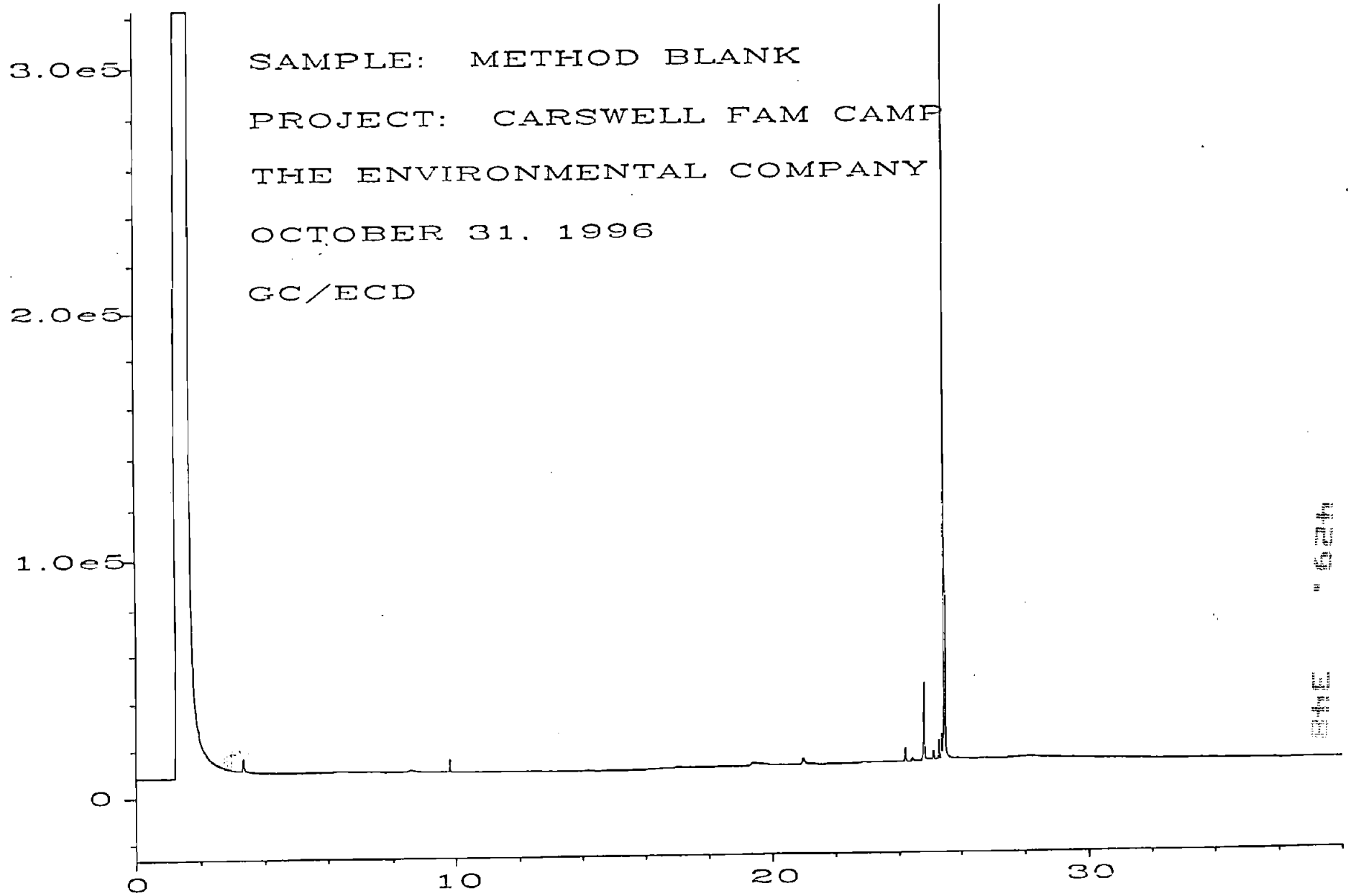

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FRIEDMAN & BRUYA, INC.
3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282

10:31:96
12:16PM

SAMPLE CHAIN OF CUSTODY

Send Report To:
Company The Environmental Com[redacted] Contact Bob Duffner
Address 24997 SE 155th Pl.
City, State, Zip Issaquah WA 98027
Phone # 206-391-2785 Date [redacted]/31/96
557 7899
Fax 557 7878

SITE NO.	PROJECT NAME	PURCHASE ORDER #
3:03-[redacted]10	CARSWELL FAM CAMP	

SAMPLERS (signature)	PROJECT LOCATION
Bob Duffner	FT. WORTH TX

REMARKS

SAMPLE DISPOSAL INFORMATION
- [x] Dispose after 30 days
- [ ] Return Samples
- [ ] Call for Instructions

Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analyses Requested
FC-SB12-03	10/26 12:05	Soil	1	73633	HFS
FC-SB03-01	10/22 1710	Soil	1	73634	HFS
FC-SB05-02	10/23 11:55	Soil	1	73635	HFS

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: Bob Duff	Bob Duffner	The Env. Co.	10/31/96	10:45
Received by: Bradley T Benson	Bradley T Benson	F&B Inc	10/31/96	10:45 AM
Relinquished by:				
Received by:				

TAB

K

APPENDIX K

SUMMARY OF EXTRACTION AND ANALYSIS TIME

SUMMARY OF EXTRACTION AND ANALYSIS DATES
FAMILY CAMPGROUND DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SBO1	FC-SB01-01	D96-12056-4	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO1	FC-SB01-02	D96-12056-5	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO1	FC-SB01-03	D96-12056-6	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO2	FC-SB02-01	D96-12056-7	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO2	FC-SB02-02	D96-12056-8	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO2	FC-SB02-03	D96-12056-9	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO3	FC-SB03-01	D96-12056-1	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO3	FC-SB03-02	D96-12056-2	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO3	FC-SB03-03	D96-12056-3	SO	N1	D2216	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
SBO4	FC-SB04-01	D96-12056-10	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO4	FC-SB04-02	D96-12056-11	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO5	FC-SB05-01	D96-12056-12	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO5	FC-SB05-02	D96-12056-13	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO5	FC-SB05-03	D96-12056-14	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO5	FC-SB05-04	D96-12056-15	SO	FD1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO6	FC-SB06-01	D96-12056-16	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO6	FC-SB06-02	D96-12056-17	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO6	FC-SB06-03	D96-12056-18	SO	N1	D2216	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
SBO7	FC-SB07-01	D96-12092-6	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SBO8	FC-SB08-01	D96-12092-7	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SBO9	FC-SB09-01	D96-12092-8	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SBO9	FC-SB09-02	D96-12092-9	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SBO9	FC-SB09-03	D96-12092-10	SO	FD1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SB10	FC-SB10-01	D96-12092-12	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SB10	FC-SB10-02	D96-12092-11	SO	N1	D2216	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
SB11	FC-SB11-01	D96-12170-13	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0
SB11	FC-SB11-02	D96-12170-14	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0
SB11	FC-SB11-03	D96-12170-15	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0
SB12	FC-SB12-01	D96-12170-18	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0
SB12	FC-SB12-02	D96-12170-19	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0
SB12	FC-SB12-03	D96-12170-20	SO	N1	D2216	26-Oct-1996	04-Nov-1996	9	04-Nov-1996	0

SUMMARY OF EXTRACTION AND ANALYSIS DATES
FAMILY CAMPGROUND DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SBO1	FC-SB01-01	D96-12056-4	SO	N1	M8015D	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO1	FC-SB01-02	D96-12056-5	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO1	FC-SB01-03	D96-12056-6	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO2	FC-SB02-01	D96-12056-7	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	29-Oct-1996	4
SBO2	FC-SB02-02	D96-12056-8	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO2	FC-SB02-03	D96-12056-9	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO3	FC-SB03-01	D96-12056-1	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO3	FC-SB03-02	D96-12056-2	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	29-Oct-1996	4
SBO3	FC-SB03-03	D96-12056-3	SO	N1	M8015D	22-Oct-1996	25-Oct-1996	3	28-Oct-1996	3
SBO4	FC-SB04-01	D96-12056-10	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO4	FC-SB04-02	D96-12056-11	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO5	FC-SB05-01	D96-12056-12	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO5	FC-SB05-02	D96-12056-13	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO5	FC-SB05-03	D96-12056-14	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO5	FC-SB05-04	D96-12056-15	SO	FD1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO6	FC-SB06-01	D96-12056-16	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO6	FC-SB06-01	D96-12056-21	SO	MS1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO6	FC-SB06-01	D96-12056-22	SO	SD1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO6	FC-SB06-02	D96-12056-17	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO6	FC-SB06-03	D96-12056-18	SO	N1	M8015D	23-Oct-1996	25-Oct-1996	2	28-Oct-1996	3
SBO7	FC-SB07-01	D96-12092-6	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SBO8	FC-SB08-01	D96-12092-7	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SBO9	FC-SB09-01	D96-12092-8	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SBO9	FC-SB09-02	D96-12092-9	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SBO9	FC-SB09-03	D96-12092-10	SO	FD1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SB10	FC-SB10-01	D96-12092-12	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SB10	FC-SB10-02	D96-12092-11	SO	N1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SB11	FC-SB11-01	D96-12170-13	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1
SB11	FC-SB11-02	D96-12170-14	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1
SB11	FC-SB11-03	D96-12170-15	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1

SUMMARY OF EXTRACTION AND ANALYSIS DATES
FAMILY CAMPGROUND DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SB12	FC-SB12-01	D96-12170-18	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1
SB12	FC-SB12-02	D96-12170-19	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1
SB12	FC-SB12-03	D96-12170-20	SO	N1	M8015D	26-Oct-1996	29-Oct-1996	3	30-Oct-1996	1
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	M8015D	22-Oct-1996	28-Oct-1996	6	29-Oct-1996	1
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	M8015D	23-Oct-1996	28-Oct-1996	5	29-Oct-1996	1
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	M8015D	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	M8015D	26-Oct-1996	30-Oct-1996	4	31-Oct-1996	1
SBO1	FC-SB01-01	D96-12056-4	SO	N1	M8015V	22-Oct-1996	25-Oct-1996	3	31-Oct-1996	6
SBO1	FC-SB01-02	D96-12056-5	SO	N1	M8015V	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO1	FC-SB01-03	D96-12056-6	SO	N1	M8015V	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SBO2	FC-SB02-01	D96-12056-7	SO	N1	M8015V	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO2	FC-SB02-02	D96-12056-8	SO	N1	M8015V	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO2	FC-SB02-03	D96-12056-9	SO	N1	M8015V	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SBO3	FC-SB03-01	D96-12056-1	SO	N1	M8015V	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO3	FC-SB03-02	D96-12056-2	SO	N1	M8015V	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SBO3	FC-SB03-03	D96-12056-3	SO	N1	M8015V	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SBO4	FC-SB04-01	D96-12056-10	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO4	FC-SB04-02	D96-12056-11	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO5	FC-SB05-01	D96-12056-12	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO5	FC-SB05-02	D96-12056-13	SO	N1	M8015V	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SBO5	FC-SB05-03	D96-12056-14	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO5	FC-SB05-04	D96-12056-15	SO	FD1	M8015V	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SBO6	FC-SB06-01	D96-12056-16	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO6	FC-SB06-01	D96-12056-21	SO	MS1	M8015V	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SBO6	FC-SB06-01	D96-12056-22	SO	SD1	M8015V	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SBO6	FC-SB06-02	D96-12056-17	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO6	FC-SB06-03	D96-12056-18	SO	N1	M8015V	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SBO7	FC-SB07-01	D96-12092-6	SO	N1	M8015V	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SBO8	FC-SB08-01	D96-12092-7	SO	N1	M8015V	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SBO9	FC-SB09-01	D96-12092-8	SO	N1	M8015V	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0

SUMMARY OF EXTRACTION AND ANALYSIS DATES
FAMILY CAMPGROUND DRILLING PROJECT
NAS FT WORTH JRB (FORMERLY CARSWELL AFB)

LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SB09	FC-SB09-02	D96-12092-9	SO	N1	M8015V	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SB09	FC-SB09-03	D96-12092-10	SO	FD1	M8015V	24-Oct-1996	02-Nov-1996	9	02-Nov-1996	0
SB10	FC-SB10-01	D96-12092-12	SO	N1	M8015V	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SB10	FC-SB10-02	D96-12092-11	SO	N1	M8015V	24-Oct-1996	02-Nov-1996	9	02-Nov-1996	0
SB11	FC-SB11-01	D96-12170-13	SO	N1	M8015V	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB11	FC-SB11-02	D96-12170-14	SO	N1	M8015V	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB11	FC-SB11-03	D96-12170-15	SO	N1	M8015V	26-Oct-1996	01-Nov-1996	6	01-Nov-1996	0
SB12	FC-SB12-01	D96-12170-18	SO	N1	M8015V	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB12	FC-SB12-02	D96-12170-19	SO	N1	M8015V	26-Oct-1996	01-Nov-1996	6	01-Nov-1996	0
SB12	FC-SB12-03	D96-12170-20	SO	N1	M8015V	26-Oct-1996	01-Nov-1996	6	01-Nov-1996	0
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	M8015V	22-Oct-1996	28-Oct-1996	6	28-Oct-1996	0
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	M8015V	23-Oct-1996	28-Oct-1996	5	28-Oct-1996	0
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	M8015V	24-Oct-1996	28-Oct-1996	4	28-Oct-1996	0
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	M8015V	26-Oct-1996	01-Nov-1996	6	01-Nov-1996	0
SB01	FC-SB01-02	D96-12056-5	SO	N1	SW6010	22-Oct-1996	28-Oct-1996	6	18-Nov-1996	21
SB03	FC-SB03-02	D96-12056-2	SO	N1	SW6010	22-Oct-1996	28-Oct-1996	6	18-Nov-1996	21
SB04	FC-SB04-02	D96-12056-11	SO	N1	SW6010	23-Oct-1996	28-Oct-1996	5	18-Nov-1996	21
SB05	FC-SB05-02	D96-12056-13	SO	N1	SW6010	23-Oct-1996	28-Oct-1996	5	18-Nov-1996	21
SB06	FC-SB06-02	D96-12056-17	SO	N1	SW6010	23-Oct-1996	28-Oct-1996	5	18-Nov-1996	21
SB07	FC-SB07-01	D96-12092-6	SO	N1	SW6010	24-Oct-1996	28-Oct-1996	4	19-Nov-1996	22
SB08	FC-SB08-01	D96-12092-7	SO	N1	SW6010	24-Oct-1996	28-Oct-1996	4	19-Nov-1996	22
SB11	FC-SB11-03	D96-12170-15	SO	N1	SW6010	26-Oct-1996	30-Oct-1996	4	20-Nov-1996	21
SB12	FC-SB12-03	D96-12170-20	SO	N1	SW6010	26-Oct-1996	30-Oct-1996	4	20-Nov-1996	21
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	SW6010	22-Oct-1996	27-Oct-1996	5	20-Nov-1996	24
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	SW6010	23-Oct-1996	27-Oct-1996	4	20-Nov-1996	24
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	SW6010	24-Oct-1996	27-Oct-1996	3	20-Nov-1996	24
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	SW6010	26-Oct-1996	31-Oct-1996	5	04-Dec-1996	34
SB01	FC-SB01-02	D96-12056-5	SO	N1	SW7421	22-Oct-1996	06-Nov-1996	15	07-Nov-1996	1
SB03	FC-SB03-02	D96-12056-2	SO	N1	SW7421	22-Oct-1996	06-Nov-1996	15	07-Nov-1996	1

SUMMARY OF EXTRACTION AND ANALYSIS DATES
FAMILY CAMPGROUND DRILLING PROJECT
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LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SB04	FC-SB04-02	D96-12056-11	SO	N1	SW7421	23-Oct-1996	06-Nov-1996	14	07-Nov-1996	1
SB05	FC-SB05-02	D96-12056-13	SO	N1	SW7421	23-Oct-1996	06-Nov-1996	14	07-Nov-1996	1
SB06	FC-SB06-02	D96-12056-17	SO	N1	SW7421	23-Oct-1996	06-Nov-1996	14	07-Nov-1996	1
SB07	FC-SB07-01	D96-12092-6	SO	N1	SW7421	24-Oct-1996	06-Nov-1996	13	07-Nov-1996	1
SB08	FC-SB08-01	D96-12092-7	SO	N1	SW7421	24-Oct-1996	06-Nov-1996	13	07-Nov-1996	1
SB11	FC-SB11-03	D96-12170-15	SO	N1	SW7421	26-Oct-1996	06-Nov-1996	11	07-Nov-1996	1
SB12	FC-SB12-03	D96-12170-20	SO	N1	SW7421	26-Oct-1996	06-Nov-1996	11	07-Nov-1996	1
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	SW7421	22-Oct-1996	27-Oct-1996	5	14-Nov-1996	18
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	SW7421	23-Oct-1996	27-Oct-1996	4	14-Nov-1996	18
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	SW7421	24-Oct-1996	27-Oct-1996	3	14-Nov-1996	18
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	SW7421	26-Oct-1996	05-Nov-1996	10	06-Nov-1996	1
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	SW7470	22-Oct-1996	29-Oct-1996	7	30-Oct-1996	1
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	SW7470	23-Oct-1996	29-Oct-1996	6	30-Oct-1996	1
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	SW7470	24-Oct-1996	29-Oct-1996	5	30-Oct-1996	1
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	SW7470	26-Oct-1996	30-Oct-1996	4	31-Oct-1996	1
SB01	FC-SB01-02	D96-12056-5	SO	N1	SW7471	22-Oct-1996	28-Oct-1996	6	29-Oct-1996	1
SB03	FC-SB03-02	D96-12056-2	SO	N1	SW7471	22-Oct-1996	28-Oct-1996	6	29-Oct-1996	1
SB04	FC-SB04-02	D96-12056-11	SO	N1	SW7471	23-Oct-1996	28-Oct-1996	5	29-Oct-1996	1
SB05	FC-SB05-02	D96-12056-13	SO	N1	SW7471	23-Oct-1996	28-Oct-1996	5	29-Oct-1996	1
SB06	FC-SB06-02	D96-12056-17	SO	N1	SW7471	23-Oct-1996	28-Oct-1996	5	29-Oct-1996	1
SB07	FC-SB07-01	D96-12092-6	SO	N1	SW7471	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SB08	FC-SB08-01	D96-12092-7	SO	N1	SW7471	24-Oct-1996	28-Oct-1996	4	29-Oct-1996	1
SB11	FC-SB11-03	D96-12170-15	SO	N1	SW7471	26-Oct-1996	31-Oct-1996	5	01-Nov-1996	1
SB12	FC-SB12-03	D96-12170-20	SO	N1	SW7471	26-Oct-1996	31-Oct-1996	5	01-Nov-1996	1
SB01	FC-SB01-01	D96-12056-4	SO	N1	SW8020	22-Oct-1996	25-Oct-1996	3	29-Oct-1996	4
SB01	FC-SB01-03	D96-12056-6	SO	N1	SW8020	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SB02	FC-SB02-01	D96-12056-7	SO	N1	SW8020	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SB02	FC-SB02-02	D96-12056-8	SO	N1	SW8020	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0

SUMMARY OF EXTRACTION AND ANALYSIS DATES
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LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SB02	FC-SB02-03	D96-12056-9	SO	N1	SW8020	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SB03	FC-SB03-01	D96-12056-1	SO	N1	SW8020	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SB03	FC-SB03-03	D96-12056-3	SO	N1	SW8020	22-Oct-1996	29-Oct-1996	7	29-Oct-1996	0
SB04	FC-SB04-01	D96-12056-10	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB05	FC-SB05-01	D96-12056-12	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB05	FC-SB05-03	D96-12056-14	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB05	FC-SB05-04	D96-12056-15	SO	FD1	SW8020	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SB06	FC-SB06-01	D96-12056-16	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB06	FC-SB06-01	D96-12056-21	SO	MS1	SW8020	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SB06	FC-SB06-01	D96-12056-22	SO	SD1	SW8020	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SB06	FC-SB06-02	D96-12056-17	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB06	FC-SB06-03	D96-12056-18	SO	N1	SW8020	23-Oct-1996	29-Oct-1996	6	29-Oct-1996	0
SB09	FC-SB09-01	D96-12092-8	SO	N1	SW8020	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SB09	FC-SB09-02	D96-12092-9	SO	N1	SW8020	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SB09	FC-SB09-03	D96-12092-10	SO	FD1	SW8020	24-Oct-1996	02-Nov-1996	9	02-Nov-1996	0
SB10	FC-SB10-01	D96-12092-12	SO	N1	SW8020	24-Oct-1996	01-Nov-1996	8	01-Nov-1996	0
SB10	FC-SB10-02	D96-12092-11	SO	N1	SW8020	24-Oct-1996	02-Nov-1996	9	02-Nov-1996	0
SB11	FC-SB11-01	D96-12170-13	SO	N1	SW8020	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB11	FC-SB11-02	D96-12170-14	SO	N1	SW8020	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB12	FC-SB12-01	D96-12170-18	SO	N1	SW8020	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SB12	FC-SB12-02	D96-12170-19	SO	N1	SW8020	26-Oct-1996	31-Oct-1996	5	01-Nov-1996	1
SB01	FC-SB01-02	D96-12056-5	SO	N1	SW8240	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SB03	FC-SB03-02	D96-12056-2	SO	N1	SW8240	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SB04	FC-SB04-02	D96-12056-11	SO	N1	SW8240	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SB05	FC-SB05-02	D96-12056-13	SO	N1	SW8240	23-Oct-1996	30-Oct-1996	7	30-Oct-1996	0
SB07	FC-SB07-01	D96-12092-6	SO	N1	SW8240	24-Oct-1996	30-Oct-1996	6	30-Oct-1996	0
SB08	FC-SB08-01	D96-12092-7	SO	N1	SW8240	24-Oct-1996	30-Oct-1996	6	30-Oct-1996	0
SB11	FC-SB11-03	D96-12170-15	SO	N1	SW8240	26-Oct-1996	30-Oct-1996	4	30-Oct-1996	0
SB12	FC-SB12-03	D96-12170-20	SO	N1	SW8240	26-Oct-1996	30-Oct-1996	4	30-Oct-1996	0
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	SW8240	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0

SUMMARY OF EXTRACTION AND ANALYSIS DATES
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LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	SW8240	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	SW8240	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	SW8240	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
FIELDQC	FC-WQ-TB-01	D96-12092-2	WQ	TB1	SW8240	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
FIELDQC	FC-WQ-TB-02	D96-12092-3	WQ	TB2	SW8240	22-Oct-1996	31-Oct-1996	9	31-Oct-1996	0
FIELDQC	FC-WQ-TB-03	D96-12092-5	WQ	TB1	SW8240	23-Oct-1996	31-Oct-1996	8	31-Oct-1996	0
FIELDQC	FC-WQ-TB-04	D96-12092-14	WQ	TB1	SW8240	24-Oct-1996	31-Oct-1996	7	31-Oct-1996	0
FIELDQC	FC-WQ-TB-07	D96-12170-16	WQ	TB1	SW8240	26-Oct-1996	31-Oct-1996	5	31-Oct-1996	0
SBO1	FC-SB01-01	D96-12056-4	SO	N1	SW8270	22-Oct-1996	30-Oct-1996	8	30-Oct-1996	0
SBO1	FC-SB01-02	D96-12056-5	SO	N1	SW8270	22-Oct-1996	25-Oct-1996	3	30-Oct-1996	5
SBO2	FC-SB02-01	D96-12056-7	SO	N1	SW8270	22-Oct-1996	25-Oct-1996	3	31-Oct-1996	6
SBO2	FC-SB02-02	D96-12056-8	SO	N1	SW8270	22-Oct-1996	25-Oct-1996	3	31-Oct-1996	6
SBO3	FC-SB03-01	D96-12056-1	SO	N1	SW8270	22-Oct-1996	25-Oct-1996	3	31-Oct-1996	6
SBO3	FC-SB03-02	D96-12056-2	SO	N1	SW8270	22-Oct-1996	25-Oct-1996	3	31-Oct-1996	6
SBO4	FC-SB04-01	D96-12056-10	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	30-Oct-1996	5
SBO4	FC-SB04-02	D96-12056-11	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	31-Oct-1996	6
SBO5	FC-SB05-01	D96-12056-12	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	31-Oct-1996	6
SBO5	FC-SB05-02	D96-12056-13	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	31-Oct-1996	6
SBO5	FC-SB05-04	D96-12056-15	SO	FD1	SW8270	23-Oct-1996	25-Oct-1996	2	31-Oct-1996	6
SBO6	FC-SB06-01	D96-12056-16	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	30-Oct-1996	5
SBO6	FC-SB06-01	D96-12056-21	SO	MS1	SW8270	23-Oct-1996	25-Oct-1996	2	30-Oct-1996	5
SBO6	FC-SB06-01	D96-12056-22	SO	SD1	SW8270	23-Oct-1996	25-Oct-1996	2	30-Oct-1996	5
SBO6	FC-SB06-02	D96-12056-17	SO	N1	SW8270	23-Oct-1996	25-Oct-1996	2	31-Oct-1996	6
SBO7	FC-SB07-01	D96-12092-6	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SBO8	FC-SB08-01	D96-12092-7	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SBO9	FC-SB09-01	D96-12092-8	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SBO9	FC-SB09-02	D96-12092-9	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SBO9	FC-SB09-03	D96-12092-10	SO	FD1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SB10	FC-SB10-01	D96-12092-12	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2
SB10	FC-SB10-02	D96-12092-11	SO	N1	SW8270	24-Oct-1996	28-Oct-1996	4	30-Oct-1996	2

SUMMARY OF EXTRACTION AND ANALYSIS DATES
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LOCATION ID	FIELD SAMPLE NO	LABORATORY SAMPLE NO	SAMPLE MATRIX	SAMPLE TYPE	ANALYSIS METHOD	SAMPLE DATE	EXTRACTION DATE	ELAPSED TIME (DAYS)	ANALYSIS DATE	ELAPSED TIME (DAYS)
SB11	FC-SB11-01	D96-12170-13	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
SB11	FC-SB11-02	D96-12170-14	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
SB11	FC-SB11-03	D96-12170-15	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
SB12	FC-SB12-01	D96-12170-18	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
SB12	FC-SB12-02	D96-12170-19	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
SB12	FC-SB12-03	D96-12170-20	SO	N1	SW8270	26-Oct-1996	29-Oct-1996	3	07-Nov-1996	9
FIELDQC	FC-WQ-EB-01	D96-12092-1	WQ	EB1	SW8270	22-Oct-1996	29-Oct-1996	7	30-Oct-1996	1
FIELDQC	FC-WQ-EB-02	D96-12092-4	WQ	EB1	SW8270	23-Oct-1996	29-Oct-1996	6	30-Oct-1996	1
FIELDQC	FC-WQ-EB-03	D96-12092-13	WQ	EB1	SW8270	24-Oct-1996	29-Oct-1996	5	30-Oct-1996	1
FIELDQC	FC-WQ-EB-05	D96-12170-17	WQ	EB1	SW8270	26-Oct-1996	30-Oct-1996	4	30-Oct-1996	0

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INDEPENDENT DATA VALIDATION REPORT

DATA VALIDATION REPORT

ORGANIC AND INORGANIC ANALYSES

Recreation Vehicle (RV) and Family Camping (FAM CAMP) Area Project

Naval Air Station Fort Worth
Carswell Field, Texas

AFCEE Analytical Batch Numbers:

V12170, V12092, V12056, 1029802001, 1101802001, 1031802001, 1031801501, 1101801501, 1029801501, 1028801501, 1101801502, AB903-85, AB903-91, AB903-96, AB925-19, AB925-13, AB903-84, AB925-42, AB925-10, AB925-18, AB925-4, AB903-98, AB925-12, 1030601001, 1028601001, 1027601002, 1106742101, 1027742101, 1031601001, 1210601001, 1119601003, 1028747101, 1029747001, 1031747101, 1105742101, and 1030747001

Sampling Dates of October 22 - 26, 1996

VOLUME I of 2

PREPARED FOR:

The Environmental Company, Inc.
710 N.W. Juniper Street
Suite 208
Issaquah, Washington 98027

February 1997

PREPARED BY:

ChemWorld Environmental, Inc.
14 Orchard Way North
Rockville, Maryland 20854

(301) 294 - 6144

RV and FAM CAMP Project
Data Validation Report: Organic and Inorganic Analyses

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CW CHEMWORLD ENVIRONMENTAL, INC.
Environmental Consultants

429 364

February 18, 1997

Mr. Robert M. Duffner, P.E.
The Environmental Company, Inc.
710 NW Juniper Street
Suite 208
Issaquah, Washington 98027

RE: Data Validation Report - Organic and Inorganic Analyses
RV and FAM CAMP Project, Carswell Field, Texas

Dear Mr. Duffner:

ChemWorld Environmental, Inc. is pleased to provide The Environmental Company, Inc. with the enclosed Data Validation Report for Organic and Inorganic Analyses for the RV and FAM CAMP Project, Carswell Field, Texas. The analytical work was performed by Inchcape Testing Services. An original report is provided at this time. In addition, a disk deliverable is included for the text portion of the report in Microsoft WORD, Version 7.0.

Please contact me at 301-294-6144, should you require additional information or clarification regarding the enclosed.

Sincerely,

Andrea P. Schuessler

Andrea P. Schuessler, CHMM
ChemWorld Environmental, Inc.

Enclosures
c: TC-9701 file

14 Orchard Way North, Rockville, Maryland 20854, Tel. (301) 294-6144, Fax (301) 309-6640

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DATA VALIDATION SUMMARY: ORGANIC AND INORGANIC ANALYSES

RV and FAM CAMP
Naval Air Station Forth Worth
Carswell Field, Texas

AFCEE Analytical Batch Numbers:

V12170, V12092, V12056, 1029802001, 1101802001, 1031802001, 1031801501, 1101801501, 1029801501, 1028801501, 1101801502, AB903-85, AB903-91, AB925-19, AB925-13, AB903-84, AB925-42, AB925-10, AB925-18, AB925-4, AB903-98, AB925-12, 1030601001, 1028601001, 1027601002, 1106742101, 1027742101, 1031601001, 1210601001, 1119601003, 1028747101, 1029747101, 1031747101, 1105742101, and 1030747001

Sampling Dates of October 22 - 26, 1996

INTRODUCTION

This Data Validation Summary report for Organic and Inorganic analyses was generated for 12 water samples, 40 soil samples, and the associated quality control samples for the Air Force Center for Environmental Excellence (AFCEE) Analytical Batch (AAB) Nos. referenced above. Sampling activities were conducted in support of the field investigation for the Recreational Vehicle (RV) and Family Camping (FAM CAMP) Project for the Naval Air Station Fort Worth, Carswell Field, Texas. The analytical laboratory work was performed by Inchcape Testing Services.

The analytical testing consisted of Volatile Organic analyses by Gas Chromatography/Mass Spectroscopy (GC/MS), Method 8240B; Volatile Aromatics by GC, Method 8020A; Total Petroleum Hydrocarbons (TPH) as Gasoline by GC, Method 8015M; and TPH as Diesel by GC, Method 8015M. Base/Neutral and Acid Extractable Organics by GC/MS, Method 8270B, and Pesticides and Polychlorinated Biphenyls (PCBs) by GC Method, 8080A, were also analyzed for selected samples. In addition, selected samples were analyzed for Inorganics by Inductively Coupled Plasma (ICP), Method 6010A; Atomic Absorption (AA), Lead by Method 7421; and Mercury by Cold Vapor, Method 7471. The analytical work was performed utilizing the **United States Environmental Protection Agency (USEPA) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846, Third Edition).**

This report provides a summary of data acceptability and deviations in accordance with the site-specific **Quality Assurance Project Plan (QAPP) for Site Assessment, Investigation, and Characterization of the RV and FAM CAMP Areas, Naval Air Station, Fort Worth, Joint Reserve Base, Carswell Field, Texas (July 1996)**; the AFCEE data validation requirements; and the SW-846 Methods, where applicable and relevant. The validation report pertains to the following samples:

AAB No. V12170, Method 8240B

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-WQTB-05 (Trip Blank 10/25/96)
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-WQ-TB-06 (Trip Blank 10/25/96)
FC-WQ-EB-04 (Equipment blank 10/25/96)
FC-SB11-03
FC-WQ-TB-07 (Trip Blank 10/26/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)
FC-SB12-03

AAB No. V12092, Method 8240B

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-TB-01 (Trip Blank 10/22/96)
FC-WQ-TB-02 (Trip Blank 10/22/96)
FC-WQ-EB-02 (Equipment Blank 10/23/96)
FC-WQ-TB-03 (Trip Blank 10/23/96)
FC-WQ-EB-03 (Equipment Blank 10/24/96)
FC-WQ-TB-04 (Trip Blank 10/24/96)
FC-SB08-01
FC-SB07-01N2

AAB No. V12056, Method 8240B

FC-SB03-02
FC-SB01-02N2
FC-SB04-02
FC-SB05-02

AAB No. 10298029001, Method 8020A

FCSB0301
FCSB0303
FCSB0101
FCSB0103
FCSB0201
FCSB0202
FCSB0203
FCSB0401
FCSB0501
FCSB0503
FCSB0504 (Duplicate of FCSB0501)
FCSB0601
FCSB0602
FCSB0603

AAB No. 1101802001, Method 8020A

FCSB0901
FCSB0902
FCSB0903 (Duplicate of FCSB0901)
FCSB1002
FCSB1001

AAB No. 1031802001, Method 8020A

FCSB1101
FCSB1102
FCSB1201
FCSB1202

AAB No. 1031801501, Method 8015M (Gas)

FCSB1601
FCSB1602
FCSB1701
FCSB1801
FCSB1802
FCSB1901
FCSB1902 (Duplicate of FCSB1901)
FCSB2001
FCSB2002
FCSB1101
FCSB1102
FCSB1103
FCSB1201
FCSB1202
FCSB1203

AAB no. 1101801501, Method 8015M (Gas)

FCWQEB04 (Equipment Blank 10/25/96)
FCWQEB05 (Equipment Blank 10/26/96)

AAB No. 1029801501, Method 8015M (Gas)

FCSB0301
FCSB0302
FCSB0303
FCSB0101
FCSB0102
FCSB0103
FCSB0201
FCSB0202

FCSB0203
FCSB0401
FCSB0402
FCSB0501
FCSB0502
FCSB0503
FCSB0504 (Duplicate of FCSB0501)
FCSB0601
FCSB0602
FCSB0603

AAB No. 1028801501, Method 8015M (Gas)

FCWQEB01 (Equipment Blank 10/22/96)
FCWQEB02 (Equipment Blank 10/23/96)
FCWQEB03 (Equipment Blank 10/24/96)
FCSB0701
FCSB0801
FCSB0901
FCSB0902
FCSB0903
FCSB1002
FCSB1001

AAB No. AB903-85, Method 8015M (Diesel)

FC-SB03-01
FC-SB03-02
FC-SB03-03
FC-SB01-01
FC-SB01-02
FC-SB01-03
FC-SB02-01
FC-SB02-02
FC-SB02-03
FC-SB04-01
FC-SB04-02
FC-SB05-01
FC-SB05-02
FC-SB05-03
FC-SB05-04 (Duplicate of FC-SB05-01)
FC-SB06-01
FC-SB06-02
FC-SB06-03

AAB No. AB903-91, Method 8015M (Diesel)

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-EB-02 (Equipment blank 10/23/96)
FC-WQ-EB-03 (Equipment blank 10/24/96)

AAB No. AB903-96, Method 8015M (Diesel)

FC-SB07-01
FC-SB08-01
FC-SB09-01
FC-SB09-02
FC-SBD09-03 (Duplicate of FC-SB09-01)
FC-SB10-02
FC-SB10-01

AAB No. AB925-19, Method 8015M (Diesel)

FC-WQ-EB-04 (Equipment Blank 10/25/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)

AAB No. AB925-13, Method 8015M (Diesel)

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-01
FC-SB11-02
FC-SB11-03
FC-SB12-01
FC-SB12-02
FC-SB12-03

AAB No. AB903-84, Method 8270B

FC-SB03-01
FC-SB03-02
FC-SB01-01
FC-SB01-02
FC-SB05-01
FC-SB05-02
FC-SB05-04 (Duplicate of FC-SB05-01)
FC-SB02-01
FC-SB02-02
FC-SB04-01
FC-SB04-02
FC-SB06-01
FC-SB06-02

AAB No. AB925-42, Method 8270B

FC-SB01-01DL
FC-SB02-01DL

AAB No. AB925-10, Method 8270B

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-01
FC-SB11-02
FC-SB11-03
FC-SB12-01
FC-SB12-02
FC-SB12-03

AAB No. AB925-18, Method 8270B

FC-WQ-EB-04 (Equipment Blank 10/25/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)

AAB No. AB925-4, Method 8270B

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-EB-02 (Equipment Blank 10/23/96)
FC-WQ-EB-03 (Equipment Blank 10/24/96)

AAB No. AB903-98, Method 8270B

FC-SB07-01
FC-SB08-01
FC-SB09-01
FC-SB09-02
FC-SB09-03 (Duplicate of FC-SB09-01)
FC-SB10-02
FC-SB10-01

AAB No. AB925-12, Method 8080A

(Pesticides)
SB16-01
SB16-02
SB17-01
SB18-01
SB18-02
SB19-01
SB19-02 (Duplicate of SB19-01)
SB20-01
SB20-02

(PCBs)
FCSB1601
FCSB1602
FCSB1701
FCSB1801
FCSB1802
FCSB1901
FCSB1902 (Duplicate of FCSB1901)
FCSB2001
FCSB2002

AAB No. 1030601001, Method 6010A

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-03
FC-SB12-03

AAB No. 1028601001, Method 6010A

(ID12092)
FC-SB07-01
FC-SB08-01

(ID12056)
FC-SB03-02
FC-SB01-02
FC-SB04-02
FC-SB05-02
FC-SB06-02

AAB No. 1027601002, Method 6010A

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-EB-02 (Equipment Blank 10/23/96)
FC-WQ-EB-03 (Equipment Blank 10/24/96)

AAB No. 1106742101, Method 7421

(ID12170)
FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-03
FC-SB12-03

(ID12092)
FC-SB07-01
FC-SB08-01

(ID12056)
FC-SB03-02
FC-SB01-02
FC-SB04-02
FC-SB05-02
FC-SB06-02

AAB No. 1027742101, Method 7421

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-EB-02 (Equipment Blank 10/23/96)
FC-WQ-EB-03 (Equipment Blank 10/24/96)

AAB No. 1031601001, Method No. 6010A

FC-WQ-EB-04 (Equipment Blank 10/25/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)

AAB No. 1210601001, Method 6010A

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-03
FC-SB12-03

AAB No. 1119601003, Method 6010A

(ID12056)
FC-SB03-02
FC-SB01-02
FC-SB04-02
FC-SB05-02
FC-SB06-02

(ID12092)
FC-SB07-01
FC-SB08-01

AAB No. 1028747101, Method 7471A

(ID12056)
FC-SB03-02
FC-SB01-02
FC-SB04-02
FC-SB05-02
FC-SB06-02

(ID12092)
FC-SB07-01
FC-SB08-01

AAB No. 1029747001, Method 7470A

FC-WQ-EB-01 (Equipment Blank 10/22/96)
FC-WQ-EB-02 (Equipment Blank 10/23/96)
FC-WQ-EB-03 (Equipment Blank 10/24/96)

AAB No. 1031747101, Method 7471A

FC-SB16-01
FC-SB16-02
FC-SB17-01
FC-SB18-01
FC-SB18-02
FC-SB19-01
FC-SB19-02 (Duplicate of FC-SB19-01)
FC-SB20-01
FC-SB20-02
FC-SB11-03
FC-SB12-03

AAB No. 1105742101, Method 7421

FC-WQ-EB-04 (Equipment blank 10/25/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)

AAB No. 1030747001, Method 7470A

FC-WQ-EB-04 (Equipment Blank 10/25/96)
FC-WQ-EB-05 (Equipment Blank 10/26/96)

1.0 VOLATILE ORGANICS BY GC/MS

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- Matrix Spikes (MS) and Matrix Spike Duplicates (MSD)
- Laboratory Control Samples (LCS)
- Initial and Continuing Calibration
- Blanks (Method and Field)
- GC/MS Instrument Performance Check
- Internal Standards
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable Quality Control (QC) specifications, with deviations detailed as follows. The initial analysis for FC-SB01-02 was qualified as 'R', unusable, for the non-detectable results, due to low internal standard recovery for all three internal standards. The remaining data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix A and within the following text.

1.1 Holding Time

All holding times were met within the acceptable time frame of 14 days from collection for the preserved water samples and soil samples.

1.2 Surrogate Compound Recovery

All surrogate recovery (%R) was found to be generated within acceptable limits for the three surrogate compounds.

1.3 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

One MS/MSD sample set for soils was analyzed for the project and Laboratory Control Samples (LCS) were analyzed for each analytical batch. Acceptable accuracy (percent recovery) and precision (relative percent difference) were generated for the quality control samples.

1.4 Calibration

All initial and continuing calibration was performed within acceptable limits for Relative Response Factors (RRF), minimum RF's, Percent Relative Standard Deviation (% RSD), Percent Recovery (%R) with respect to the expected value, and Percent Difference (%D).

1.5 Blanks

1.5.1 Field Blanks

1.5.1.1 AAB No. V12170

Three trip blanks and two equipment blanks were analyzed for the analytical batch. Positive results were not detected for the 8240B Volatile Organics.

1.5.1.2 **AAB No. V12092**

Four trip blanks and three equipment blanks were analyzed for the analytical batch. Positive results were not detected for the 8240B Volatile Organics.

1.5.2 **Method Blanks**

1.5.2.1 **AAB No. V12170**

One water method blank and one soil method blank were analyzed for the analytical batch. Volatile Organics were not detected.

1.5.2.2 **AAB No. V12092**

One water method blank and one soil method blank were analyzed for the analytical batch. Volatile Organics were not detected.

1.5.2.3 **AAB No. V12056**

One soil method blank was analyzed for the analytical batch. Volatile Organics were not detected.

1.6 **GC/MS Instrument Performance Check**

Instrument Performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB).

1.7 **Internal Standards**

All internal standards were generated within acceptable specifications for area counts and retention time variation, with the following exceptions.

1.7.1 **AAB No. V12056**

Sample ID	Internal Standard	Reported Area Count	Lower Limit
FC-SB01-02	Bromochloromethane	189393	264496
	1,4-Difluorobenzene	929851	1084828
	Chlorobenzene-d5	578660	760804

The sample above was qualified as 'R', unusable, for the non-detectable results, due to the generation of low reported area counts for all three internal standards. Sample FC-SB01-02 was reanalyzed and generated acceptable internal standard area counts for the reanalysis. Both analyses are included in Appendix A.

1.8 **Field Duplicates**

1.8.1 **AAB No. V12170**

Samples FC-SB19-01 and FC-SB19-02 were collected as the field duplicate soil samples and analyzed for Volatile Organics. Acceptable precision was generated for the duplicate pair, with the exception of 2-Hexanone and methyl isobutyl ketone. These compounds were detected in FC-SB19-02 at 0.143 mg/Kg and 0.0388 mg/Kg, respectively. Positive results were not detected for any of the Volatile compounds analyzed for FC-SB19-01. Non-homogeneity of the soil matrix may contribute to poor precision.

1.9 Compound Identification

GC/MS qualitative analyses are considered to be acceptable for the data set. Retention times and mass spectra were generated within appropriate quality control specifications.

1.10 Compound Quantitation and Reported Detection Limits

GC/MS quantitative analyses are considered to be acceptable. Sample dilutions, internal standards and response factors were found to be within acceptable limits.

1.10.1 AAB No. V12170

The undiluted sample results for FC-SB11-03 and FC-SB12-03 were qualified as 'E', estimated, due to the concentration being reported above the calibration range for the compounds benzene, ethylbenzene, toluene, m,p-xylene, and o-xylene. Sample results that include an 'E' qualifier require dilution to accurately quantitate the positive results affected. Both samples were diluted and results reported within the calibration range for the diluted analyses. The results from the diluted analyses should be used for contamination assessment purposes for the compounds qualified with an 'E', in the undiluted analysis.

2.0 VOLATILE ORGANICS (AROMATICS) BY GC

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- MS/MSD
- LCS
- Initial and Continuing Calibration
- Blanks (Method and Field)
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All of the data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix A and within the following text.

2.1 Holding Time

All holding times were met within the acceptable time frame of 14 days from collection for the preserved water samples and soil samples.

2.2 Surrogate Compound Recovery

All surrogate recovery was found to be generated within acceptable limits for the one surrogate compound.

2.3 MS/MSD

One MS/MSD sample set for soils was analyzed for the project and an LCS was analyzed for each analytical batch. Acceptable accuracy and precision were generated for the quality control samples.

2.4 Calibration

All initial and continuing calibration was performed within acceptable limits for correlation coefficients of ≥ 0.990, %R with respect to the expected value, and %D.

2.5 Blanks

2.5.1 Field Blanks

Field blanks were not collected for Aromatic Volatiles analyzed by Method 8020A.

2.5.2 Method Blanks

2.5.2.1 AAB No. 10298029001

One soil method blank was analyzed for the analytical batch. Volatile Organics were not detected.

2.5.2.2 AAB No. 1101802001

One soil method blank was analyzed for the analytical batch. Volatile Organics were not detected.

2.5.2.3 AAB No. 1031802001

One soil method blank was analyzed for the analytical batch. Volatile Organics were not detected.

2.6 Field Duplicates

2.6.1 AAB No. 10298029001

Samples FC-SB05-04 and FC-SB05-01 were collected as the field duplicate soil samples and analyzed for Volatile Organics. Trace levels of 8020A Volatiles were detected in both of the samples. However, toluene was the only compound detected in both soil duplicate samples. Non-homogeneity of the soil matrix and the trace levels of detection for the Volatile compounds may contribute to the poor precision generated. Table 1 includes calculated precision for the duplicate pair.

2.6.2 AAB No. 1101802001

Samples FCSB0901 and FCSB0903 were collected as the field duplicate soils samples and analyzed for Volatile Organics. Positive results were not detected for Method 8020A, therefore, acceptable precision was generated.

2.7 Compound Identification

GC qualitative analyses are considered to be acceptable for the data set. Data was generated within appropriate quality control specifications.

2.8 Compound Quantitation and Reported Detection Limits

GC quantitative analyses are considered to be acceptable. Sample dilutions and quality control criteria were found to be acceptable.

3.0 TPH AS GASOLINE BY GC

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- MS/MSD
- LCS
- Initial and Continuing Calibration
- Blanks (Method and Field)
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All of the data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix B and within the following text.

3.1 Holding Time

All holding times were met within the acceptable time frame of 14 days from collection for the preserved water samples and soil samples.

3.2 Surrogate Compound Recovery

All surrogate recovery was found to be generated within acceptable limits for the one surrogate compound.

3.3 MS/MSD

Two MS/MSD sample sets for soils were analyzed for the project and an LCS was analyzed for each analytical batch. Acceptable accuracy and precision were generated for the quality control samples.

3.4 Calibration

All initial and continuing calibration was performed within acceptable limits for correlation coefficients of $\geq$ 0.990, %R with respect to the expected value, and %D.

3.5 Blanks

3.5.1 Field Blanks

3.5.1.1 AAB No. 1101801501

Two equipment blanks were collected and analyzed for TPH as gasoline. Positive results were not detected.

3.5.1.2 AAB No. 1028801501

Three equipment blanks were collected and analyzed for TPH as gasoline. Positive results were not detected.

3.5.2 Method Blanks

3.5.2.1 AAB No. 1031801501

One soil method blank was analyzed for the analytical batch. TPH as gasoline was not detected.

3.5.2.2 AAB No. 1101801501

One water method blank was analyzed for the analytical batch. TPH as gasoline was not detected.

3.5.2.3 AAB No. 1029801501

One soil method blank was analyzed for the analytical batch. TPH as gasoline was not detected.

3.5.2.4 AAB No. 1028801501

One water method blank was analyzed for the analytical batch. TPH as gasoline was not detected.

3.5.2.5 AAB No. 1101801502

One soil method blank was analyzed for the analytical batch. TPH as gasoline was not detected.

3.6 Field Duplicates

3.6.1 AAB Nos. 1031801501 and 1029801501

Samples FC-SB19-02/FC-SB19-01 and FCSB0504/FCSB0501 were collected as the field duplicate soil samples and analyzed for TPH as gasoline. Positive results were not detected for either pair of duplicate samples, therefore, acceptable precision was generated.

3.7 Compound Identification

GC qualitative analyses are considered to be acceptable for the data set. Data was generated within appropriate quality control specifications.

3.8 Compound Quantitation and Reported Detection Limits

GC quantitative analyses are considered to be acceptable. Sample dilutions and quality control criteria were found to be acceptable.

4.0 TPH AS DIESEL BY GC

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- MS/MSD
- LCS
- Initial and Continuing Calibration
- Blanks (Method and Field)
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All of the data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix B and within the following text.

4.1 Holding Time

All holding times were met within the acceptable time frame for extraction and analysis of the water and soil samples. Water samples were extracted within 7 days of collection and soils within 14 days. Analyses were run within 40 days of extraction.

4.2 Surrogate Compound Recovery

All surrogate recovery was found to be generated within acceptable limits for the one surrogate compound, with the following exceptions.

4.2.1 AAB No. AB903-85

Sample ID			
FC-SB02-02	Triacontane	176%	(Limit 60-140)
FC-SB01-01	Triacontane	33.7%	
FC-SB02-01	Triacontane	45.6%	

The samples above were qualified as 'J', estimated, for TPH as Diesel.

4.3 MS/MSD

Two MS/MSD sample sets for soils were analyzed for the project and an LCS was analyzed for each analytical batch. Acceptable accuracy and precision were generated for the quality control samples.

4.4 Calibration

All initial and continuing calibration was performed within acceptable limits for correlation coefficients of ≥ 0.990, %R with respect to the expected value, and %D.

4.5 Blanks

4.5.1 Field Blanks

4.5.1.1 AAB No. AB903-91

Three equipment blanks were collected and analyzed for TPH as diesel. Positive results were detected in FC-WQ-EB-02 at 33 ug/L and FC-WQ-EB-03 at 68 ug/L. These results are reported at less than the PQL. The data was not qualified based upon these field blanks.

4.5.1.2 AAB No. AB925-19

Two equipment blanks were collected and analyzed for TPH as diesel. Positive results were detected in FC-WQ-EB-04 at 77 ug/L and FC-WQ-EB-05 at 126 ug/L. These results are reported at less than the PQL. The data was not qualified based upon these field blanks.

4.5.2 **Method Blanks**

4.5.2.1 **AAB No. AB903-85**

One soil method blank was analyzed for the analytical batch. TPH as diesel was not detected.

4.5.2.2 **AAB No. AB903-91**

One water method blank was analyzed for the analytical batch. TPH as diesel was not detected.

4.5.2.3 **AAB No. AB903-96**

One soil method blank was analyzed for the analytical batch. TPH as diesel was not detected.

4.5.2.4 **AAB No. AB925-19**

One water method blank was analyzed for the analytical batch. TPH as diesel was not detected.

4.5.2.5 **AAB No. AB925-13**

One soil method blank was analyzed for the analytical batch. TPH as diesel was not detected.

4.6 **Field Duplicates**

4.6.1 **AAB Nos. AB903-85**

Samples FC-SB05-04 and FC-SB05-01 were collected as the field duplicate soil samples and analyzed for TPH as diesel. Poor precision was generated at a relative percent difference of 87% for the soil duplicate. Non-homogeneity of the soil matrix may contribute to poor precision.

4.6.2 **AAB No. AB903-96**

Samples FC-SBD09-03 and FC-SB09-01 were collected as the field duplicate soil samples and analyzed for TPH as diesel. Positive results were not detected, therefore, acceptable precision was generated.

4.6.3 **AAB No. AB925-13**

Samples FC-SB19-02 and FC-SB19-01 were collected as the field duplicate soil samples and analyzed as TPH as diesel. Acceptable precision was generated for the duplicate sample (relative percent difference of 2%).

4.7 **Compound Identification**

GC qualitative analyses are considered to be acceptable for the data set. Data was generated within appropriate quality control specifications.

4.8 **Compound Quantitation and Reported Detection Limits**

GC quantitative analyses are considered to be acceptable. Sample dilutions and quality control criteria were found to be acceptable.

5.0 SEMIVOLATILE ORGANICS BY GC/MS
(Base/Neutral and Acid Extractable Organics)

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- MS/MSD
- LCS
- Initial and Continuing Calibration
- Blanks (Method and Field)
- GC/MS Instrument Performance Check
- Internal Standards
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. The acid phenol compounds for the samples FC-SB01-01, FC-SB02-01, FC-SB01-01DL, and FC-SB02-01DL were qualified as 'R', unusable, due to surrogate recovery of less than 10%. In addition, samples FC-SB01-01DL and FC-SB02-01DL were qualified as 'R', unusable, for the non-detectable results for 4-chloroaniline, due to the fact that the solid LCS generated a recovery of 22% (Limit 25-146). The remaining data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix C and within the following text.

5.1 Holding Time

All holding times were met within the acceptable time frame for extraction and analysis of the water and soil samples. Water samples were extracted within 7 days of collection and soils within 14 days. Analyses were run within 40 days of extraction.

5.2 Surrogate Compound Recovery

All surrogate recovery was found to be generated within acceptable limits for the six surrogate compounds, with the following exceptions.

5.2.1 AAB No. AB903-84

Sample ID			
FC-SB01-01	2-Fluorophenol	6%	(Limit 25-135)
	2,4,6-Tribromophenol	3%	(Limit 25-144)
FC-SB02-01	2-Fluorophenol	8%	
	2,4,6-Tribromophenol	4%	

The acid phenol compounds for the samples noted above were qualified as 'R', unusable, due to surrogate recovery of less than 10%. These samples were re-analyzed and reported in AAB No. AB925-42, with similar low recovery for 2,4,6-Tribromophenol.

5.2.2 **AAB No. AB925-42**

Sample ID			
FC-SB01-01DL	2,4,6-Tribromophenol	0%	(Limit 25-144)
FC-SB02-01DL	2,4,6-Tribromophenol	0%	

The samples above were qualified as 'R', unusable, for the acid phenol compounds, due to 0% recovery of the surrogate noted.

5.2.3 **AAB No. AB925-18**

Sample ID			
FC-WQ-EB-04	Phenol-d6	20%	(Limit 25-125)
FC-WQ-EB-05	Phenol-d6	23%	
FC-WQ-EB-05-RE	Phenol-d6	23%	
FC-WQ-EB-04-RE	Phenol-d6	20%	

The non-detectable results for the samples noted above were qualified as 'UJ', estimated, for the acid-phenol compounds, only. Positive results were not detected for the samples.

5.3 **MS/MSD**

Two MS/MSD sample sets for soils were analyzed for the project and an LCS was analyzed for each analytical batch. Acceptable accuracy and precision were generated for the quality control samples, with the following exceptions.

5.3.1 **AAB No. AB903-84**

Sample ID			
FC-SB06-01MS	Benzoic Acid	13%	(Limit 25-172)
FC-SB06-01MSD	2,4-Dimethylphenol	31%	(Limit 35-149)
FC-SB06-01MSD	2,4-Dinitrophenol	21% 44% RPD	(Limit 25-161) (Limit 30)
FC-SB06-01MSD	Benzoic Acid	10%	

The soil samples included in AAB No. AB903-84 were qualified with an 'M', for possible matrix interference, for the compounds noted above.

5.3.2 **AAB No. AB925-42**

The solid LCS for this analytical batch generated recovery for 4-Chloroaniline at 22% (Limit 35-146). Samples FC-SB01-01DL and FC-SB02-01DL were qualified as 'R', unusable, for the non-detectable results for 4-Chloroaniline.

5.3.3 **AAB No. AB925-10**

Precision for the MS/MSD sample for benzoic acid was found to be out of specification at an RPD of 36% (Limit 30%). The soil samples included in AAB No. AB925-10 were qualified with an 'M', for possible matrix interference for benzoic acid.

5.4 Calibration

All initial and continuing calibration was performed within acceptable limits for RRF's, minimum RF's, %RSD, %R with respect to the expected value, and %D.

5.5 Blanks

5.5.1 **Field Blanks**

5.5.1.1 **AAB No. AB925-18**

Two equipment blanks were analyzed for the analytical batch. Positive results were not detected for the 8270B Semivolatile Organics.

5.5.1.2 **AAB No. AB925-4**

Three equipment blanks were analyzed for the analytical batch. Positive results were detected for di-n-butylphthalate in samples FC-WQ-EB-02 and FC-WQ-EB-03 at 2.62 ug/L and 1.76 ug/L, respectively. The results are reported at less than the PQL. The data was not qualified based upon these field blanks.

5.5.2 **Method Blanks**

5.5.2.1 **AAB Nos. AB903-84 and AB925-42**

One soil method blank was analyzed for each analytical batch. Semivolatile Organics were not detected.

5.5.2.2 **AAB Nos. AB925-10 and AB925-18**

One soil method blank and one water method blank were analyzed for the analytical batches. Semivolatile Organics were not detected.

5.5.2.3 **AAB Nos. AB925-4 and AB903-98**

One soil method blank and one water method blank were analyzed for the analytical batches. Semivolatile Organics were not detected.

5.6 GC/MS Instrument Performance Check

Instrument Performance was generated within acceptable limits and frequency for Decafluorotriphenylphosphine (DFTPP).

5.7 Internal Standards

All internal standards were generated within acceptable specifications for area counts and retention time variation.

5.8 Field Duplicates

5.8.1 AAB No. AB903-84

Samples FC-SB05-04 and FC-SB05-01 were collected as the field duplicate soil samples and analyzed for Semivolatile Organics. Acceptable precision was generated for the duplicate pair. Positive results were not detected for either sample.

5.8.2 AAB No. AB925-10

Samples FC-SB19-01 and FC-SB19-02 were collected as the field duplicate samples and analyzed for Semivolatile Organics. Acceptable precision was generated. Positive results were not detected for either sample.

5.8.3 AAB No. AB903-98

Samples FC-SB09-03 and FC-SB09-01 were collected as the field duplicate soil samples and analyzed for Semivolatile Organics. Positive results were not detected for either sample, therefore, acceptable precision was generated.

5.9 Compound Identification

GC/MS qualitative analyses are considered to be acceptable for the data set. Retention times and mass spectra were generated within appropriate quality control specifications.

5.10 Compound Quantitation and Reported Detection Limits

GC/MS quantitative analyses are considered to be acceptable. Sample dilutions, internal standards and response factors were found to be within acceptable limits.

6.0 PESTICIDES/PCBs BY GC

The following items/criteria were reviewed:

- Holding Times
- Surrogate Recovery
- MS/MSD
- LCS
- Initial and Continuing Calibration
- Blanks (Method and Field)
- Field Duplicates
- Compound Identification
- Compound Quantitation and Reported Detection Limits

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All of the data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form O-2's in Appendix D and within the following text.

6.1 Holding Time

All holding times were met within the acceptable time frame for extraction and analysis of the soil samples. Soil samples were extracted within 14 days of collection and analyzed within 40 days of extraction.

6.2 Surrogate Compound Recovery

All surrogate recovery was found to be generated within acceptable limits for the two surrogate compounds.

6.3 MS/MSD

One MS/MSD sample set for soils was analyzed for the project and an LCS was analyzed for each analytical batch. Acceptable accuracy and precision were generated for the quality control samples.

6.4 Calibration

All initial and continuing calibration was performed within acceptable limits for correlation coefficients of ≥ 0.990, %R with respect to the expected value, and %D.

6.5 Blanks

6.5.1 Field Blanks

Field blanks were not collected for Pesticides and PCBs analyzed by Method 8080A.

6.5.2 Method Blanks

6.5.2.1 AAB No. AB925-12

One soil method blank was analyzed for Pesticides and PCBs for the analytical batch. Positive results were not detected.

6.6 Field Duplicates

6.6.1 AAB No. AB925-12

Samples FC-SB19-01 and FC-SB19-02 were collected as the field duplicate soil samples and analyzed for Pesticides and PCBs. Positive results were not detected for either sample, therefore, acceptable precision was generated.

6.7 Compound Identification

GC qualitative analyses are considered to be acceptable for the data set. Data was generated within appropriate quality control specifications.

6.8 Compound Quantitation and Reported Detection Limits

GC quantitative analyses are considered to be acceptable. Sample dilutions and quality control criteria were found to be acceptable.

7.0 INORGANIC ANALYSES BY AA AND ICP
(Mercury by Cold Vapor)

The following items/criteria were reviewed:

- Holding Times
- Initial and Continuing Calibration
- Blanks (Initial, Continuing Calibration, and Method)
- Field Blanks
- ICP Interference Check Sample
- MS/MSD
- Field Duplicates
- LCS
- ICP Serial Dilution
- Sample Result Verification

All items above were generated within acceptable QC specifications, with deviations detailed as follows. All data is considered to be valid and usable with the appropriate qualifiers, as noted on the AFCEE Form I-2's in Appendix E and within the following text.

7.1 Holding Times

All holding times were met within the acceptable time frame from collection for Inorganics (180 days) and mercury (28 days).

7.2 Calibration

All initial and continuing calibration was performed within acceptable limits for correlation coefficients of ≥ 0.995 and percent recovery.

7.3 Blanks

7.3.1 Laboratory (Method) Blanks

All initial calibration, continuing calibration, and method blanks were generated in accordance with acceptable limits, with the following exceptions.

7.3.1.1 AAB No. 1027601002

Calcium was detected in the method blank at 262 ug/L. The three equipment blank samples associated with this method blank were qualified with a 'B', to denote a concentration of greater than the PQL of calcium in the associated method blank.

7.3.2 Field Blanks

7.3.2.1 AAB No. 1027601002

Three equipment blanks were analyzed for the analytical batch. Inorganics detected over the PQL are as follows.

Sample ID		
FC-WQ-EB-01 (10/22/96)	Sodium	655 ug/L
	Calcium	687 ug/L
	Iron	384 ug/L
FC-WQ-EB-02 (10/23/96)	Calcium	314 ug/L
FC-WQ-EB-03 (10/24/96)	Sodium	301 ug/L
	Calcium	275 ug/L

The samples associated with the equipment blanks above were qualified with a 'B', qualifier, for the compounds noted.

7.3.2.2 **AAB No. 1027742101**

Three equipment blanks were collected for the soil samples and analyzed for lead. Positive results were not detected for these equipment blanks.

7.3.2.3 **AAB No. 1031601001**

Two equipment blanks were collected for the soil samples and analyzed for Inorganics by Method 6010A. Inorganics detected over the PQL are as follows.

Sample ID		
FC-WQ-EB-04 (10/24/96)	Calcium	303 ug/L
	Iron	85 ug/L
FC-WQ-EB-05 (10/26/96)	Calcium	306 ug/L

The samples associated with the equipment blanks above were qualified with a 'B' qualifier for the compounds noted.

7.3.2.4 **AAB No. 1029747001**

Three equipment blanks were analyzed for the analytical batch. Mercury was detected in the equipment blanks as follows.

Sample ID		
FC-WQ-EB-01	Mercury	0.09 ug/L
FC-WQ-EB-02	Mercury	0.10 ug/L
FC-WQ-EB-03	Mercury	0.07 ug/L

The mercury results detected are all reported at less than the PQL. The samples were not qualified based upon these equipment blanks.

7.3.2.5 **AAB No. 1105742101**

Two equipment blanks were analyzed for the analytical batch. Lead was detected in FC-WQ-EB-05 at 2.05 ug/L. This result is less than the PQL, therefore, qualification of the associated samples is not required.

7.3.2.6 **AAB No. 1030747001**

Two equipment blanks were analyzed for the analytical batch. Mercury was not detected in either equipment blank.

7.4 **ICP Interference Check**

The recoveries for the ICP Interference Check samples were found to be within the acceptable 80-120% limit.

7.5 **MS/MSD**

All percent recoveries and relative percent difference for the MS/MSD samples were found to be acceptable, with the following exceptions.

7.5.1 **AAB No. 1030601001**

Sample ID			
FC-SB20-02 (mg/Kg)	Aluminum	33% RPD	(Limit 25%)
	Cadmium	79% R	(Limit 80-120)
	Calcium	53.5% RPD	
	Magnesium	46.7% RPD	
	Nickel	75.9% R	
		76.2% R	
	Potassium	149.2% R	
		177% R	
	Zinc	74.5% R	
		76% R	

The soil samples included in AAB No. 1030601001 were qualified with an 'M', for possible matrix interference for the Inorganics noted above.

7.5.2 **AAB No. 1106742101**

Sample ID			
FC-SB19-02 (mg/Kg)	Lead	64% R	(Limit 74-124)
		203% R	
		105% RPD	(Limit 25)

The samples included in AAB No. 1106742101 were qualified with an 'M', for possible matrix interference, due to poor accuracy and precision generated for the MS/MSD sample.

7.5.3 **AAB No. 1210601001**

Sample ID			
FC-SB20-02 (mg/Kg)	Antimony	66% R	(Limit 80-120)
		51% R	
		26% RPD	(Limit 25)

The samples included in AAB No. 1210601001 were qualified with an 'M', for possible matrix interference, due to poor accuracy and precision generated for the MS/MSD.

7.6 Field Duplicates

7.6.1 AAB Nos. 1030601001, 1106742101, and 1210601001

Samples FC-SB19-01 and FC-SB19-02 were collected as the field duplicate samples and analyzed for Inorganics. Acceptable precision was generated. Table 2 includes calculated precision for the duplicate pair.

7.7 Laboratory Control Sample (LCS)

The aqueous and solid laboratory control samples were generated within the acceptable limit of 80-120% for recovery.

7.8 ICP Serial Dilution

ICP Serial Dilution was found to be within the acceptable limit of ± 10% for the Inorganic analyses, with the following exceptions.

7.8.1 AAB No. 1030601001

Sample ID		
FC-SB20-02	Beryllium	13.4% D
(mg/Kg)	Calcium	880.0%

The samples were qualified as 'J', estimated, for the positive results for beryllium and calcium.

7.8.2 AAB No. 1028601001 (ID12056)

Sample ID		
FC-SB06-02	Selenium	57.4% D
(mg/Kg)		

The positive results for selenium for sample FC-SB06-02 were qualified as 'J', estimated. Positive results were not detected for selenium in the remaining associated samples.

7.8.3 AAB No. 1027601002

Sample ID		
FC-WQ-EB-03	Barium	19.9% D
(ug/L)	Beryllium	453.1%
	Chromium	96.8%
	Copper	80.3%
	Iron	33.7%
	Magnesium	13.2%
	Sodium	190.9%

Sample FC-WQ-EB-03 was qualified as 'J', estimated, for the Inorganics noted above.

7.8.4 **AAB No. 1031601001**

Sample ID

FC-WQ-EB-04 (ug/L)	Chromium	66.8% D
	Copper	56.8%
	Iron	35.4%

Sample FC-WQ-EB-04 was qualified as 'J', estimated, for the Inorganics noted above.

7.8.5 **AAB No. 1210601001**

Sample ID

FC-SB20-02 (mg/Kg)	Antimony	236.1% D

The samples associated with this analytical batch were qualified as 'J', estimated, for antimony.

7.8.6 **AAB No. 1119601003**

Sample ID

FC-SB06-02 (mg/Kg)	Zinc	55.5% D

The samples associated with this analytical batch were qualified as 'J', estimated, for zinc.

7.9 **Sample Result Verification**

Quantitative analyses are considered to be acceptable for the data set. Analyte quantitation was generated in accordance with protocols.

TABLE 1

FIELD DUPLICATE SAMPLE ANALYSIS

PRECISION FOR VOLATILES

RV and FAM CAMP Project

Results in mg/Kg (ppm)

Parameter	FC-SB05-04	FC-SB05-01	RPD**
Benzene	0.0003	ND	++
Toluene	0.0034	0.0013	89%
Ethyl Benzene	0.0004	ND	++
m,p-Xylenes	0.0009	ND	++
o-Xylenes	0.0004	ND	++
Methyl tert-butylether	ND	0.0018	++

** Relative Percent Difference (Calculated Precision)
ND Not Detected
++ Unable to be calculated due to non-detected results

TABLE 2

FIELD DUPLICATE SAMPLE ANALYSIS

PRECISION FOR INORGANICS

RV and FAM CAMP Project

Results in mg/Kg (ppm)

Parameter	FC-SB19-01	FC-SB19-02	RPD**
Aluminum	6161	5778	6%
Antimony	1.17	1.05	11%
Arsenic	3.42	3.26	5%
Barium	28.29	27.50	3%
Beryllium	0.33	0.30	10%
Cadmium	0.09	0.06	40%
Calcium	584845	573163	2%
Chromium	7.65	6.86	11%
Cobalt	1.65	1.76	6%
Copper	1.70	1.70	0%
Iron	5857	5794	1%
Lead	4.21	5.50	27%
Magnesium	1813	1776	2%
Manganese	65.96	76.04	14%
Mercury	0.04	ND	++
Nickel	5.05	4.82	5%
Potassium	1005	941	7%
Selenium	ND	ND	++
Silver	ND	ND	++
Sodium	110	99.72	10%
Thallium	ND	ND	++
Vanadium	18.06	17.91	1%
Zinc	8.42	6.97	19%

** Relative Percent Difference (Calculated Precision)
ND Not Detected
++ Unable to be calculated due to non-detected results

APPENDIX A

DATA SUMMARY FORMS

VOLATILE ORGANICS

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0301

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-1

Lab File ID: 30OCT1137029 Date Received: 10/23/96

% Solids: 83.4 ~~Date Extracted:10/30/96~~

Dilution Factor: 250.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0600	U
Toluene	0.0004	0.002	0.4300	
Ethyl benzene	0.0004	0.002	1.1200	
m.p.-xylenes	0.0007	0.002	3.1700	
o-Xylenes	0.0004	0.002	0.8290	
Methyl tert-Butyl Ether	0.0004	0.002	0.0899	U

COMMENTS: Results from the primary and secondary columns did not agree within 50% of each other for toluene, ethyl benzene, m.p.-xylenes, and o-Xylenes. The lower results were reported.

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0303

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-3

Lab File ID: 29OCT2119029 Date Received: 10/23/96

% Solids: 79.6 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0003	0.002	0.0003	U
Toluene	0.0004	0.002	0.0009	F
Ethyl benzene	0.0004	0.002	0.0017	F
m.p.-xylenes	0.0008	0.002	0.0014	F
o-Xylenes	0.0004	0.002	0.0009	F
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

O-2
8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0101

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-4

Lab File ID: 30OCT1421029 Date Received: 10/23/96

% Solids: 84.5 ~~Date Extracted: 10/30/96~~

Dilution Factor: 5.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0012	U
Toluene	0.0004	0.002	0.0136	
Ethyl benzene	0.0004	0.002	0.0259	
m.p.-xylenes	0.0007	0.002	0.0906	
o-Xylenes	0.0004	0.002	0.0018	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0018	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0103

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-6

Lab File ID: 29OCT1723029 Date Received: 10/23/96

% Solids: 86.4 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0201

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-7

Lab File ID: 30OCT0114029 Date Received: 10/23/96

% Solids: 91.3 ~~Date Extracted:10/30/96~~

Dilution Factor: 50.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0110	U
Toluene	0.0003	0.002	0.0431	
Ethyl benzene	0.0003	0.002	0.0829	
m.p.-xylenes	0.0007	0.002	0.4170	
o-Xylenes	0.0003	0.002	0.1130	
Methyl tert-Butyl Ether	0.0003	0.002	0.0164	U

COMMENTS: Results from the primary and secondary columns did not agree within 50% RPD of each other for ethyl benzene, m.p.-xylenes. Therefore the lower results were reported from the confirmation column.

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0202

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-8

Lab File ID: 30OCT1311029 Date Received: 10/23/96

% Solids: 91.0 ~~Date Extracted:10/29/96~~

Dilution Factor: 25.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0055	U
Toluene	0.0003	0.002	0.0121	
Ethyl benzene	0.0003	0.002	0.0741	
m.p.-xylenes	0.0007	0.002	0.3320	
o-Xylenes	0.0003	0.002	0.0321	
Methyl tert-Butyl Ether	0.0003	0.002	0.0082	U

COMMENTS: Results from the primary and secondary columns did not agree within 50% of each other for ethyl benzene, o-xylenes. Therefore the lower results were reported.

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0203

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-9

Lab File ID: 29OCT2206029 Date Received: 10/23/96

% Solids: 85.7 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0004	U
Ethyl benzene	0.0004	0.002	0.0005	F
m.p.-xylenes	0.0007	0.002	0.0012	F
o-Xylenes	0.0004	0.002	0.0004	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0401

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-10

Lab File ID: 29OCT1636029 Date Received: 10/24/96

% Solids: 88.2 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0015	F
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	F
o-Xylenes	0.0003	0.002	0.0004	F
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0501

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-12

Lab File ID: 29OCT1659029 Date Received: 10/24/96

% Solids: 92.0 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0013	F
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0018	F

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0503

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-14

Lab File ID: 29OCT2143029 Date Received: 10/24/96

% Solids: 88.0 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0006	F
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0006	F
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0504

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-15

Lab File ID: 30OCT0813029 Date Received: 10/24/96

% Solids: 92.0 ~~Date Extracted~~:10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0003	F
Toluene	0.0003	0.002	0.0034	
Ethyl benzene	0.0003	0.002	0.0004	F
m.p.-xylenes	0.0007	0.002	0.0009	F
o-Xylenes	0.0003	0.002	0.0004	F
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0601

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-16

Lab File ID: 29OCT1837029 Date Received: 10/24/96

% Solids: 81.5 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0006	F
Ethyl benzene	0.0004	0.002	0.0004	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0004	0.002	0.0004	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0602

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-17

Lab File ID: 29OCT1924029 Date Received: 10/24/96

% Solids: 81.8 ~~Date Extracted:~~ 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0004	U
Ethyl benzene	0.0004	0.002	0.0004	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0004	0.002	0.0004	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0603

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-18

Lab File ID: 29OCT1900029 Date Received: 10/23/96

% Solids: 85.2 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0004	U
Ethyl benzene	0.0004	0.002	0.0004	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0004	0.002	0.0004	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0901

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-8

Lab File ID: 01NOV1731101 Date Received: 10/25/96

% Solids: 87.7 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

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FIELD SAMPLE ID.

FCSB0902

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-9

Lab File ID: 01NOV1754101 Date Received: 10/25/96

% Solids: 83.6 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0004	U
Ethyl benzene	0.0004	0.002	0.0004	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0004	0.002	0.0004	U
Methyl tert-Butyl Ether	0.0004	0.002	0.0004	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0903

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-10

Lab File ID: 02NOV1002101 Date Received: 10/25/96

% Solids: 87.8 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/02/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1002

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-11

Lab File ID: 02NOV1027101 Date Received: 10/25/96

% Solids: 89.5 ~~Date Extracted:11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/02/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1001

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-12

Lab File ID: 01NOV1927101 Date Received: 10/25/96

% Solids: 90.1 ~~Date Extracted:~~ 11/01/96

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1101

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031802001

Matrix: (soil/water) SOIL Lab Sample ID: 12170-13

Lab File ID: 31OCT2250031 Date Received: 10/26/96

% Solids: 93.1 ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0006	0.002	0.0006	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1102

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031802001

Matrix: (soil/water) SOIL Lab Sample ID: 12170-14

Lab File ID: 31OCT2119031 Date Received: 10/26/96

% Solids: 85.5 ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0004	0.002	0.0007	F
Ethyl benzene	0.0004	0.002	0.0020	
m.p.-xylenes	0.0007	0.002	0.0018	F
o-Xylenes	0.0004	0.002	0.0009	F
Methyl tert-Butyl Ether	0.0004	0.002	0.0020	

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1201

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031802001

Matrix: (soil/water) SOIL Lab Sample ID: 12170-18

Lab File ID: 31OCT2227031 Date Received: 10/26/96

% Solids: 92.3 ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0003	F
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0007	0.002	0.0007	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0006	F

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1202

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031802001

Matrix: (soil/water) SOIL Lab Sample ID: 12170-19

Lab File ID: 01NOV1133031 Date Received: 10/26/96

% Solids: 84.7 ~~Date Extracted: 11/01/96~~

Dilution Factor: 250.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.4540	
Toluene	0.0004	0.002	45.2000	
Ethyl benzene	0.0004	0.002	19.7000	
m.p.-xylenes	0.0007	0.002	48.1000	
o-Xylenes	0.0004	0.002	17.7000	
Methyl tert-Butyl Ether	0.0004	0.002	0.0885	U

APPENDIX B

DATA SUMMARY FORMS

TPH as GASOLINE and TPH as DIESEL

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1101

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-13

Lab File ID: 31OCT2250031 Date Received: 10/26/96

% Solids: 93.1 ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.04	1.0	0.04	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 418

FIELD SAMPLE ID.

FCSB1102

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-14

Lab File ID: 31OCT2119031 Date Received: 10/26/96

% Solids: 85.5 ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.05	1.0	0.25	F

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1103

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-15

Lab File ID: 01NOV0023031 Date Received: 10/26/96

% Solids: 83.8 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1000.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.05	1.0	538.00	

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1201

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-18

Lab File ID: 31OCT2227031 Date Received: 10/26/96

% Solids: 92.3 ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.04	1.0	0.04	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1202

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-19

Lab File ID: 01NOV1133031 Date Received: 10/26/96

% Solids: 84.7 ~~Date Extracted: 11/01/96~~

Dilution Factor: 250.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.05	1.0	674.00	

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1203

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Lab Sample ID: 12170-20

Lab File ID: 01NOV0109031 Date Received: 10/26/96

% Solids: 81.1 ~~Date Extracted: 11/01/96~~

Dilution Factor: 250.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.05	1.0	330.00	

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCWQEB05

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801501

Matrix: (soil/water) WATER Lab Sample ID: 12170-17

Lab File ID: 01NOV1738101 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0301

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-1

Lab File ID: 30OCT1137029 Date Received: 10/23/96

% Solids: 83.4 ~~Date Extracted: 10/30/96~~

Dilution Factor: 500 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.048	1.00	396.000	✓

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0302

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-2

Lab File ID: 29OCT2341029 Date Received: 10/23/96

% Solids: 85.1 ~~Date Extracted: 10/29/96~~

Dilution Factor: 250.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.047	1.00	325.000	

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0303

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-3

Lab File ID: 29OCT2119029 Date Received: 10/23/96

% Solids: 79.6 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.050	1.00	0.300	F

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 427

FIELD SAMPLE ID.

FCSB0101

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-4

Lab File ID: 30OCT0224029 Date Received: 10/23/96

% Solids: 84.5 ~~Date Extracted: 10/30/96~~

Dilution Factor: 50.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.047	1.00	41.800	

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 426

FIELD SAMPLE ID.

FCSB0102

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-5

Lab File ID: 30OCT1114029 Date Received: 10/23/96

% Solids: 87.7 ~~Date Extracted:10/30/96~~

Dilution Factor: 5.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.046	1.00	4.870	

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 429

FIELD SAMPLE ID.

FCSB0103

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-6

Lab File ID: 29OCT1723029 Date Received: 10/23/96

% Solids: 86.4 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.046	1.00	0.046	U

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0201

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-7

Lab File ID: 30OCT0114029 Date Received: 10/23/96

% Solids: 91.3 ~~Date Extracted:10/30/96~~

Dilution Factor: 50.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.044	1.00	34.000	

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0202

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-8

Lab File ID: 30OCT1311029 Date Received: 10/23/96

% Solids: 91.0 ~~Date Extracted:10/30/96~~ e

Dilution Factor: 25.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.044	1.00	23.100	

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 432

FIELD SAMPLE ID.

FCSB0203

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-9

Lab File ID: 29OCT2206029 Date Received: 10/23/96

% Solids: 85.7 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.047	1.00	0.254	F

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0401

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-10

Lab File ID: 29OCT1636029 Date Received: 10/24/96

% Solids: 88.2 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.045	1.00	0.045	U

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0402

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-11

Lab File ID: 29OCT1814029 Date Received: 10/24/96

% Solids: 88.8 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.045	1.00	0.045	U

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0501

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-12

Lab File ID: 29OCT1659029 Date Received: 10/24/96

% Solids: 92.0 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.043	1.00	0.043	U

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 436

FIELD SAMPLE ID.

FCSB0502

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-13

Lab File ID: 30OCT0005029 Date Received: 10/24/96

% Solids: 84.5 ~~Date Extracted:10/30/96~~

Dilution Factor: 250.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.047	1.00	151.000	

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0503

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-14

Lab File ID: 29OCT2143029 Date Received: 10/24/96

% Solids: 88.0 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.045	1.00	0.180	

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 438

FIELD SAMPLE ID.

FCSB0504

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-15

Lab File ID: 30OCT0813029 Date Received: 10/24/96

% Solids: 92.0 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.043	1.00	0.043	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 439

FIELD SAMPLE ID:

FCSB0601

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-16

Lab File ID: 29OCT1837029 Date Received: 10/24/96

% Solids: 81.5 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.049	1.00	0.049	U

O-2

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FCSB0602

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-17

Lab File ID: 29OCT1924029 Date Received: 10/24/96

% Solids: 81.8 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.049	1.00	0.049	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 441

FIELD SAMPLE ID.

FCSB0603

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Lab Sample ID: 12056-18

Lab File ID: 29OCT1900029 Date Received: 10/23/96

% Solids: 85.2 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.047	1.00	0.050	F

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCWQEB01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1028801501

Matrix: (soil/water) WATER Lab Sample ID: 12092-1

Lab File ID: 28OCT1604028 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:10/28/96~~

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCWQEB02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1028801501

Matrix: (soil/water) WATER Lab Sample ID: 12092-4

Lab File ID: 28OCT1625028 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:~~ 10/28/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCWQEB03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1028801501

Matrix: (soil/water) WATER Lab Sample ID: 12092-13

Lab File ID: 28OCT1645028 Date Received: 10/25/96

% Solids: NA ~~Date Extracted:10/28/96~~

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FCSB0701

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-6

Lab File ID: 01NOV1644101 Date Received: 10/25/96

% Solids: 83.4 ~~Date Extracted:~~ 11/01/96

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.048	1.00	0.048	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FCSB0801

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-7

Lab File ID: 01NOV1708101 Date Received: 10/25/96

% Solids: 92.2 ~~Date Extracted:11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.043	1.00	0.043	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FCSB0901

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-8

Lab File ID: 01NOV1731101 Date Received: 10/25/96

% Solids: 87.7 ~~Date Extracted:11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.046	1.00	0.046	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0902

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-9

Lab File ID: 01NOV1754101 Date Received: 10/25/96

% Solids: 83.6 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.048	1.00	0.048	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB0903

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-10

Lab File ID: 02NOV1002101 Date Received: 10/25/96

% Solids: 87.8 ~~Date Extracted: 11/02/96~~

Dilution Factor: 1.0 Date Analyzed: 11/02/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.046	1.00	0.046	U

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8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1002

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-11

Lab File ID: 02NOV1027101 Date Received: 10/25/96

% Solids: 89.5 ~~Date Extracted: 11/02/96~~

Dilution Factor: 1.0 Date Analyzed: 11/02/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.045	1.00	0.045	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FCSB1001

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Lab Sample ID: 12092-12

Lab File ID: 01NOV1927101 Date Received: 10/25/96

% Solids: 90.1 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.044	1.00	0.044	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB03-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-1

Lab File ID: 28OCT1414030 Date Received: 10/23/96

% Solids: 83.4 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.39	10.0	662.00	

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB03-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-2

Lab File ID: 28OCT1857030 Date Received: 10/23/96

% Solids: 85.1 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.35	10.0	1000.00	

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB03-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-3

Lab File ID: 28OCT1928030 Date Received: 10/23/96

% Solids: 79.6 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.51	10.0	3.15	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB01-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-4

Lab File ID: 29OCT1916029 Date Received: 10/23/96

% Solids: 84.5 Date Extracted: 10/25/96

Dilution Factor: 5.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	11.85	10.0	2830.00	J

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB01-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-5

Lab File ID: 28OCT2031030 Date Received: 10/23/96

% Solids: 87.7 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.28	10.0	271.00	

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB01-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-6

Lab File ID: 28OCT2102030 Date Received: 10/23/96

% Solids: 86.4 Date Extracted:10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.32	10.0	2.99	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FC-SB02-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-7

Lab File ID: 29OCT1947029 Date Received: 10/23/96

% Solids: 91.3 Date Extracted: 10/25/96

Dilution Factor: 5.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	11.00	10.0	1710.00	J

AFCEE O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB02-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-8

Lab File ID: 28OCT2205030 Date Received: 10/23/96

% Solids: 91.0 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.20	10.0	892.00	J

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB02-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-9

Lab File ID: 28OCT1137028 Date Received: 10/23/96

% Solids: 85.7 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.33	10.0	27.20	

8015M DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB04-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-10

Lab File ID: 28OCT1208028 Date Received: 10/24/96

% Solids: 88.2 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.26	10.0	3.08	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB04-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-11

Lab File ID: 28OCT1239028 Date Received: 10/24/96

% Solids: 88.8 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.25	10.0	2.55	F

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8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-12

Lab File ID: 28OCT1311028 Date Received: 10/24/96

% Solids: 92.0 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.17	10.0	5.07	F

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8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-13

Lab File ID: 28OCT1342028 Date Received: 10/24/96

% Solids: 84.5 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.37	10.0	528.00	

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8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-14

Lab File ID: 28OCT1414028 Date Received: 10/24/96

% Solids: 88.0 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.27	10.0	3.84	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 466

FC-SB05-04

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-15

Lab File ID: 28OCT1445028 Date Received: 10/24/96

% Solids: 92.0 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.17	10.0	12.80	

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

439 467

FIELD SAMPLE ID.

FC-SB06-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-16

Lab File ID: 28OCT1517028 Date Received: 10/24/96

% Solids: 81.5 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.45	10.0	2.87	F

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB06-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-17

Lab File ID: 28OCT1548028 Date Received: 10/24/96

% Solids: 81.8 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.44	10.0	3.51	F

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB06-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Lab Sample ID: 12056-18

Lab File ID: 28OCT1754028 Date Received: 10/24/96

% Solids: 85.2 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.35	10.0	3.65	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-91

Matrix: (soil/water) WATER Lab Sample ID: 12092-1

Lab File ID: 29OCT1537029 Date Received: 10/23/96

% Solids: NA Date Extracted: 10/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.0	1000	30.0	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

429 471

FIELD SAMPLE ID.

FC-WQ-EB-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-91

Matrix: (soil/water) WATER Lab Sample ID: 12092-4

Lab File ID: 29OCT1608029 Date Received: 10/23/96

% Solids: NA Date Extracted: 10/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.0	1000	33.0	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-91

Matrix: (soil/water) WATER Lab Sample ID: 12092-13

Lab File ID: 29OCT1639029 Date Received: 10/25/96

% Solids: NA Date Extracted: 10/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.0	1000	68.0	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FCSB07-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 12092-6

Lab File ID: 29OCT0010028 Date Received: 09/25/96

% Solids: 83.4 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.40	10.0	2.40	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB08-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-7

Lab File ID: 29OCT0041028 Date Received: 09/25/96

% Solids: 92.2 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.17	10.0	2.17	U

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB09-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-8

Lab File ID: 29OCT0111028 Date Received: 09/25/96

% Solids: 87.7 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.28	10.0	2.28	U

FC-SB09-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-9

Lab File ID: 29OCT0142028 Date Received: 09/25/96

% Solids: 83.6 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.39	10.0	2.39	U

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SBD09-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-10

Lab File ID: 29OCT0212028 Date Received: 09/25/96

% Solids: 87.8 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.28	10.0	2.28	U

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB10-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-11

Lab File ID: 29OCT0243028 Date Received: 09/25/96

% Solids: 89.5 Date Extracted:09/2896

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.23	10.0	2.23	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB10-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Lab Sample ID: 10292-12

Lab File ID: 29OCT0313028 Date Received: 09/25/96

% Solids: 90.1 Date Extracted: 09/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.22	10.0	2.22	U

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-05

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-19

Matrix: (soil/water) WATER Lab Sample ID: 12170-17

Lab File ID: 31OCT0931031 Date Received: 10/26/96

% Solids: NA Date Extracted: 10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.00	1000.0	126.00	F

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 481

FC-SB11-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-13

Lab File ID: 30OCT1602030 Date Received: 10/26/96

% Solids: 93.1 Date Extracted: 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.15	10.0	2.15	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB11-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-14

Lab File ID: 30OCT1634030 Date Received: 10/26/96

% Solids: 85.5 Date Extracted: 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.34	10.0	2.34	U

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

429 483

FIELD SAMPLE ID.

FC-SB11-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-15

Lab File ID: 30OCT1705030 Date Received: 10/26/96

% Solids: 83.8 Date Extracted: 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.39	10.0	77.30	

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8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-18

Lab File ID: 30OCT1737030 Date Received: 10/26/96

% Solids: 92.3 Date Extracted: 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.17	10.0	2.76	F

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-19

Lab File ID: 30OCT1808030 Date Received: 10/26/96

% Solids: 84.7 Date Extracted:10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.36	10.0	248.00	

O-2

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Lab Sample ID: 12170-20

Lab File ID: 30OCT1839030 Date Received: 10/26/96

% Solids: 81.1 Date Extracted: 10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.47	10.0	68.10	

8240 BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-21

Lab File ID: BB7560301003 Date Received: 10/26/96

% Solids: 100 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0010	0.005	0.0010	U
1,1,2,2-Tetrachloroethane	0.0020	0.005	0.0020	U
1,1,2-Trichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethene	0.0010	0.005	0.0010	U
1,2,3-Trichloropropane	0.9000	5.000	0.9000	U
1,2-Dichloroethane	0.0010	0.005	0.0010	U
1,2-Dichloropropane	0.0010	0.005	0.0010	U
Methyl ethyl ketone	0.0030	0.100	0.0030	U
2-Chloroethyl vinyl ether	0.0020	0.010	0.0020	U
2-Hexanone	0.0030	0.050	0.0030	U
Methyl isobutyl ketone	0.0020	0.050	0.0020	U
Acetone	0.0020	0.100	0.0020	U
Benzene	0.0010	0.005	0.0010	U
Bromodichloromethane	0.0010	0.005	0.0010	U
Bromoform	0.0010	0.005	0.0010	U
Bromomethane	0.0030	0.010	0.0030	U
Carbon disulfide	0.0010	0.005	0.0010	U
Carbon tetrachloride	0.0050	0.005	0.0050	U
Chlorobenzene	0.0010	0.005	0.0010	U
Chloroethane	0.0020	0.010	0.0020	U
Chloroform	0.0010	0.005	0.0010	U
Chloromethane	0.0010	0.010	0.0010	U
cis 1,2-Dichloroethene	0.0020	0.005	0.0020	U
cis 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Chlorodibromomethane	0.0010	0.005	0.0010	U
Ethylbenzene	0.0020	0.005	0.0020	U
Methylene chloride	0.0020	0.005	0.0020	U
Styrene	0.0020	0.005	0.0020	U
Trichloroethene	0.0010	0.005	0.0010	U
Tetrachloroethene	0.0030	0.005	0.0030	U
Toluene	0.0010	0.005	0.0010	U
trans 1,2-Dichloroethene	0.0020	0.005	0.0020	U

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8240 BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12092-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-21

Lab File ID: BB7560301003 Date Received: 10/26/96

% Solids: 100 Date Extracted: 10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Vinyl acetate	0.0120	0.050	0.0120	U
Vinyl chloride	0.0010	0.010	0.0010	U
m,p-Xylene	0.0040	0.005	0.0040	U
o-Xylene	0.0040	0.005	0.0040	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-26

Lab File ID: DD7371201012 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U

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8240 ANALYSIS DATA SHEET

429 490

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-26

Lab File ID: DD7371201012 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U
2-Butanone	7.68	100.0	7.68	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U

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8240 BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-17

Lab File ID: DD7371201012 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

1251-2

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8240 BLANK ORGANIC ANALYSIS DATA SHEET

429 . 492

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-16

Lab File ID: DD7371201012 Date Received: 10/25/96

% Solids: NA ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610 ID/3103

Lab Code: ITS-DALLAS

AAB No.: V12092

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-15

Lab File ID: BB7560301003

Date Received: 10/26/96

% Solids: 100

~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0010	0.005	0.0010	U
1,1,2,2-Tetrachloroethane	0.0020	0.005	0.0020	U
1,1,2-Trichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethene	0.0010	0.005	0.0010	U
1,2,3-Trichloropropane	0.0010	0.005	0.0010	U
1,2-Dichloroethane	0.0010	0.005	0.0010	U
1,2-Dichloropropane	0.0010	0.005	0.0010	U
Methyl ethyl ketone	0.0030	0.100	0.0030	U
2-Chloroethyl vinyl ether	0.0020	0.010	0.0020	U
2-Hexanone	0.0030	0.050	0.0030	U
Methyl isobutyl ketone	0.0020	0.050	0.0020	U
Acetone	0.0020	0.100	0.0020	U
Benzene	0.0010	0.005	0.0010	U
Bromodichloromethane	0.0010	0.005	0.0010	U
Bromoform	0.0010	0.005	0.0010	U
Bromomethane	0.0030	0.010	0.0030	U
Carbon disulfide	0.0010	0.005	0.0010	U
Carbon tetrachloride	0.0050	0.005	0.0050	U
Chlorobenzene	0.0010	0.005	0.0010	U
Chloroethane	0.0020	0.010	0.0020	U
Chloroform	0.0010	0.005	0.0010	U
Chloromethane	0.0010	0.010	0.0010	U
cis 1,2-Dichloroethene	0.0020	0.005	0.0020	U
cis 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Chlorodibromomethane	0.0010	0.005	0.0010	U
Ethylbenzene	0.0020	0.005	0.0020	U
Methylene chloride	0.0020	0.005	0.0020	U
Styrene	0.0020	0.005	0.0020	U
Trichloroethene	0.0010	0.005	0.0010	U
Tetrachloroethene	0.0030	0.005	0.0030	U
Toluene	0.0010	0.005	0.0010	U
trans 1,2-Dichloroethene	0.0020	0.005	0.0020	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610 ID/3103

Lab Code: ITS-DALLAS

AAB No.: V12092

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-15

Lab File ID: BB7560301003

Date Received: 10/26/96

% Solids: 100

~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Vinyl acetate	0.0120	0.050	0.0120	U
Vinyl chloride	0.0010	0.010	0.0010	U
m,p-Xylene	0.0040	0.005	0.0040	U
o-Xylene	0.0040	0.005	0.0040	U

8240 BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-19

Lab File ID: BB7560301003 Date Received: 10/24/96

% Solids: 100 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0010	0.005	0.0010	U
1,1,2,2-Tetrachloroethane	0.0020	0.005	0.0020	U
1,1,2-Trichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethane	0.0010	0.005	0.0010	U
1,1-Dichloroethene	0.0010	0.005	0.0010	U
1,2,3-Trichloropropane	0.0010	0.005	0.0010	U
1,2-Dichloroethane	0.0010	0.005	0.0010	U
1,2-Dichloropropane	0.0010	0.005	0.0010	U
Methyl ethyl ketone	0.0030	0.100	0.0030	U
2-Chloroethyl vinyl ether	0.0020	0.010	0.0020	U
2-Hexanone	0.0030	0.050	0.0030	U
Methyl isobutyl ketone	0.0020	0.050	0.0020	U
Acetone	0.0020	0.100	0.0020	U
Benzene	0.0010	0.005	0.0010	U
Bromodichloromethane	0.0010	0.005	0.0010	U
Bromoform	0.0010	0.005	0.0010	U
Bromomethane	0.0030	0.010	0.0030	U
Carbon disulfide	0.0010	0.005	0.0010	U
Carbon tetrachloride	0.0050	0.005	0.0050	U
Chlorobenzene	0.0010	0.005	0.0010	U
Chloroethane	0.0020	0.010	0.0020	U
Chloroform	0.0010	0.005	0.0010	U
Chloromethane	0.0010	0.010	0.0010	U
cis 1,2-Dichloroethene	0.0020	0.005	0.0020	U
cis 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Chlorodibromomethane	0.0010	0.005	0.0010	U
Ethylbenzene	0.0020	0.005	0.0020	U
Methylene chloride	0.0020	0.005	0.0020	U
Styrene	0.0020	0.005	0.0020	U
Trichloroethene	0.0010	0.005	0.0010	U
Tetrachloroethene	0.0030	0.005	0.0030	U
Toluene	0.0010	0.005	0.0010	U
trans 1,2-Dichloroethene	0.0020	0.005	0.0020	U

8240 BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

METHOD BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-19

Lab File ID: BB7560301003 Date Received: 10/24/96

% Solids: 100 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0010	0.005	0.0010	U
Vinyl acetate	0.0120	0.050	0.0120	U
Vinyl chloride	0.0010	0.010	0.0010	U
m,p-Xylene	0.0040	0.005	0.0040	U
o-Xylene	0.0040	0.005	0.0040	U

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8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029802001

Matrix: (soil/water) SOIL Lab Sample ID: 12056-19

Lab File ID: 29OCT1611029 Date Received: 10/24/96

% Solids: 100.0 ~~Date Extracted:10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0006	0.002	0.0006	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

O-6

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101802001

Matrix: (soil/water) SOIL Lab Sample ID: 12092-15

Lab File ID: 01NOV1927101 Date Received: 10/25/96

% Solids: 100 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0006	0.002	0.0006	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

O-6

8020 ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031802001

Matrix: (soil/water) SOIL Method Blank ID: 12170-21

Lab File ID: 31OCT1406031 Date Received: 10/26/96

% Solids: 100 ~~Date Extracted:~~ 10/31/96

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Benzene	0.0002	0.002	0.0002	U
Toluene	0.0003	0.002	0.0003	U
Ethyl benzene	0.0003	0.002	0.0003	U
m.p.-xylenes	0.0006	0.002	0.0006	U
o-Xylenes	0.0003	0.002	0.0003	U
Methyl tert-Butyl Ether	0.0003	0.002	0.0003	U

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1031801501

Matrix: (soil/water) SOIL Method Blank ID: BLANK

Lab File ID: 31OCT1406031 Date Received: 10/26/96

% Solids: 100 ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.04	1.0	0.04	U

O-6

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 . 501

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801501

Matrix: (soil/water) WATER Method Blank ID: BLANK

Lab File ID: 01NOV1421101 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

O-6

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1029801501

Matrix: (soil/water) SOIL Method Blank ID: 12056-19

Lab File ID: 29OCT1611029 Date Received: 10/24/96

% Solids: 100 ~~Date Extracted: 10/29/96~~

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.040	1.00	0.040	U

O-6

8015M_GRO ORGANICS ANALYSIS DATA SHEET

429 . 503

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1028801501

Matrix: (soil/water) WATER Method Blank ID: BLANK

Lab File ID: 28OCT1239028 Date Received: 10/25/96

% Solids: NA ~~Date Extracted:10/28/96~~

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	6.0	100.	6.0	U

O-6

8015M_GRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLANK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ\3103

Lab Code: DALLAS AAB No.: 1101801502

Matrix: (soil/water) SOIL Method Blank ID: 12092-15

Lab File ID: 01NOV1453101 Date Received: 10/25/96

% Solids: 100 ~~Date Extracted: 11/01/96~~

Dilution Factor: 1.0 Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS GASOLINE	0.040	1.00	0.040	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-85

Matrix: (soil/water) SOIL Method Blank ID: BLK

Lab File ID: 28OCT1137030 Date Received: 10/23/96

% Solids: 100 Date Extracted: 10/25/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.00	10.0	2.00	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 506

BLK

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-91

Matrix: (soil/water) WATER Method Blank ID: BLK

Lab File ID: 29OCT0919029 Date Received: 10/23/96

% Solids: NA Date Extracted:10/28/96

Dilution Factor: 1.0 Date Analyzed: 10/29/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.0	1000	30.0	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 507

BLK

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB903-96

Matrix: (soil/water) SOIL Method Blank ID: BLK

Lab File ID: 28OCT1620028 Date Received: 09/20/96

% Solids: 100 Date Extracted: 09/23/96

Dilution Factor: 1.0 Date Analyzed: 10/28/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.00	10.0	2.00	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 508

BLK

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-19

Matrix: (soil/water) WATER Method Blank ID: BLK

Lab File ID: 31OCT0729031 Date Received: 10/26/96

% Solids: NA Date Extracted: 10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	30.00	1000.0	30.00	U

8015M_DRO ORGANICS ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 509

BLK

Lab Name: INCHCAPE TESTING SERVICES Contract: 96101IDIQ/3103

Lab Code: ITS-DALLAS AAB No.: AB925-13

Matrix: (soil/water) SOIL Method Blank ID: BLK

Lab File ID: 30OCT122330 Date Received: 10/26/96

% Solids: 100 Date Extracted:10/29/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
TPH AS DIESEL	2.00	10.0	2.00	U

DATA VALIDATION REPORT

ORGANIC AND INORGANIC ANALYSES

Recreation Vehicle (RV) and Family Camping (FAM CAMP) Area Project

Naval Air Station Fort Worth
Carswell Field, Texas

AFCEE Analytical Batch Numbers:

V12170, V12092, V12056, 1029802001, 1101802001, 1031802001, 1031801501, 1101801501, 1029801501, 1028801501, 1101801502, AB903-85, AB903-91, AB903-96, AB925-19, AB925-13, AB903-84, AB925-42, AB925-10, AB925-18, AB925-4, AB903-98, AB925-12, 1030601001, 1028601001, 1027601002, 1106742101, 1027742101, 1031601001, 1210601001, 1119601003, 1028747101, 1029747001, 1031747101, 1105742101, and 1030747001

Sampling Dates of October 22 - 26, 1996

VOLUME 2 of 2

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RV and FAM CAMP Project
Data Validation Report: Organic and Inorganic Analyses

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G Case Narratives
H Chain-of-Custody Forms

APPENDIX C

DATA SUMMARY FORMS

SEMIVOLATILE ORGANICS

8270B ANALYSIS DATA SHEET

FC-SB03-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-1

Lab File ID: FD974

Date Received: 10/23/96

% Solids: 83

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	3.28	
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.48	1.3	0.48	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U

Revised

1100

FIELD SAMPLE ID:

8270B ANALYSIS DATA SHEET

429 515

FC-SB03-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-1

Lab File ID: FD974

Date Received: 10/23/96

% Solids: 83

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.36	0.7	0.36	U
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	1.58	
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U M
2,4-Dinitrophenol	0.24	3.3	0.24	U M
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.36	1.6	0.36	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

Revised

O-2
8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB03-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-2

Lab File ID: FD975

Date Received: 10/23/96

% Solids: 85

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.35	0.7	0.35	U
1,2-Dichlorobenzene	0.35	0.7	0.35	U
1,3-Dichlorobenzene	0.35	0.7	0.35	U
1,4-Dichlorobenzene	0.35	0.7	0.35	U
2,4-Dinitrotoluene	0.35	0.7	0.35	U
2,6-Dinitrotoluene	0.35	0.7	0.35	U
2-Chloronaphthalene	0.35	0.7	0.35	U
2-Methylnaphthalene	0.35	0.7	4.32	
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.47	1.3	0.47	U
4-Bromophenyl phenyl ether	0.35	0.7	0.35	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.35	0.7	0.35	U
4-Nitroaniline	0.35	3.3	0.35	U
Acenaphthylene	0.35	0.7	0.35	U
Acenaphthene	0.35	0.7	0.35	U
Anthracene	0.35	0.7	0.35	U
Benzo(a)anthracene	0.35	0.7	0.35	U
Benzo(a)pyrene	0.35	0.7	0.35	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.35	0.7	0.35	U
Benzo(k)fluoranthene	0.35	0.7	0.35	U
Benzo(g,h,i)perylene	0.28	0.7	0.28	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.35	0.7	0.35	U
Bis(2-ethylhexyl)phthalate	0.35	0.7	0.35	U
Butyl benzyl phthalate	0.35	0.7	0.35	U
Chrysene	0.35	0.7	0.35	U
Di-n-butylphthalate	0.35	0.7	0.35	U
Di-n-octylphthalate	0.35	0.7	0.35	U

Revised

1102

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB03-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-2

Lab File ID: FD975

Date Received: 10/23/96

% Solids: 85

Date Extracted:10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.35	0.7	0.35	U
Dibenzofuran	0.35	0.7	0.35	U
Diethyl phthalate	0.28	0.7	0.28	U
Dimethyl phthalate	0.28	0.7	0.28	U
Fluoranthene	0.35	0.7	0.35	U
Fluorene	0.35	0.7	0.35	U
Hexachlorobenzene	0.35	0.7	0.35	U
Hexachlorobutadiene	0.35	0.7	0.35	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.35	0.7	0.35	U
Indeno(1,2,3-cd)pyrene	0.35	0.7	0.35	U
Isophorone	0.35	0.7	0.35	U
N-Nitrosodiphenylamine	0.35	0.7	0.35	U
N-Nitrosodi-n-propylamine	0.35	0.7	0.35	U
Naphthalene	0.24	0.7	0.54	F
Nitrobenzene	0.35	0.7	0.35	U
Phenanthrene	0.35	0.7	0.35	U
Pyrene	0.35	0.7	0.35	U
2,4,5-Trichlorophenol	0.35	3.3	0.35	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U M
2,4-Dinitrophenol	0.24	3.3	0.24	U M
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.35	1.6	0.35	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

Revised

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 518

FC-SB01-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-4

Lab File ID: FD971

Date Received: 10/23/96

% Solids: 84

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	0.36	U
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.47	1.3	0.47	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
2,4-Dichlorophenol	0.18	0.3	0.18	~~U~~ R
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.28	0.7	0.28	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB01-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-4

Lab File ID: FD971

Date Received: 10/23/96

% Solids: 84

Date Extracted:10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.36	0.7	0.36	U
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.28	0.7	0.28	U
Dimethyl phthalate	0.28	0.7	0.28	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	0.24	U
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	R
2,4,6-Trichlorophenol	0.18	0.3	0.18	R
2,4-Dimethylphenol	0.18	0.3	0.18	R
2,4-Dinitrophenol	0.24	3.3	0.24	R
2-Chlorophenol	0.18	0.3	0.18	R
2-Methylphenol	0.18	0.3	0.18	R
2-Nitrophenol	0.18	0.3	0.18	R
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	R
4-Chloro-3-methylphenol	0.24	1.3	0.24	R
4-Methylphenol	0.18	0.3	0.18	R
4-Nitrophenol	0.36	1.6	0.36	R
Benzoic acid	0.24	1.6	0.24	~~R~~ U
Pentachlorophenol	0.24	3.3	0.24	R
Phenol	0.18	0.3	0.18	R

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB01-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-5

Lab File ID: FD954

Date Received: 10/23/96

% Solids: 88

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.46	1.3	0.46	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB01-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-5

Lab File ID: FD954

Date Received: 10/23/96

% Solids: 88

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.34	0.7	0.34	U
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U M
2,4-Dinitrophenol	0.23	3.3	0.23	U M
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.23	1.6	0.23	U M
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.17	0.3	0.17	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB02-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-7

Lab File ID: FD972

Date Received: 10/23/96

% Solids: 91

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.47	F
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.44	1.3	0.44	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	~~U~~ R
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB02-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-7

Lab File ID: FD972

Date Received: 10/23/96

% Solids: 91

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	R
2,4,6-Trichlorophenol	0.16	0.3	0.16	R
2,4-Dimethylphenol	0.16	0.3	0.16	R
2,4-Dinitrophenol	0.22	3.3	0.22	R
2-Chlorophenol	0.16	0.3	0.16	R
2-Methylphenol	0.16	0.3	0.16	R
2-Nitrophenol	0.16	0.3	0.16	R
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	R
4-Chloro-3-methylphenol	0.22	1.3	0.22	R
4-Methylphenol	0.16	0.3	0.16	R
4-Nitrophenol	0.33	1.6	0.33	R
Benzoic acid	0.22	1.6	0.22	~~R~~ U
Pentachlorophenol	0.22	3.3	0.22	R
Phenol	0.16	0.3	0.16	R

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB02-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-8

Lab File ID: FD973

Date Received: 10/23/96

% Solids: 91

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	1.67	
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.44	1.3	0.44	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB02-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-8

Lab File ID: FD973

Date Received: 10/23/96

% Solids: 91

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.34	F
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U M
2,4-Dinitrophenol	0.22	3.3	0.22	U M
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.22	1.6	0.22	U M
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 526

FC-SB04-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-10

Lab File ID: FD955

Date Received: 10/24/96

% Solids: 88

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.45	1.3	0.45	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U

O-2
8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB04-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-10

Lab File ID: FD955

Date Received: 10/24/96

% Solids: 88

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.34	0.7	0.34	U
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U M
2,4-Dinitrophenol	0.23	3.3	0.23	U M
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.23	1.6	0.23	U M
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.17	0.3	0.17	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB04-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-11

Lab File ID: FD976

Date Received: 10/24/96

% Solids: 89

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.45	1.3	0.45	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB04-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-11

Lab File ID: FD976

Date Received: 10/24/96

% Solids: 89

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.34	0.7	0.34	U
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U M
2,4-Dinitrophenol	0.23	3.3	0.23	U M
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.23	1.6	0.23	U M
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.17	0.3	0.17	U

8270B ANALYSIS DATA SHEET

429 . 530

FC-SB05-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-12

Lab File ID: FD977

Date Received: 10/24/96

% Solids: 92

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.33	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.43	1.3	0.43	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB05-01

429 531

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-12

Lab File ID: FD977

Date Received: 10/24/96

% Solids: 92

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U M
2,4-Dinitrophenol	0.22	3.3	0.22	U M
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.22	1.6	0.22	U M
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB05-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-13

Lab File ID: FD978

Date Received: 10/24/96

% Solids: 84

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	2.47	
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.47	1.3	0.47	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.28	0.7	0.28	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U

Revised

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 533

FC-SB05-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-13

Lab File ID: FD978

Date Received: 10/24/96

% Solids: 84

Date Extracted:10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.36	0.7	0.36	U
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.28	0.7	0.28	U
Dimethyl phthalate	0.28	0.7	0.28	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	0.83	
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U M
2,4-Dinitrophenol	0.24	3.3	0.24	U M
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.36	1.6	0.36	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

Revised

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-04

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-15

Lab File ID: FD979

Date Received: 10/24/96

% Solids: 92

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.33	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.43	1.3	0.43	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB05-04

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-15

Lab File ID: FD979

Date Received: 10/24/96

% Solids: 92

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U M
2,4-Dinitrophenol	0.22	3.3	0.22	U M
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.22	1.6	0.22	U M
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB06-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-16

Lab File ID: FD942

Date Received: 10/24/96

% Solids: 82

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.37	0.7	0.37	U
1,2-Dichlorobenzene	0.37	0.7	0.37	U
1,3-Dichlorobenzene	0.37	0.7	0.37	U
1,4-Dichlorobenzene	0.37	0.7	0.37	U
2,4-Dinitrotoluene	0.37	0.7	0.37	U
2,6-Dinitrotoluene	0.37	0.7	0.37	U
2-Chloronaphthalene	0.37	0.7	0.37	U
2-Methylnaphthalene	0.37	0.7	0.37	U
2-Nitroaniline	0.25	3.3	0.25	U
3-Nitroaniline	0.25	3.3	0.25	U
3,3'-Dichlorobenzidine	0.49	1.3	0.49	U
4-Bromophenyl phenyl ether	0.37	0.7	0.37	U
4-Chloroaniline	0.25	1.3	0.25	U
4-Chlorophenyl phenyl ether	0.37	0.7	0.37	U
4-Nitroaniline	0.37	3.3	0.37	U
Acenaphthylene	0.37	0.7	0.37	U
Acenaphthene	0.37	0.7	0.37	U
Anthracene	0.37	0.7	0.37	U
Benzo(a)anthracene	0.37	0.7	0.37	U
Benzo(a)pyrene	0.37	0.7	0.37	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.37	0.7	0.37	U
Benzo(k)fluoranthene	0.37	0.7	0.37	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.25	1.3	0.25	U
Bis(2-chloroethyl)ether	0.25	0.7	0.25	U
Bis(2-chloroethoxy)methane	0.25	0.7	0.25	U
Bis(2-chloroisopropyl)ether	0.37	0.7	0.37	U
Bis(2-ethylhexyl)phthalate	0.37	0.7	0.37	U
Butyl benzyl phthalate	0.37	0.7	0.37	U
Chrysene	0.37	0.7	0.37	U
Di-n-butylphthalate	0.37	0.7	0.37	U
Di-n-octylphthalate	0.37	0.7	0.37	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB06-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-16

Lab File ID: FD942

Date Received: 10/24/96

% Solids: 82

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.37	0.7	0.37	U
Dibenzofuran	0.37	0.7	0.37	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.37	0.7	0.37	U
Fluorene	0.37	0.7	0.37	U
Hexachlorobenzene	0.37	0.7	0.37	U
Hexachlorobutadiene	0.37	0.7	0.37	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.37	0.7	0.37	U
Indeno(1,2,3-cd)pyrene	0.37	0.7	0.37	U
Isophorone	0.37	0.7	0.37	U
N-Nitrosodiphenylamine	0.37	0.7	0.37	U
N-Nitrosodi-n-propylamine	0.37	0.7	0.37	U
Naphthalene	0.25	0.7	0.25	U
Nitrobenzene	0.37	0.7	0.37	U
Phenanthrene	0.37	0.7	0.37	U
Pyrene	0.37	0.7	0.37	U
2,4,5-Trichlorophenol	0.37	3.3	0.37	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U M
2,4-Dinitrophenol	0.25	3.3	0.25	U M
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.25	3.3	0.25	U
4-Chloro-3-methylphenol	0.25	1.3	0.25	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.37	1.6	0.37	U
Benzoic acid	0.25	1.6	0.25	U M
Pentachlorophenol	0.25	3.3	0.25	U
Phenol	0.18	0.3	0.18	U

8270B ANALYSIS DATA SHEET

FC-SB06-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-17

Lab File ID: FD980

Date Received: 10/24/96

% Solids: 82

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.37	0.7	0.37	U
1,2-Dichlorobenzene	0.37	0.7	0.37	U
1,3-Dichlorobenzene	0.37	0.7	0.37	U
1,4-Dichlorobenzene	0.37	0.7	0.37	U
2,4-Dinitrotoluene	0.37	0.7	0.37	U
2,6-Dinitrotoluene	0.37	0.7	0.37	U
2-Chloronaphthalene	0.37	0.7	0.37	U
2-Methylnaphthalene	0.37	0.7	0.37	U
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.49	1.3	0.49	U
4-Bromophenyl phenyl ether	0.37	0.7	0.37	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.37	0.7	0.37	U
4-Nitroaniline	0.37	3.3	0.37	U
Acenaphthylene	0.37	0.7	0.37	U
Acenaphthene	0.37	0.7	0.37	U
Anthracene	0.37	0.7	0.37	U
Benzo(a)anthracene	0.37	0.7	0.37	U
Benzo(a)pyrene	0.37	0.7	0.37	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.37	0.7	0.37	U
Benzo(k)fluoranthene	0.37	0.7	0.37	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.37	0.7	0.37	U
Bis(2-ethylhexyl)phthalate	0.37	0.7	0.37	U
Butyl benzyl phthalate	0.37	0.7	0.37	U
Chrysene	0.37	0.7	0.37	U
Di-n-butylphthalate	0.37	0.7	0.37	U
Di-n-octylphthalate	0.37	0.7	0.37	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB06-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-17

Lab File ID: FD980

Date Received: 10/24/96

% Solids: 82

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/31/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.37	0.7	0.37	U
Dibenzofuran	0.37	0.7	0.37	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.37	0.7	0.37	U
Fluorene	0.37	0.7	0.37	U
Hexachlorobenzene	0.37	0.7	0.37	U
Hexachlorobutadiene	0.37	0.7	0.37	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.37	0.7	0.37	U
Indeno(1,2,3-cd)pyrene	0.37	0.7	0.37	U
Isophorone	0.37	0.7	0.37	U
N-Nitrosodiphenylamine	0.37	0.7	0.37	U
N-Nitrosodi-n-propylamine	0.37	0.7	0.37	U
Naphthalene	0.24	0.7	0.24	U
Nitrobenzene	0.37	0.7	0.37	U
Phenanthrene	0.37	0.7	0.37	U
Pyrene	0.37	0.7	0.37	U
2,4,5-Trichlorophenol	0.37	3.3	0.37	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U M
2,4-Dinitrophenol	0.24	3.3	0.24	U M
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.37	1.6	0.37	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

FIELD SAMPLE ID:

8270 ANALYSIS DATA SHEET

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FC-SB01-01 DL

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610IDIQ\3103

Lab Code: ITS-DALLAS

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-23

Lab File ID: FE174

Date Received: 10/23/96

% Solids: 84

Date Extracted:11/01/96

Dilution Factor: 10.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: RG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	3.19	0.7	3.19	U
1,2-Dichlorobenzene	3.55	0.7	3.55	U
1,3-Dichlorobenzene	3.55	0.7	3.55	U
1,4-Dichlorobenzene	3.55	0.7	3.55	U
2,4-Dinitrotoluene	3.19	0.7	3.19	U
2,6-Dinitrotoluene	3.19	0.7	3.19	U
2-Chloronaphthalene	3.55	0.7	3.55	U
2-Rethylnaphthalene	3.19	0.7	3.19	U
2-Nitroaniline	2.84	3.3	2.84	U
3-Nitroaniline	2.13	3.3	2.13	U
3,3'-Dichlorobenzidine	4.26	1.3	4.26	U
4-Bromophenyl phenyl ether	3.55	0.7	3.55	U
4-Chloroaniline	2.84	1.3	2.84	R
4-Chlorophenyl phenyl ether	3.55	0.7	3.55	U
4-Nitroaniline	3.19	3.3	3.19	U
Acenaphthylene	3.55	0.7	3.55	U
Acenaphthene	3.55	0.7	3.55	U
Anthracene	3.90	0.7	3.90	U
Benzo(a)anthracene	3.19	0.7	3.19	U
Benzo(a)pyrene	3.19	0.7	3.19	U
Benzo(b)fluoranthene	3.55	0.7	3.55	U
2,4-Dichlorophenol	2.13	0.3	2.13	~~U~~ R
Benzo(g,h,i)perylene	4.26	0.7	4.26	U
Benzyl alcohol	2.84	1.3	2.84	U
Bis(2-chloroethyl)ether	2.84	0.7	2.84	U
Bis(2-chloroethoxy)methane	2.48	0.7	2.48	U
Bis(2-chloroisopropyl)ether	3.19	0.7	3.19	U
Bis(2-ethylhexyl)phthalate	3.55	0.7	3.55	U
Butyl benzyl phthalate	3.55	0.7	3.55	U
Chrysene	3.55	0.7	3.55	U
Di-n-butylphthalate	3.90	0.7	3.90	U
Di-n-octylphthalate	3.90	0.7	3.90	U
Dibenz(a,h)anthracene	3.55	0.7	3.55	U

8270 ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB01-01 DL

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610IDIQ\3103

Lab Code: ITS-DALLAS

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-23

Lab File ID: FE174

Date Received: 10/23/96

% Solids: 84

Date Extracted: 11/01/96

Dilution Factor: 10.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: RG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	3.55	0.7	3.55	U
Diethyl phthalate	4.26	0.7	4.26	U
Dimethyl phthalate	4.26	0.7	4.26	U
Fluoranthene	3.19	0.7	3.19	U
Fluorene	3.55	0.7	3.55	U
Hexachlorobenzene	3.55	0.7	3.55	U
Hexachlorobutadiene	3.55	0.7	3.55	U
Hexachlorocyclopentadiene	1.67	0.7	1.67	U
Hexachloroethane	3.55	0.7	3.55	U
Indeno(1,2,3-cd)pyrene	3.90	0.7	3.90	U
Isophorone	3.19	0.7	3.19	U
N-Nitrosodiphenylamine	3.55	0.7	3.55	U
N-Nitrosodi-n-propylamine	3.19	0.7	3.19	U
Naphthalene	2.84	0.7	2.84	U
Nitrobenzene	3.19	0.7	3.19	U
Phenanthrene	3.55	0.7	3.55	U
Pyrene	3.19	0.7	3.19	U
2,4,5-Trichlorophenol	3.19	3.3	3.19	R
2,4,6-Trichlorophenol	3.19	0.3	3.19	R
2,4-Dimethylphenol	2.13	0.3	2.13	R
2,4-Dinitrophenol	2.84	3.3	2.84	R
2-Chlorophenol	3.55	0.3	3.55	R
2-Rethylphenol	2.84	0.3	2.84	R
2-Nitrophenol	2.84	0.3	2.84	R
4,6-Dinitro-2-methylphenol	2.84	3.3	2.84	R
4-Chloro-3-methylphenol	2.84	1.3	2.84	R
4-Rethylphenol	2.84	0.3	2.84	R
4-Nitrophenol	3.19	1.6	3.19	R
Benzoic acid	4.14	1.6	4.14	~~R~~ U
Pentachlorophenol	2.13	3.3	2.13	R
Phenol	3.55	0.3	3.55	R

8270 ANALYSIS DATA SHEET

FC-SB02-1 DL

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610IDIQ\3103

Lab Code: ITS-DALLAS

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-24

Lab File ID: FE175

Date Received: 10/23/96

% Solids: 91

Date Extracted:11/01/96

Dilution Factor: 10.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.96	0.7	2.96	U
1,2-Dichlorobenzene	3.29	0.7	3.29	U
1,3-Dichlorobenzene	3.29	0.7	3.29	U
1,4-Dichlorobenzene	3.29	0.7	3.29	U
2,4-Dinitrotoluene	2.96	0.7	2.96	U
2,6-Dinitrotoluene	2.96	0.7	2.96	U
2-Chloronaphthalene	3.29	0.7	3.29	U
2-Methylnaphthalene	2.96	0.7	2.96	U
2-Nitroaniline	2.63	3.3	2.63	U
3-Nitroaniline	1.97	3.3	1.97	U
3,3'-Dichlorobenzidine	3.94	1.3	3.94	U
4-Bromophenyl phenyl ether	3.29	0.7	3.29	U
4-Chloroaniline	2.63	1.3	2.63	R
4-Chlorophenyl phenyl ether	3.29	0.7	3.29	U
4-Nitroaniline	2.96	3.3	2.96	U
Acenaphthylene	3.29	0.7	3.29	U
Acenaphthene	3.29	0.7	3.29	U
Anthracene	3.61	0.7	3.61	U
Benzo(a)anthracene	2.96	0.7	2.96	U
Benzo(a)pyrene	2.96	0.7	2.96	U
Benzo(b)fluoranthene	3.29	0.7	3.29	U
2,4-Dichlorophenol	1.97	0.3	1.97	~~U~~ R
Benzo(g,h,i)perylene	3.94	0.7	3.94	U
Benzyl alcohol	2.63	1.3	2.63	U
Bis(2-chloroethyl)ether	2.63	0.7	2.63	U
Bis(2-chloroethoxy)methane	2.30	0.7	2.30	U
Bis(2-chloroisopropyl)ether	2.96	0.7	2.96	U
Bis(2-ethylhexyl)phthalate	3.29	0.7	3.29	U
Butyl benzyl phthalate	3.29	0.7	3.29	U
Chrysene	3.29	0.7	3.29	U
Di-n-butylphthalate	3.61	0.7	3.61	U
Di-n-octylphthalate	3.61	0.7	3.61	U
Dibenz(a,h)anthracene	3.29	0.7	3.29	U

8270 ANALYSIS DATA SHEET

429 543

FIELD SAMPLE ID:

FC-SB02-1 DL

Lab Name: INCHCAPE TESTING SERVICES

Contract: 9610IDIQ\3103

Lab Code: ITS-DALLAS

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-24

Lab File ID: FE175

Date Received: 10/23/96

% Solids: 91

Date Extracted: 11/01/96

Dilution Factor: 10.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	3.29	0.7	3.29	U
Diethyl phthalate	3.94	0.7	4.39	
Dimethyl phthalate	3.94	0.7	3.94	U
Fluoranthene	2.96	0.7	2.96	U
Fluorene	3.29	0.7	3.29	U
Hexachlorobenzene	3.29	0.7	3.29	U
Hexachlorobutadiene	3.29	0.7	3.29	U
Hexachlorocyclopentadiene	1.53	0.7	1.53	U
Hexachloroethane	3.29	0.7	3.29	U
Indeno(1,2,3-cd)pyrene	3.61	0.7	3.61	U
Isophorone	2.96	0.7	2.96	U
N-Nitrosodiphenylamine	3.29	0.7	3.29	U
N-Nitrosodi-n-propylamine	2.96	0.7	2.96	U
Naphthalene	2.63	0.7	2.63	U
Nitrobenzene	2.96	0.7	2.96	U
Phenanthrene	3.29	0.7	3.29	U
Pyrene	2.96	0.7	2.96	U
2,4,5-Trichlorophenol	2.96	3.3	2.96	R
2,4,6-Trichlorophenol	2.96	0.3	2.96	R
2,4-Dimethylphenol	1.97	0.3	1.97	R
2,4-Dinitrophenol	2.63	3.3	2.63	R
2-Chlorophenol	3.29	3.3	3.29	R
2-Methylphenol	2.63	0.3	2.63	R
2-Nitrophenol	2.63	0.3	2.63	R
4,6-Dinitro-2-methylphenol	2.63	3.3	2.63	R
4-Chloro-3-methylphenol	2.63	1.3	2.63	R
4-Methylphenol	2.63	0.3	2.63	R
4-Nitrophenol	2.96	1.6	2.96	R
Benzoic acid	[illegible]	1.6	3.83	~~R~~ U
Pentachlorophenol	1.97	3.3	1.97	R
Phenol	3.29	0.3	3.29	R

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB11-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-13

Lab File ID: FE085

Date Received: 10/26/96

% Solids: 93

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.32	0.7	0.32	U
1,2-Dichlorobenzene	0.32	0.7	0.32	U
1,3-Dichlorobenzene	0.32	0.7	0.32	U
1,4-Dichlorobenzene	0.32	0.7	0.32	U
2,4-Dinitrotoluene	0.32	0.7	0.32	U
2,6-Dinitrotoluene	0.32	0.7	0.32	U
2-Chloronaphthalene	0.32	0.7	0.32	U
2-Methylnaphthalene	0.32	0.7	0.32	U
2-Nitroaniline	0.21	3.3	0.21	U
3-Nitroaniline	0.21	3.3	0.21	U
3,3'-Dichlorobenzidine	0.43	1.3	0.43	U
4-Bromophenyl phenyl ether	0.32	0.7	0.32	U
4-Chloroaniline	0.21	1.3	0.21	U
4-Chlorophenyl phenyl ether	0.32	0.7	0.32	U
4-Nitroaniline	0.32	3.3	0.32	U
Acenaphthylene	0.32	0.7	0.32	U
Acenaphthene	0.32	0.7	0.32	U
Anthracene	0.32	0.7	0.32	U
Benzo(a)anthracene	0.32	0.7	0.32	U
Benzo(a)pyrene	0.32	0.7	0.32	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.32	0.7	0.32	U
Benzo(k)fluoranthene	0.32	0.7	0.32	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.21	1.3	0.21	U
Bis(2-chloroethyl)ether	0.21	0.7	0.21	U
Bis(2-chloroethoxy)methane	0.21	0.7	0.21	U
Bis(2-chloroisopropyl)ether	0.32	0.7	0.32	U
Bis(2-ethylhexyl)phthalate	0.32	0.7	0.32	U
Butyl benzyl phthalate	0.32	0.7	0.32	U
Chrysene	0.32	0.7	0.32	U
Di-n-butylphthalate	0.32	0.7	0.32	U
Di-n-octylphthalate	0.32	0.7	0.32	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB11-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-13

Lab File ID: FE085

Date Received: 10/26/96

% Solids: 93

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.32	0.7	0.32	U
Dibenzofuran	0.32	0.7	0.32	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.32	0.7	0.32	U
Fluorene	0.32	0.7	0.32	U
Hexachlorobenzene	0.32	0.7	0.32	U
Hexachlorobutadiene	0.32	0.7	0.32	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.32	0.7	0.32	U
Indeno(1,2,3-cd)pyrene	0.32	0.7	0.32	U
Isophorone	0.32	0.7	0.32	U
N-Nitrosodiphenylamine	0.32	0.7	0.32	U
N-Nitrosodi-n-propylamine	0.32	0.7	0.32	U
Naphthalene	0.21	0.7	0.21	U
Nitrobenzene	0.32	0.7	0.32	U
Phenanthrene	0.32	0.7	0.32	U
Pyrene	0.32	0.7	0.32	U
2,4,5-Trichlorophenol	0.32	3.3	0.32	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U
2,4-Dinitrophenol	0.21	3.3	0.21	U
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.21	3.3	0.21	U
4-Chloro-3-methylphenol	0.21	1.3	0.21	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.32	1.6	0.32	U
Benzoic acid	0.21	1.6	0.21	U M
Pentachlorophenol	0.21	3.3	0.21	U
Phenol	0.16	0.3	0.16	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 546

FC-SB11-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-14

Lab File ID: FE086

Date Received: 10/26/96

% Solids: 86

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.35	0.7	0.35	U
1,2-Dichlorobenzene	0.35	0.7	0.35	U
1,3-Dichlorobenzene	0.35	0.7	0.35	U
1,4-Dichlorobenzene	0.35	0.7	0.35	U
2,4-Dinitrotoluene	0.35	0.7	0.35	U
2,6-Dinitrotoluene	0.35	0.7	0.35	U
2-Chloronaphthalene	0.35	0.7	0.35	U
2-Methylnaphthalene	0.35	0.7	0.35	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.47	1.3	0.47	U
4-Bromophenyl phenyl ether	0.35	0.7	0.35	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.35	0.7	0.35	U
4-Nitroaniline	0.35	3.3	0.35	U
Acenaphthylene	0.35	0.7	0.35	U
Acenaphthene	0.35	0.7	0.35	U
Anthracene	0.35	0.7	0.35	U
Benzo(a)anthracene	0.35	0.7	0.35	U
Benzo(a)pyrene	0.35	0.7	0.35	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.35	0.7	0.35	U
Benzo(k)fluoranthene	0.35	0.7	0.35	U
Benzo(g,h,i)perylene	0.28	0.7	0.28	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.35	0.7	0.35	U
Bis(2-ethylhexyl)phthalate	0.35	0.7	0.90	
Butyl benzyl phthalate	0.35	0.7	0.35	U
Chrysene	0.35	0.7	0.35	U
Di-n-butylphthalate	0.35	0.7	0.35	U
Di-n-octylphthalate	0.35	0.7	0.35	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB11-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-14

Lab File ID: FE086

Date Received: 10/26/96

% Solids: 86

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.35	0.7	0.35	U
Dibenzofuran	0.35	0.7	0.35	U
Diethyl phthalate	0.28	0.7	0.28	U
Dimethyl phthalate	0.28	0.7	0.28	U
Fluoranthene	0.35	0.7	0.35	U
Fluorene	0.35	0.7	0.35	U
Hexachlorobenzene	0.35	0.7	0.35	U
Hexachlorobutadiene	0.35	0.7	0.35	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.35	0.7	0.35	U
Indeno(1,2,3-cd)pyrene	0.35	0.7	0.35	U
Isophorone	0.35	0.7	0.35	U
N-Nitrosodiphenylamine	0.35	0.7	0.35	U
N-Nitrosodi-n-propylamine	0.35	0.7	0.35	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.35	0.7	0.35	U
Phenanthrene	0.35	0.7	0.35	U
Pyrene	0.35	0.7	0.35	U
2,4,5-Trichlorophenol	0.35	3.3	0.35	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U
2,4-Dinitrophenol	0.23	3.3	0.23	U
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.35	1.6	0.35	U
Benzoic acid	0.23	1.6	0.23	U M
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.18	0.3	0.18	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 548

FC-SB11-03

Lab Name: ITS-DALLAS

Lab Code:

Matrix: (soil/water) SOIL

Lab File ID: FE087

% Solids: 84

Dilution Factor: 1.0

Contract: 9610IDIQ\3103

AAB No.: AB925-10

Lab Sample ID: D96-12170-15

Date Received: 10/26/96

Date Extracted: 10/29/96

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	0.87	
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.48	1.3	0.48	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB11-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-15

Lab File ID: FE087

Date Received: 10/26/96

% Solids: 84

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.36	0.7	0.36	U
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	1.14	
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U
2,4-Dinitrophenol	0.24	3.3	0.24	U
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.61	
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.73	
4-Nitrophenol	0.36	1.6	0.36	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 550

FC-SB12-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-18

Lab File ID: FE088

Date Received: 10/26/96

% Solids: 92

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.33	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.43	1.3	0.43	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-18

Lab File ID: FE088

Date Received: 10/26/96

% Solids: 92

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U
2,4-Dinitrophenol	0.22	3.3	0.22	U
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.22	1.6	0.22	U M
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB12-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-19

Lab File ID: FE089

Date Received: 10/26/96

% Solids: 85

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.35	0.7	0.35	U
1,2-Dichlorobenzene	0.35	0.7	0.35	U
1,3-Dichlorobenzene	0.35	0.7	0.35	U
1,4-Dichlorobenzene	0.35	0.7	0.35	U
2,4-Dinitrotoluene	0.35	0.7	0.35	U
2,6-Dinitrotoluene	0.35	0.7	0.35	U
2-Chloronaphthalene	0.35	0.7	0.35	U
2-Methylnaphthalene	0.35	0.7	6.78	
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.47	1.3	0.47	U
4-Bromophenyl phenyl ether	0.35	0.7	0.35	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.35	0.7	0.35	U
4-Nitroaniline	0.35	3.3	0.35	U
Acenaphthylene	0.35	0.7	0.35	U
Acenaphthene	0.35	0.7	0.35	U
Anthracene	0.35	0.7	0.35	U
Benzo(a)anthracene	0.35	0.7	0.35	U
Benzo(a)pyrene	0.35	0.7	0.35	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
Benzo(b)fluoranthene	0.35	0.7	0.35	U
Benzo(k)fluoranthene	0.35	0.7	0.35	U
Benzo(g,h,i)perylene	0.28	0.7	0.28	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.35	0.7	0.35	U
Bis(2-ethylhexyl)phthalate	0.35	0.7	0.35	U
Butyl benzyl phthalate	0.35	0.7	0.35	U
Chrysene	0.35	0.7	0.35	U
Di-n-butylphthalate	0.35	0.7	0.35	U
Di-n-octylphthalate	0.35	0.7	0.35	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 553

FC-SB12-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-19

Lab File ID: FE089

Date Received: 10/26/96

% Solids: 85

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.35	0.7	0.35	U
Dibenzofuran	0.35	0.7	0.35	U
Diethyl phthalate	0.28	0.7	0.28	U
Dimethyl phthalate	0.28	0.7	0.28	U
Fluoranthene	0.35	0.7	0.35	U
Fluorene	0.35	0.7	0.35	U
Hexachlorobenzene	0.35	0.7	0.35	U
Hexachlorobutadiene	0.35	0.7	0.35	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.35	0.7	0.35	U
Indeno(1,2,3-cd)pyrene	0.35	0.7	0.35	U
Isophorone	0.35	0.7	0.35	U
N-Nitrosodiphenylamine	0.35	0.7	0.35	U
N-Nitrosodi-n-propylamine	0.35	0.7	0.35	U
Naphthalene	0.24	0.7	8.24	
Nitrobenzene	0.35	0.7	0.35	U
Phenanthrene	0.35	0.7	0.35	U
Pyrene	0.35	0.7	0.35	U
2,4,5-Trichlorophenol	0.35	3.3	0.35	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U
2,4-Dinitrophenol	0.24	3.3	0.24	U
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.34	
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.52	
4-Nitrophenol	0.35	1.6	0.35	U
Benzoic acid	0.24	1.6	0.24	U M
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB12-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-20

Lab File ID: FE090

Date Received: 10/26/96

% Solids: 91

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	2.11	
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.44	1.3	0.44	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-20

Lab File ID: FE090

Date Received: 10/26/96

% Solids: 91

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/07/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.33	0.7	0.33	U
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	2.47	
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U
2,4-Dinitrophenol	0.22	3.3	0.22	U
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.52	
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.53	
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.22	1.6	0.22	U M
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB12-02 RE

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-33

Lab File ID: FE099

Date Received: 10/26/96

% Solids: 85

Date Extracted: 10/29/96

Dilution Factor: 5.0

Date Analyzed: 11/09/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	3.07	0.7	3.07	U
1,2-Dichlorobenzene	3.78	0.7	3.78	U
1,3-Dichlorobenzene	3.90	0.7	3.90	U
1,4-Dichlorobenzene	4.01	0.7	4.01	U
2,4-Dinitrotoluene	2.36	0.7	2.36	U
2,6-Dinitrotoluene	1.89	0.7	1.89	U
2-Chloronaphthalene	2.01	0.7	2.01	U
2-Methylnaphthalene	2.24	0.7	4.21	
2-Nitroaniline	2.48	3.3	2.48	U
3-Nitroaniline	2.24	3.3	2.24	U
3,3'-Dichlorobenzidine	3.66	1.3	3.66	U
4-Bromophenyl phenyl ether	1.18	0.7	1.18	U
4-Chloroaniline	2.48	1.3	2.48	U
4-Chlorophenyl phenyl ether	1.89	0.7	1.89	U
4-Nitroaniline	3.07	3.3	3.07	U
Acenaphthylene	1.89	0.7	1.89	U
Acenaphthene	1.89	0.7	1.89	U
Anthracene	2.13	0.7	2.13	U
Benzo(a)anthracene	2.13	0.7	2.13	U
Benzo(a)pyrene	1.89	0.7	1.89	U
Benzo(b)fluoranthene	5.08	0.7	5.08	U
Benzo(k)fluoranthene	5.08	0.7	5.08	U
Benzo(g,h,i)perylene	1.89	0.7	1.89	U
Benzyl alcohol	3.42	1.3	3.42	U
Bis(2-chloroethyl)ether	3.42	0.7	3.42	U
Bis(2-chloroethoxy)methane	2.60	0.7	2.60	U
Bis(2-chloroisopropyl)ether	2.72	0.7	2.72	U
Bis(2-ethylhexyl)phthalate	4.13	0.7	4.13	U
Butyl benzyl phthalate	2.13	0.7	2.13	U
Chrysene	1.89	0.7	1.89	U
Di-n-butylphthalate	1.89	0.7	1.89	U
Di-n-octylphthalate	2.83	0.7	2.83	U
Dibenz(a,h)anthracene	1.89	0.7	1.89	U

8270B ANALYSIS DATA SHEET

FC-SB12-02 RE

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-33

Lab File ID: FE099

Date Received: 10/26/96

% Solids: 85

Date Extracted: 10/29/96

Dilution Factor: 5.0

Date Analyzed: 11/09/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.89	0.7	1.89	U
Diethyl phthalate	1.77	0.7	1.77	U
Dimethyl phthalate	1.42	0.7	1.42	U
Fluoranthene	3.78	0.7	3.78	U
Fluorene	2.13	0.7	2.13	U
Hexachlorobenzene	1.30	0.7	1.30	U
Hexachlorobutadiene	3.54	0.7	3.54	U
Hexachlorocyclopentadiene	0.24	0.7	0.24	U
Hexachloroethane	4.01	0.7	4.01	U
Indeno(1,2,3-cd)pyrene	1.65	0.7	1.65	U
Isophorone	1.89	0.7	1.89	U
N-Nitrosodiphenylamine	1.42	0.7	1.42	U
N-Nitrosodi-n-propylamine	2.48	0.7	2.48	U
Naphthalene	2.60	0.7	6.20	
Nitrobenzene	2.95	0.7	2.95	U
Phenanthrene	1.77	0.7	1.77	U
Pyrene	2.60	0.7	2.60	U
2,4,5-Trichlorophenol	1.89	3.3	1.89	U
2,4,6-Trichlorophenol	1.77	0.3	1.77	U
2,4-Dichlorophenol	2.13	0.3	2.13	U
2,4-Dimethylphenol	2.72	0.3	2.72	U
2,4-Dinitrophenol	2.36	3.3	2.36	U
2-Chlorophenol	2.95	0.3	2.95	U
2-Methylphenol	2.83	0.3	2.83	U
2-Nitrophenol	2.72	0.3	2.72	U
4,6-Dinitro-2-methylphenol	2.72	3.3	2.72	U
4-Chloro-3-methylphenol	1.89	1.3	1.89	U
4-Methylphenol	2.13	0.3	2.13	U
4-Nitrophenol	3.66	1.6	3.66	U
Benzoic acid	4.60	1.6	4.60	U M
Pentachlorophenol	6.73	3.3	6.73	U
Phenol	3.07	0.3	3.07	U

8270B ANALYSIS DATA SHEET

FC-WQ-EB-05

429 958

Lab Name: ITS-DALLAS

Lab Code:

Matrix: (soil/water) WATER

Lab File ID: FD964

% Solids: NA

Dilution Factor: 1.0

Contract: 9610IDIQ\3103

AAB No.: AB925-18

Lab Sample ID: D96-12170-17

Date Received: 10/26/96

Date Extracted: 10/30/96

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.60	U
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

8270B ANALYSIS DATA SHEET

FC-WQ-EB-05

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-18

Matrix: (soil/water) WATER

Lab Sample ID: D96-12170-17

Lab File ID: FD964

Date Received: 10/26/96

% Solids: NA

Date Extracted: 10/30/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	UJ
2,4,6-Trichlorophenol	1.50	10.0	1.50	UJ
2,4-Dichlorophenol	1.80	10.0	1.80	UJ
2,4-Dimethylphenol	2.30	10.0	2.30	UJ
2,4-Dinitrophenol	2.00	50.0	2.00	UJ
2-Chlorophenol	2.50	10.0	2.50	UJ
2-Methylphenol	2.40	20.0	2.40	UJ
2-Nitrophenol	2.30	10.0	2.30	UJ
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	UJ
4-Chloro-3-methylphenol	1.60	20.0	1.60	UJ
4-Methylphenol	1.80	10.0	1.80	UJ
4-Nitrophenol	3.10	50.0	3.10	UJ
Benzoic acid	3.90	50.0	3.90	UJ
Pentachlorophenol	5.70	50.0	5.70	UJ
Phenol	2.60	10.0	2.60	UJ

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-05 RE

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-18

Matrix: (soil/water) WATER

Lab Sample ID: D96-12170-29

Lab File ID: FD988

Date Received: 10/26/96

% Solids: NA

Date Extracted: 10/30/96

Dilution Factor: 1.0

Date Analyzed: 11/01/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.60	U
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-05 RE

429 561

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-18

Matrix: (soil/water) WATER

Lab Sample ID: D96-12170-29

Lab File ID: FD988

Date Received: 10/26/96

% Solids: NA

Date Extracted:10/30/96

Dilution Factor: 1.0

Date Analyzed: 11/01/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	UJ
2,4,6-Trichlorophenol	1.50	10.0	1.50	UJ
2,4-Dichlorophenol	1.80	10.0	1.80	UJ
2,4-Dimethylphenol	2.30	10.0	2.30	UJ
2,4-Dinitrophenol	2.00	50.0	2.00	UJ
2-Chlorophenol	2.50	10.0	2.50	UJ
2-Methylphenol	2.40	20.0	2.40	UJ
2-Nitrophenol	2.30	10.0	2.30	UJ
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	UJ
4-Chloro-3-methylphenol	1.60	20.0	1.60	UJ
4-Methylphenol	1.80	10.0	1.80	UJ
4-Nitrophenol	3.10	50.0	3.10	UJ
Benzoic acid	3.90	50.0	3.90	UJ
Pentachlorophenol	5.70	50.0	5.70	UJ
Phenol	2.60	10.0	2.60	UJ

8270B ANALYSIS DATA SHEET

FC-WQ-EB-01

429 362

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-1

Lab File ID: FD951

Date Received: 10/23/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.60	U
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

8270B ANALYSIS DATA SHEET

FC-WQ-EB-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-1

Lab File ID: FD951

Date Received: 10/23/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	U
2,4,6-Trichlorophenol	1.50	10.0	1.50	U
2,4-Dichlorophenol	1.80	10.0	1.80	U
2,4-Dimethylphenol	2.30	10.0	2.30	U
2,4-Dinitrophenol	2.00	50.0	2.00	U
2-Chlorophenol	2.50	10.0	2.50	U
2-Methylphenol	2.40	20.0	2.40	U
2-Nitrophenol	2.30	10.0	2.30	U
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	U
4-Chloro-3-methylphenol	1.60	20.0	1.60	U
4-Methylphenol	1.80	10.0	1.80	U
4-Nitrophenol	3.10	50.0	3.10	U
Benzoic acid	3.90	50.0	3.90	U
Pentachlorophenol	5.70	50.0	5.70	U
Phenol	2.60	10.0	2.60	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-WQ-EB-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-4

Lab File ID: FD952

Date Received: 10/23/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	2.62	F
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 565

FC-WQ-EB-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-4

Lab File ID: FD952

Date Received: 10/23/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	U
2,4,6-Trichlorophenol	1.50	10.0	1.50	U
2,4-Dichlorophenol	1.80	10.0	1.80	U
2,4-Dimethylphenol	2.30	10.0	2.30	U
2,4-Dinitrophenol	2.00	50.0	2.00	U
2-Chlorophenol	2.50	10.0	2.50	U
2-Methylphenol	2.40	20.0	2.40	U
2-Nitrophenol	2.30	10.0	2.30	U
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	U
4-Chloro-3-methylphenol	1.60	20.0	1.60	U
4-Methylphenol	1.80	10.0	1.80	U
4-Nitrophenol	3.10	50.0	3.10	U
Benzoic acid	3.90	50.0	3.90	U
Pentachlorophenol	5.70	50.0	5.70	U
Phenol	2.60	10.0	2.60	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 . 566

FC-WQ-EB-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-13

Lab File ID: FD953

Date Received: 10/25/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.76	F
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-13

Lab File ID: FD953

Date Received: 10/25/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	U
2,4,6-Trichlorophenol	1.50	10.0	1.50	U
2,4-Dichlorophenol	1.80	10.0	1.80	U
2,4-Dimethylphenol	2.30	10.0	2.30	U
2,4-Dinitrophenol	2.00	50.0	2.00	U
2-Chlorophenol	2.50	10.0	2.50	U
2-Methylphenol	2.40	20.0	2.40	U
2-Nitrophenol	2.30	10.0	2.30	U
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	U
4-Chloro-3-methylphenol	1.60	20.0	1.60	U
4-Methylphenol	1.80	10.0	1.80	U
4-Nitrophenol	3.10	50.0	3.10	U
Benzoic acid	3.90	50.0	3.90	U
Pentachlorophenol	5.70	50.0	5.70	U
Phenol	2.60	10.0	2.60	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429. 568

FC-SB07-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-6

Lab File ID: FD929

Date Received: 10/25/96

% Solids: 84

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	0.36	U
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.48	1.3	0.48	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U
Dibenz(a,h)anthracene	0.36	0.7	0.36	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB07-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-6

Lab File ID: FD929

Date Received: 10/25/96

% Solids: 84

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	0.24	U
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U
2,4-Dinitrophenol	0.24	3.3	0.24	U
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.36	1.6	0.36	U
Benzoic acid	0.48	1.6	0.48	U
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB08-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-7

Lab File ID: FD930

Date Received: 10/25/96

% Solids: 92

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.33	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.43	1.3	0.43	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.26	0.7	0.26	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U
Dibenz(a,h)anthracene	0.33	0.7	0.33	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 571

FC-SB08-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-7

Lab File ID: FD930

Date Received: 10/25/96

% Solids: 92

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.26	0.7	0.26	U
Dimethyl phthalate	0.26	0.7	0.26	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.16	0.3	0.16	U
2,4-Dichlorophenol	0.16	0.3	0.16	U
2,4-Dimethylphenol	0.16	0.3	0.16	U
2,4-Dinitrophenol	0.22	3.3	0.22	U
2-Chlorophenol	0.16	0.3	0.16	U
2-Methylphenol	0.16	0.3	0.16	U
2-Nitrophenol	0.16	0.3	0.16	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.16	0.3	0.16	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.43	1.6	0.43	U
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.16	0.3	0.16	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB09-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-8

Lab File ID: FD931

Date Received: 10/25/96

% Solids: 88

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.46	1.3	0.46	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U
Dibenz(a,h)anthracene	0.34	0.7	0.34	U

FIELD SAMPLE ID:

8270B ANALYSIS DATA SHEET

FC-SB09-01

429 573

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-8

Lab File ID: FD931

Date Received: 10/25/96

% Solids: 88

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U
2,4-Dinitrophenol	0.23	3.3	0.23	U
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.46	1.6	0.46	U
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.17	0.3	0.17	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

FC-SB09-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-9

Lab File ID: FD932

Date Received: 10/25/96

% Solids: 84

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.36	0.7	0.36	U
1,2-Dichlorobenzene	0.36	0.7	0.36	U
1,3-Dichlorobenzene	0.36	0.7	0.36	U
1,4-Dichlorobenzene	0.36	0.7	0.36	U
2,4-Dinitrotoluene	0.36	0.7	0.36	U
2,6-Dinitrotoluene	0.36	0.7	0.36	U
2-Chloronaphthalene	0.36	0.7	0.36	U
2-Methylnaphthalene	0.36	0.7	0.36	U
2-Nitroaniline	0.24	3.3	0.24	U
3-Nitroaniline	0.24	3.3	0.24	U
3,3'-Dichlorobenzidine	0.48	1.3	0.48	U
4-Bromophenyl phenyl ether	0.36	0.7	0.36	U
4-Chloroaniline	0.24	1.3	0.24	U
4-Chlorophenyl phenyl ether	0.36	0.7	0.36	U
4-Nitroaniline	0.36	3.3	0.36	U
Acenaphthylene	0.36	0.7	0.36	U
Acenaphthene	0.36	0.7	0.36	U
Anthracene	0.36	0.7	0.36	U
Benzo(a)anthracene	0.36	0.7	0.36	U
Benzo(a)pyrene	0.36	0.7	0.36	U
Benzo(b)fluoranthene	0.36	0.7	0.36	U
Benzo(k)fluoranthene	0.36	0.7	0.36	U
Benzo(g,h,i)perylene	0.29	0.7	0.29	U
Benzyl alcohol	0.24	1.3	0.24	U
Bis(2-chloroethyl)ether	0.24	0.7	0.24	U
Bis(2-chloroethoxy)methane	0.24	0.7	0.24	U
Bis(2-chloroisopropyl)ether	0.36	0.7	0.36	U
Bis(2-ethylhexyl)phthalate	0.36	0.7	0.36	U
Butyl benzyl phthalate	0.36	0.7	0.36	U
Chrysene	0.36	0.7	0.36	U
Di-n-butylphthalate	0.36	0.7	0.36	U
Di-n-octylphthalate	0.36	0.7	0.36	U
Dibenz(a,h)anthracene	0.36	0.7	0.36	U

FIELD SAMPLE ID:

8270B ANALYSIS DATA SHEET

429 . 575

FC-SB09-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-9

Lab File ID: FD932

Date Received: 10/25/96

% Solids: 84

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.36	0.7	0.36	U
Diethyl phthalate	0.29	0.7	0.29	U
Dimethyl phthalate	0.29	0.7	0.29	U
Fluoranthene	0.36	0.7	0.36	U
Fluorene	0.36	0.7	0.36	U
Hexachlorobenzene	0.36	0.7	0.36	U
Hexachlorobutadiene	0.36	0.7	0.36	U
Hexachlorocyclopentadiene	0.12	0.7	0.12	U
Hexachloroethane	0.36	0.7	0.36	U
Indeno(1,2,3-cd)pyrene	0.36	0.7	0.36	U
Isophorone	0.36	0.7	0.36	U
N-Nitrosodiphenylamine	0.36	0.7	0.36	U
N-Nitrosodi-n-propylamine	0.36	0.7	0.36	U
Naphthalene	0.24	0.7	0.24	U
Nitrobenzene	0.36	0.7	0.36	U
Phenanthrene	0.36	0.7	0.36	U
Pyrene	0.36	0.7	0.36	U
2,4,5-Trichlorophenol	0.36	3.3	0.36	U
2,4,6-Trichlorophenol	0.18	0.3	0.18	U
2,4-Dichlorophenol	0.18	0.3	0.18	U
2,4-Dimethylphenol	0.18	0.3	0.18	U
2,4-Dinitrophenol	0.24	3.3	0.24	U
2-Chlorophenol	0.18	0.3	0.18	U
2-Methylphenol	0.18	0.3	0.18	U
2-Nitrophenol	0.18	0.3	0.18	U
4,6-Dinitro-2-methylphenol	0.24	3.3	0.24	U
4-Chloro-3-methylphenol	0.24	1.3	0.24	U
4-Methylphenol	0.18	0.3	0.18	U
4-Nitrophenol	0.36	1.6	0.36	U
Benzoic acid	0.48	1.6	0.48	U
Pentachlorophenol	0.24	3.3	0.24	U
Phenol	0.18	0.3	0.18	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 576 FC-SB09-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-10

Lab File ID: FD933

Date Received: 10/25/96

% Solids: 88

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.23	3.3	0.23	U
3-Nitroaniline	0.23	3.3	0.23	U
3,3'-Dichlorobenzidine	0.46	1.3	0.46	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.23	1.3	0.23	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.23	1.3	0.23	U
Bis(2-chloroethyl)ether	0.23	0.7	0.23	U
Bis(2-chloroethoxy)methane	0.23	0.7	0.23	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U
Dibenz(a,h)anthracene	0.34	0.7	0.34	U

O-2
8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 577

FC-SB09-03

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-10

Lab File ID: FD933

Date Received: 10/25/96

% Solids: 88

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.23	0.7	0.23	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U
2,4-Dinitrophenol	0.23	3.3	0.23	U
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.23	3.3	0.23	U
4-Chloro-3-methylphenol	0.23	1.3	0.23	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.46	1.6	0.46	U
Pentachlorophenol	0.23	3.3	0.23	U
Phenol	0.17	0.3	0.17	U

O-2
8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB10-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-11

Lab File ID: FD935

Date Received: 10/25/96

% Solids: 90

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.34	0.7	0.34	U
1,2-Dichlorobenzene	0.34	0.7	0.34	U
1,3-Dichlorobenzene	0.34	0.7	0.34	U
1,4-Dichlorobenzene	0.34	0.7	0.34	U
2,4-Dinitrotoluene	0.34	0.7	0.34	U
2,6-Dinitrotoluene	0.34	0.7	0.34	U
2-Chloronaphthalene	0.34	0.7	0.34	U
2-Methylnaphthalene	0.34	0.7	0.34	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.45	1.3	0.45	U
4-Bromophenyl phenyl ether	0.34	0.7	0.34	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.34	0.7	0.34	U
4-Nitroaniline	0.34	3.3	0.34	U
Acenaphthylene	0.34	0.7	0.34	U
Acenaphthene	0.34	0.7	0.34	U
Anthracene	0.34	0.7	0.34	U
Benzo(a)anthracene	0.34	0.7	0.34	U
Benzo(a)pyrene	0.34	0.7	0.34	U
Benzo(b)fluoranthene	0.34	0.7	0.34	U
Benzo(k)fluoranthene	0.34	0.7	0.34	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.34	0.7	0.34	U
Bis(2-ethylhexyl)phthalate	0.34	0.7	0.34	U
Butyl benzyl phthalate	0.34	0.7	0.34	U
Chrysene	0.34	0.7	0.34	U
Di-n-butylphthalate	0.34	0.7	0.34	U
Di-n-octylphthalate	0.34	0.7	0.34	U
Dibenz(a,h)anthracene	0.34	0.7	0.34	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB10-02

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AE903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-11

Lab File ID: FD935

Date Received: 10/25/96

% Solids: 90

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.34	0.7	0.34	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.34	0.7	0.34	U
Fluorene	0.34	0.7	0.34	U
Hexachlorobenzene	0.34	0.7	0.34	U
Hexachlorobutadiene	0.34	0.7	0.34	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.34	0.7	0.34	U
Indeno(1,2,3-cd)pyrene	0.34	0.7	0.34	U
Isophorone	0.34	0.7	0.34	U
N-Nitrosodiphenylamine	0.34	0.7	0.34	U
N-Nitrosodi-n-propylamine	0.34	0.7	0.34	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.34	0.7	0.34	U
Phenanthrene	0.34	0.7	0.34	U
Pyrene	0.34	0.7	0.34	U
2,4,5-Trichlorophenol	0.34	3.3	0.34	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U
2,4-Dinitrophenol	0.22	3.3	0.22	U
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.34	1.6	0.34	U
Benzoic acid	0.45	1.6	0.45	U
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.17	0.3	0.17	U

8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 580

FC-SB10-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-12

Lab File ID: FD936

Date Received: 10/25/96

% Solids: 90

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.33	0.7	0.33	U
1,2-Dichlorobenzene	0.33	0.7	0.33	U
1,3-Dichlorobenzene	0.33	0.7	0.33	U
1,4-Dichlorobenzene	0.33	0.7	0.33	U
2,4-Dinitrotoluene	0.33	0.7	0.33	U
2,6-Dinitrotoluene	0.33	0.7	0.33	U
2-Chloronaphthalene	0.33	0.7	0.33	U
2-Methylnaphthalene	0.33	0.7	0.33	U
2-Nitroaniline	0.22	3.3	0.22	U
3-Nitroaniline	0.22	3.3	0.22	U
3,3'-Dichlorobenzidine	0.44	1.3	0.44	U
4-Bromophenyl phenyl ether	0.33	0.7	0.33	U
4-Chloroaniline	0.22	1.3	0.22	U
4-Chlorophenyl phenyl ether	0.33	0.7	0.33	U
4-Nitroaniline	0.33	3.3	0.33	U
Acenaphthylene	0.33	0.7	0.33	U
Acenaphthene	0.33	0.7	0.33	U
Anthracene	0.33	0.7	0.33	U
Benzo(a)anthracene	0.33	0.7	0.33	U
Benzo(a)pyrene	0.33	0.7	0.33	U
Benzo(b)fluoranthene	0.33	0.7	0.33	U
Benzo(k)fluoranthene	0.33	0.7	0.33	U
Benzo(g,h,i)perylene	0.27	0.7	0.27	U
Benzyl alcohol	0.22	1.3	0.22	U
Bis(2-chloroethyl)ether	0.22	0.7	0.22	U
Bis(2-chloroethoxy)methane	0.22	0.7	0.22	U
Bis(2-chloroisopropyl)ether	0.33	0.7	0.33	U
Bis(2-ethylhexyl)phthalate	0.33	0.7	0.33	U
Butyl benzyl phthalate	0.33	0.7	0.33	U
Chrysene	0.33	0.7	0.33	U
Di-n-butylphthalate	0.33	0.7	0.33	U
Di-n-octylphthalate	0.33	0.7	0.33	U
Dibenz(a,h)anthracene	0.33	0.7	0.33	U

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8270B ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 581

FC-SB10-01

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-12

Lab File ID: FD936

Date Received: 10/25/96

% Solids: 90

Date Extracted: 10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.33	0.7	0.33	U
Diethyl phthalate	0.27	0.7	0.27	U
Dimethyl phthalate	0.27	0.7	0.27	U
Fluoranthene	0.33	0.7	0.33	U
Fluorene	0.33	0.7	0.33	U
Hexachlorobenzene	0.33	0.7	0.33	U
Hexachlorobutadiene	0.33	0.7	0.33	U
Hexachlorocyclopentadiene	0.11	0.7	0.11	U
Hexachloroethane	0.33	0.7	0.33	U
Indeno(1,2,3-cd)pyrene	0.33	0.7	0.33	U
Isophorone	0.33	0.7	0.33	U
N-Nitrosodiphenylamine	0.33	0.7	0.33	U
N-Nitrosodi-n-propylamine	0.33	0.7	0.33	U
Naphthalene	0.22	0.7	0.22	U
Nitrobenzene	0.33	0.7	0.33	U
Phenanthrene	0.33	0.7	0.33	U
Pyrene	0.33	0.7	0.33	U
2,4,5-Trichlorophenol	0.33	3.3	0.33	U
2,4,6-Trichlorophenol	0.17	0.3	0.17	U
2,4-Dichlorophenol	0.17	0.3	0.17	U
2,4-Dimethylphenol	0.17	0.3	0.17	U
2,4-Dinitrophenol	0.22	3.3	0.22	U
2-Chlorophenol	0.17	0.3	0.17	U
2-Methylphenol	0.17	0.3	0.17	U
2-Nitrophenol	0.17	0.3	0.17	U
4,6-Dinitro-2-methylphenol	0.22	3.3	0.22	U
4-Chloro-3-methylphenol	0.22	1.3	0.22	U
4-Methylphenol	0.17	0.3	0.17	U
4-Nitrophenol	0.33	1.6	0.33	U
Benzoic acid	0.44	1.6	0.44	U
Pentachlorophenol	0.22	3.3	0.22	U
Phenol	0.17	0.3	0.17	U

APPENDIX D

DATA SUMMARY FORMS

PESTICIDES/PCBs

O-2
8240 ANALYSIS DATA SHEET

429 . 583

FIELD SAMPLE ID:

FC-SB11-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-15

Lab File ID: BB7562301023 Date Received: 10/26/96

% Solids: 84 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.0012	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethene	0.0012	0.005	0.0012	U
1,2,3-Trichloropropane	0.0012	0.050	0.0012	U
1,2-Dichloroethane	0.0012	0.005	0.0012	U
1,2-Dichloropropane	0.0012	0.005	0.0012	U
Methyl ethyl ketone	0.0035	0.100	0.0035	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0035	0.050	0.0035	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0012	0.005	0.3970	E
Bromodichloromethane	0.0012	0.005	0.0012	U
Bromoform	0.0012	0.005	0.0012	U
Bromomethane	0.0035	0.010	0.0035	U
Carbon disulfide	0.0012	0.005	0.0012	U
Carbon tetrachloride	0.0059	0.005	0.0059	U
Chlorobenzene	0.0012	0.005	0.0012	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0012	0.005	0.0012	U
Chloromethane	0.0012	0.010	0.0012	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Chlorodibromomethane	0.0012	0.005	0.0012	U
Ethylbenzene	0.0023	0.005	5.4200	E
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0012	0.005	0.0012	U
Tetrachloroethene	0.0035	0.005	0.0035	U
Toluene	0.0012	0.005	6.8300	E
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

Revised
1463

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8240 ANALYSIS DATA SHEET

429 584

FIELD SAMPLE ID.

FC-SB11-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-15

Lab File ID: BB7562301023 Date Received: 10/26/96

% Solids: 84 ~~Date Extracted.10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Vinyl acetate	0.0141	0.050	0.0141	U
Vinyl chloride	0.0012	0.010	0.0012	U
m,p-Xylene	0.0047	0.005	6.8400	E
o-Xylene	0.0047	0.005	3.9500	E

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-TB-07

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-16

Lab File ID: DD7372501025 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Butanone	7.68	100.0	7.68	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Trichloroethene	1.69	5.0	1.69	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-TB-07

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-16

Lab File ID: DD7372501025 Date Received: 10/26/96

% Solids: NA ~~Date Extracted 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

8240 ANALYSIS DATA SHEET

429 . 587

FC-WQ-EB-05

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-17

Lab File ID: DD7372601026 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Butanone	7.68	100.0	7.68	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Trichloroethene	1.69	5.0	1.69	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U

8240 ANALYSIS DATA SHEET

FILE SAMPLE ID:

429 . 586

FC-WQ-EB-05

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12170-LIQ

Matrix: (soil/water) WATER Lab Sample ID: D96-12170-17

Lab File ID: DD7372601026 Date Received: 10/26/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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FIELD SAMPLE ID.

FC-SB11-C3RE

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-34

Lab File ID: BB7562901029 Date Received: 10/26/96

% Solids: 84 ~~Date Extracted: 10/30/96~~

Dilution Factor: ~~1.0~~ 100.0 APS 2/10/97 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.1200	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.2300	U
1,1,2-Trichloroethane	0.0012	0.005	0.1200	U
1,1-Dichloroethane	0.0012	0.005	0.1200	U
1,1-Dichloroethene	0.0012	0.005	0.1200	U
1,2,3-Trichloropropane	0.0012	0.050	0.1200	U
1,2-Dichloroethane	0.0012	0.005	0.1200	U
1,2-Dichloropropane	0.0012	0.005	0.1200	U
Methyl ethyl ketone	0.0035	0.100	0.3500	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.2300	U
2-Hexanone	0.0035	0.050	0.3500	U
Methyl isobutyl ketone	0.0023	0.050	0.2300	U
Acetone	0.0023	0.100	0.2300	U
Benzene	0.0012	0.005	2.2800	
Bromodichloromethane	0.0012	0.005	0.1200	U
Bromoform	0.0012	0.005	0.1200	U
Bromomethane	0.0035	0.010	0.3500	U
Carbon disulfide	0.0012	0.005	0.1200	U
Carbon tetrachloride	0.0059	0.005	0.5900	U
Chlorobenzene	0.0012	0.005	0.1200	U
Chloroethane	0.0023	0.010	0.2300	U
Chloroform	0.0012	0.005	0.1200	U
Chloromethane	0.0012	0.010	0.1200	U
cis 1,2-Dichloroethene	0.0023	0.005	0.2300	U
cis 1,3-Dichloropropene	0.0012	0.005	0.1200	U
Chlorodibromomethane	0.0012	0.005	0.1200	U
Ethylbenzene	0.0023	0.005	38.5000	
Methylene chloride	0.0023	0.005	0.2300	U
Styrene	0.0023	0.005	0.2300	U
Trichloroethene	0.0012	0.005	0.1200	U
Tetrachloroethene	0.0035	0.005	0.3500	U
Toluene	0.0012	0.005	0.1200	U
trans 1,2-Dichloroethene	0.0023	0.005	0.2300	U

Revised 1473

~~1465~~

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB11-03RE

429 590

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-34

Lab File ID: BB7562901029 Date Received: 10/26/96

% Solids: 84 ~~Date Extracted:10/30/96~~

Dilution Factor: 100.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.1200	U
Vinyl acetate	0.0141	0.050	1.4100	U
Vinyl chloride	0.0012	0.010	0.1200	U
m,p-Xylene	0.0047	0.005	76.9000	
o-Xylene	0.0047	0.005	36.5000	

Revised ~~1400~~ 12/31 1474

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FIELD SAMPLE ID.

FC-SB12-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-20

Lab File ID: BB7562401024 Date Received: 10/26/96

% Solids: 81 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.0012	U
1,1,2,2-Tetrachloroethane	0.0025	0.005	0.0025	U
1,1,2-Trichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethene	0.0012	0.005	0.0012	U
1,2,3-Trichloropropane	0.0012	0.050	0.0012	U
1,2-Dichloroethane	0.0012	0.005	0.0012	U
1,2-Dichloropropane	0.0012	0.005	0.0012	U
Methyl ethyl ketone	0.0037	0.100	0.0037	U
2-Chloroethyl vinyl ether	0.0025	0.010	0.0025	U
2-Hexanone	0.0037	0.050	0.0035	U
Methyl isobutyl ketone	0.0025	0.050	0.0025	U
Acetone	0.0025	0.100	0.0025	U
Benzene	0.0012	0.005	0.3975	
Bromodichloromethane	0.0012	0.005	0.0012	U
Bromoform	0.0012	0.005	0.0012	U
Bromomethane	0.0037	0.010	0.0037	U
Carbon disulfide	0.0012	0.005	0.0012	U
Carbon tetrachloride	0.0062	0.005	0.0062	U
Chlorobenzene	0.0012	0.005	0.0012	U
Chloroethane	0.0025	0.010	0.0025	U
Chloroform	0.0012	0.005	0.0012	U
Chloromethane	0.0012	0.010	0.0012	U
cis 1,2-Dichloroethene	0.0025	0.005	0.0025	U
cis 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Chlorodibromomethane	0.0012	0.005	0.0012	U
Ethylbenzene	0.0025	0.005	2.9259	E
Methylene chloride	0.0025	0.005	0.0025	U
Styrene	0.0025	0.005	0.0025	U
Trichloroethene	0.0012	0.005	0.0012	U
Tetrachloroethene	0.0037	0.005	0.0037	U
Toluene	0.0012	0.005	4.6914	E
trans 1,2-Dichloroethene	0.0025	0.005	0.0025	U

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1469

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429 592

FIELD SAMPLE ID.

FC-SB12-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-20

Lab File ID: BB7562401024 Date Received: 10/26/96

% Solids: 81 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Vinyl acetate	0.0160	0.050	0.0160	U
Vinyl chloride	0.0012	0.010	0.0012	U
m,p-Xylene	0.0049	0.005	4.5432	E
o-Xylene	0.0049	0.005	2.7901	E

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FIELD SAMPLE ID.

FC-SB12-03RE

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-35

Lab File ID: BB7563001030 Date Received: 10/26/96

% Solids: 81 ~~Date Extracted: 10/30/96~~

Dilution Factor: 100.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.1200	U
1,1,2,2-Tetrachloroethane	0.0025	0.005	0.2500	U
1,1,2-Trichloroethane	0.0012	0.005	0.1200	U
1,1-Dichloroethane	0.0012	0.005	0.1200	U
1,1-Dichloroethene	0.0012	0.005	0.1200	U
1,2,3-Trichloropropane	0.0012	0.050	0.1200	U
1,2-Dichloroethane	0.0012	0.005	0.1200	U
1,2-Dichloropropane	0.0012	0.005	0.1200	U
Methyl ethyl ketone	0.0037	0.100	2.4815	
2-Chloroethyl vinyl ether	0.0025	0.010	0.2500	U
2-Hexanone	0.0037	0.050	0.3500	U
Methyl isobutyl ketone	0.0025	0.050	0.2500	U
Acetone	0.0025	0.100	0.2500	U
Benzene	0.0012	0.005	1.5679	
Bromodichloromethane	0.0012	0.005	0.1200	U
Bromoform	0.0012	0.005	0.1200	U
Bromomethane	0.0037	0.010	0.3700	U
Carbon disulfide	0.0012	0.005	0.1200	U
Carbon tetrachloride	0.0062	0.005	0.6200	U
Chlorobenzene	0.0012	0.005	0.1200	U
Chloroethane	0.0025	0.010	0.2500	U
Chloroform	0.0012	0.005	0.1200	U
Chloromethane	0.0012	0.010	0.1200	U
cis 1,2-Dichloroethene	0.0025	0.005	0.2500	U
cis 1,3-Dichloropropene	0.0012	0.005	0.1200	U
Chlorodibromomethane	0.0012	0.005	0.1200	U
Ethylbenzene	0.0025	0.005	29.7531	
Methylene chloride	0.0025	0.005	0.2500	U
Styrene	0.0025	0.005	0.2500	U
Trichloroethene	0.0012	0.005	0.1200	U
Tetrachloroethene	0.0037	0.005	0.3700	U
Toluene	0.0012	0.005	38.2716	
trans 1,2-Dichloroethene	0.0025	0.005	0.2500	U

Revised
1475

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FIELD SAMPLE ID.

FC-SB12-03RE

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12170-SOIL

Matrix: (soil/water) SOIL Lab Sample ID: D96-12170-35

Lab File ID: BB7563001030 Date Received: 10/26/96

% Solids: 81 ~~Date Extracted:~~ 10/30/96

Dilution Factor: 100.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.1200	U
Vinyl acetate	0.0160	0.050	1.6000	U
Vinyl chloride	0.0012	0.010	0.1200	U
m,p-Xylene	0.0049	0.005	63.8272	
o-Xylene	0.0049	0.005	25.5556	

Revised
1476

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FIELD SAMPLE ID.

FC-WQ-EB-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-1

Lab File ID: DD7371501015 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Trichloroethene	1.69	5.0	1.69	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U

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FIELD SAMPLE ID.

FC-WQ-EB-01

429 . 996

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-1

Lab File ID: DD7371501015 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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FIELD SAMPLE ID.

FC-WQ-TB-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-2

Lab File ID: DD7371601016 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-TB-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-2

Lab File ID: DD7371601016 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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8240 ANALYSIS DATA SHEET

429 599

FIELD SAMPLE ID.

FC-WQ-TB-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-3

Lab File ID: DD7371701017 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

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8240 ANALYSIS DATA SHEET

429 600

FIELD SAMPLE ID.

FC-WQ-TB-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-3

Lab File ID: DD7371701017 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 601

FC-WQ-EB-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-4

Lab File ID: DD7371801018 Date Received: 10/23/96

% Solids: NA ~~Date Extracted:10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

Revised

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-4

Lab File ID: DD7371801018 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 603

FC-WQ-TB-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-5

Lab File ID: DD7371901019 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 604

FC-WQ-TB-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-5

Lab File ID: DD7371901019 Date Received: 10/23/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

8240 ANALYSIS DATA SHEET

429 . 605

FIELD SAMPLE ID.

FC-WQ-EB-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-13

Lab File ID: DD7372001020 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-EB-03

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-13

Lab File ID: DD7372001020 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-TB-04

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-14

Lab File ID: DD7372101021 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	1.22	5.0	1.22	U
1,1,2,2-Tetrachloroethane	3.95	5.0	3.95	U
1,1,2-Trichloroethane	1.61	5.0	1.61	U
1,1-Dichloroethane	1.48	5.0	1.48	U
1,1-Dichloroethene	1.30	5.0	1.30	U
1,2,3-Trichloropropane	0.90	5.0	0.90	U
1,2-Dichloroethane	1.18	5.0	1.18	U
1,2-Dichloropropane	1.38	5.0	1.38	U
2-Chloroethylvinyl ether	0.08	5.0	0.08	U
2-Hexanone	2.69	50.0	2.69	U
Acetone	6.54	100.0	6.54	U
Benzene	1.13	5.0	1.13	U
Bromodichloromethane	1.80	5.0	1.80	U
Bromoform	0.92	5.0	0.92	U
Bromomethane	2.57	10.0	2.57	U
Carbon disulfide	1.58	5.0	1.58	U
Carbon tetrachloride	0.79	5.0	0.79	U
Chlorobenzene	0.84	5.0	0.84	U
Chloroethane	1.16	10.0	1.16	U
Chloroform	1.42	5.0	1.42	U
Chloromethane	2.39	10.0	2.39	U
cis-1,3-Dichloropropene	1.06	5.0	1.06	U
Chlorodibromomethane	1.23	5.0	1.23	U
Ethylbenzene	1.86	5.0	1.86	U
2-Butanone	7.68	100.0	7.68	U
4-Methyl-2-pentanone	2.75	50.0	2.75	U
Methylene chloride	1.57	5.0	1.57	U
Styrene	1.01	5.0	1.01	U
Tetrachloroethene	0.92	5.0	0.92	U
Toluene	0.95	5.0	0.95	U
cis-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,2-Dichloroethene	1.64	5.0	1.64	U
trans-1,3-Dichloropropene	1.41	5.0	1.41	U
Trichloroethene	1.69	5.0	1.69	U

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-WQ-TB-04

429 . 608

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) WATER Lab Sample ID: D96-12092-14

Lab File ID: DD7372101021 Date Received: 10/25/96

% Solids: NA ~~Date Extracted: 10/31/96~~

Dilution Factor: 1.0 Date Analyzed: 10/31/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Vinyl acetate	3.85	50.0	3.85	U
Vinyl chloride	2.31	10.0	2.31	U
m,p-Xylene	3.16	5.0	3.16	U
o-Xylene	4.93	5.0	4.93	U

VOA ANALYSIS DATA SHEET

429 509

FC-SB08-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) SOIL Lab Sample ID: D96-12092-7

Lab File ID: BB7561101011 Date Received: 10/25/96

% Solids: 92 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0011	0.005	0.0011	U
1,1,2,2-Tetrachloroethane	0.0022	0.005	0.0022	U
1,1,2-Trichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethene	0.0011	0.005	0.0011	U
1,2,3-Trichloropropane	0.0011	0.050	0.0011	U
1,2-Dichloroethane	0.0011	0.005	0.0011	U
1,2-Dichloropropane	0.0011	0.005	0.0011	U
Methyl ethyl ketone	0.0033	0.100	0.0033	U
2-Chloroethyl vinyl ether	0.0022	0.010	0.0022	U
2-Hexanone	0.0033	0.050	0.0033	U
Methyl isobutyl ketone	0.0022	0.050	0.0022	U
Acetone	0.0022	0.100	0.0022	U
Benzene	0.0011	0.005	0.0011	U
Bromodichloromethane	0.0011	0.005	0.0011	U
Bromoform	0.0011	0.005	0.0011	U
Bromomethane	0.0033	0.010	0.0033	U
Carbon disulfide	0.0011	0.005	0.0011	U
Carbon tetrachloride	0.0054	0.005	0.0054	U
Chlorobenzene	0.0011	0.005	0.0011	U
Chloroethane	0.0022	0.010	0.0022	U
Chloroform	0.0011	0.005	0.0011	U
Chloromethane	0.0011	0.010	0.0011	U
cis 1,2-Dichloroethene	0.0022	0.005	0.0022	U
cis 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Chlorodibromomethane	0.0011	0.005	0.0011	U
Ethylbenzene	0.0022	0.005	0.0022	U
Methylene chloride	0.0022	0.005	0.0022	U
Styrene	0.0022	0.005	0.0022	U
Trichloroethene	0.0011	0.005	0.0011	U
Tetrachloroethene	0.0033	0.005	0.0033	U
Toluene	0.0011	0.005	0.0011	U
trans 1,2-Dichloroethene	0.0022	0.005	0.0022	U

Revised

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 610

FC-SB08-01

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) SOIL Lab Sample ID: D96-12092-7

Lab File ID: BB7561101011 Date Received: 10/25/96

% Solids: 92 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Vinyl acetate	0.0130	0.050	0.0130	U
Vinyl chloride	0.0011	0.010	0.0011	U
m,p-Xylene	0.0043	0.005	0.0043	U
o-Xylene	0.0043	0.005	0.0043	U

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FIELD SAMPLE ID:

FC-SB07-01N2

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) SOIL Lab Sample ID: D96-12092-21

Lab File ID: BB7562801028 Date Received: 10/25/96

% Solids: 84 ~~Date Extracted 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.0012	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethene	0.0012	0.005	0.0012	U
1,2,3-Trichloropropane	0.0012	0.050	0.0012	U
1,2-Dichloroethane	0.0012	0.005	0.0012	U
1,2-Dichloropropane	0.0012	0.005	0.0012	U
Methyl ethyl ketone	0.0035	0.100	0.0035	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0035	0.050	0.0035	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0012	0.005	0.0012	U
Bromodichloromethane	0.0012	0.005	0.0012	U
Bromoform	0.0012	0.005	0.0012	U
Bromomethane	0.0035	0.010	0.0035	U
Carbon disulfide	0.0012	0.005	0.0012	U
Carbon tetrachloride	0.0059	0.005	0.0059	U
Chlorobenzene	0.0012	0.005	0.0012	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0012	0.005	0.0012	U
Chloromethane	0.0012	0.010	0.0012	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Chlorodibromomethane	0.0012	0.005	0.0012	U
Ethylbenzene	0.0023	0.005	0.0023	U
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0012	0.005	0.0012	U
Tetrachloroethene	0.0035	0.005	0.0035	U
Toluene	0.0012	0.005	0.0012	U
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

Revised

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8240 ANALYSIS DATA SHEET

429 612

FC-SB07-01N2

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12092

Matrix: (soil/water) SOIL Lab Sample ID: D96-12092-21

Lab File ID: BB7562801028 Date Received: 10/25/96

% Solids: 84 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Vinyl acetate	0.0141	0.050	0.0141	U
Vinyl chloride	0.0012	0.010	0.0012	U
m,p-Xylene	0.0047	0.005	0.0047	U
o-Xylene	0.0047	0.005	0.0047	U

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FIELD SAMPLE ID.

FC-SB03-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-2

Lab File ID: BB7560601006 Date Received: 10/23/96

% Solids: 85 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.0012	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethene	0.0012	0.005	0.0012	U
1,2,3-Trichloropropane	0.0012	0.050	0.0012	U
1,2-Dichloroethane	0.0012	0.005	0.0012	U
1,2-Dichloropropane	0.0012	0.005	0.0012	U
Methyl ethyl ketone	0.0035	0.100	0.0035	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0035	0.050	0.0035	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0012	0.005	0.0012	U
Bromodichloromethane	0.0012	0.005	0.0012	U
Bromoform	0.0012	0.005	0.0012	U
Bromomethane	0.0035	0.010	0.0035	U
Carbon disulfide	0.0012	0.005	0.0012	U
Carbon tetrachloride	0.0059	0.005	0.0059	U
Chlorobenzene	0.0012	0.005	0.0012	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0012	0.005	0.0012	U
Chloromethane	0.0012	0.010	0.0012	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Chlorodibromomethane	0.0012	0.005	0.0012	U
Ethylbenzene	0.0023	0.005	0.0023	U
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0012	0.005	0.0012	U
Tetrachloroethene	0.0035	0.005	0.0035	U
Toluene	0.0012	0.005	0.0012	U
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

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FIELD SAMPLE ID.

429 614

FC-SB03-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-2

Lab File ID: BB7560601006 Date Received: 10/23/96

% Solids: 85 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Vinyl acetate	0.0141	0.050	0.0141	U
Vinyl chloride	0.0012	0.010	0.0012	U
m,p-Xylene	0.0047	0.005	0.0047	U
o-Xylene	0.0047	0.005	0.0047	U

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8240 ANALYSIS DATA SHEET

429 615

FIELD SAMPLE ID:

FC-SB01-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-5

Lab File ID: BB7560701007 Date Received: 10/23/96

% Solids: 88 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0011	0.005	0.0011	R
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	R
1,1,2-Trichloroethane	0.0011	0.005	0.0011	R
1,1-Dichloroethane	0.0011	0.005	0.0011	R
1,1-Dichloroethene	0.0011	0.005	0.0011	R
1,2,3-Trichloropropane	0.0011	0.050	0.0011	R
1,2-Dichloroethane	0.0011	0.005	0.0011	R
1,2-Dichloropropane	0.0011	0.005	0.0011	R
Methyl ethyl ketone	0.0034	0.100	0.0034	R
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	R
2-Hexanone	0.0034	0.050	0.0034	R
Methyl isobutyl ketone	0.0023	0.050	0.0023	R
Acetone	0.0023	0.100	0.0023	R
Benzene	0.0011	0.005	0.0011	R
Bromodichloromethane	0.0011	0.005	0.0011	R
Bromoform	0.0011	0.005	0.0011	R
Bromomethane	0.0034	0.010	0.0034	R
Carbon disulfide	0.0011	0.005	0.0011	R
Carbon tetrachloride	0.0057	0.005	0.0057	R
Chlorobenzene	0.0011	0.005	0.0011	R
Chloroethane	0.0023	0.010	0.0023	R
Chloroform	0.0011	0.005	0.0011	R
Chloromethane	0.0011	0.010	0.0011	R
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	R
cis 1,3-Dichloropropene	0.0011	0.005	0.0011	R
Chlorodibromomethane	0.0011	0.005	0.0011	R
Ethylbenzene	0.0023	0.005	0.0023	R
Methylene chloride	0.0023	0.005	0.0023	R
Styrene	0.0023	0.005	0.0023	R
Trichloroethene	0.0011	0.005	0.0011	R
Tetrachloroethene	0.0034	0.005	0.0034	R
Toluene	0.0011	0.005	0.0011	R
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	R

Revised
947

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 . 616

FC-SB01-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-5

Lab File ID: BB7560701007 Date Received: 10/23/96

% Solids: 88 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0011	0.005	0.0011	R
Vinyl acetate	0.0136	0.050	0.0136	R
Vinyl chloride	0.0011	0.010	0.0011	R
m,p-Xylene	0.0045	0.005	0.0045	R
o-Xylene	0.0045	0.005	0.0045	R

Revised 943

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8240 ANALYSIS DATA SHEET 617

FIELD SAMPLE ID.

FC-SB01-02 N2

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-27

Lab File ID: BB7562701027 Date Received: 10/23/96

% Solids: 88 ~~Date Extracted:~~ 10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0011	0.005	0.0011	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethene	0.0011	0.005	0.0011	U
1,2,3-Trichloropropane	0.0011	0.050	0.0011	U
1,2-Dichloroethane	0.0011	0.005	0.0011	U
1,2-Dichloropropane	0.0011	0.005	0.0011	U
Methyl ethyl ketone	0.0034	0.100	0.0034	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0034	0.050	0.0034	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0011	0.005	0.0011	U
Bromodichloromethane	0.0011	0.005	0.0011	U
Bromoform	0.0011	0.005	0.0011	U
Bromomethane	0.0034	0.010	0.0034	U
Carbon disulfide	0.0011	0.005	0.0011	U
Carbon tetrachloride	0.0057	0.005	0.0057	U
Chlorobenzene	0.0011	0.005	0.0011	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0011	0.005	0.0011	U
Chloromethane	0.0011	0.010	0.0011	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Chlorodibromomethane	0.0011	0.005	0.0011	U
Ethylbenzene	0.0023	0.005	0.0023	U
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0011	0.005	0.0011	U
Tetrachloroethene	0.0034	0.005	0.0034	U
Toluene	0.0011	0.005	0.0011	U
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

Revised

549

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8240 ANALYSIS DATA SHEET

429 618

FIELD SAMPLE ID.

FC-SB01-02 N2

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-27

Lab File ID: BB7562701027 Date Received: 10/23/96

% Solids: 88 ~~Date Extracted:~~ 10/30/96

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Vinyl acetate	0.0136	0.050	0.0136	U
Vinyl chloride	0.0011	0.010	0.0011	U
m,p-Xylene	0.0045	0.005	0.0045	U
o-Xylene	0.0045	0.005	0.0045	U

revised
550

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID:

429 . 619

FC-SB04-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-11

Lab File ID: BB7560801008 Date Received: 10/24/96

% Solids: 89 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0011	0.005	0.0011	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethane	0.0011	0.005	0.0011	U
1,1-Dichloroethene	0.0011	0.005	0.0011	U
1,2,3-Trichloropropane	0.0011	0.050	0.0011	U
1,2-Dichloroethane	0.0011	0.005	0.0011	U
1,2-Dichloropropane	0.0011	0.005	0.0011	U
Methyl ethyl ketone	0.0034	0.100	0.0034	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0034	0.050	0.0034	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0011	0.005	0.0011	U
Bromodichloromethane	0.0011	0.005	0.0011	U
Bromoform	0.0011	0.005	0.0011	U
Bromomethane	0.0034	0.010	0.0034	U
Carbon disulfide	0.0011	0.005	0.0011	U
Carbon tetrachloride	0.0057	0.005	0.0057	U
Chlorobenzene	0.0011	0.005	0.0011	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0011	0.005	0.0011	U
Chloromethane	0.0011	0.010	0.0011	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Chlorodibromomethane	0.0011	0.005	0.0011	U
Ethylbenzene	0.0023	0.005	0.0023	U
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0011	0.005	0.0011	U
Tetrachloroethene	0.0034	0.005	0.0034	U
Toluene	0.0011	0.005	0.0011	U
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

Revised

8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB04-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-11

Lab File ID: BB7560801008 Date Received: 10/24/96

% Solids: 89 ~~Date Extracted: 10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0011	0.005	0.0011	U
Vinyl acetate	0.0136	0.050	0.0136	U
Vinyl chloride	0.0011	0.010	0.0011	U
m,p-Xylene	0.0045	0.005	0.0045	U
o-Xylene	0.0045	0.005	0.0045	U

Revised

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-13

Lab File ID: BB7560901009 Date Received: 10/24/96

% Solids: 84 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,1,1-Trichloroethane	0.0012	0.005	0.0012	U
1,1,2,2-Tetrachloroethane	0.0023	0.005	0.0023	U
1,1,2-Trichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethane	0.0012	0.005	0.0012	U
1,1-Dichloroethene	0.0012	0.005	0.0012	U
1,2,3-Trichloropropane	0.0012	0.050	0.0012	U
1,2-Dichloroethane	0.0012	0.005	0.0012	U
1,2-Dichloropropane	0.0012	0.005	0.0012	U
Methyl ethyl ketone	0.0035	0.100	0.0035	U
2-Chloroethyl vinyl ether	0.0023	0.010	0.0023	U
2-Hexanone	0.0035	0.050	0.0035	U
Methyl isobutyl ketone	0.0023	0.050	0.0023	U
Acetone	0.0023	0.100	0.0023	U
Benzene	0.0012	0.005	0.0012	U
Bromodichloromethane	0.0012	0.005	0.0012	U
Bromoform	0.0012	0.005	0.0012	U
Bromomethane	0.0035	0.010	0.0035	U
Carbon disulfide	0.0012	0.005	0.0012	U
Carbon tetrachloride	0.0059	0.005	0.0059	U
Chlorobenzene	0.0012	0.005	0.0012	U
Chloroethane	0.0023	0.010	0.0023	U
Chloroform	0.0012	0.005	0.0012	U
Chloromethane	0.0012	0.010	0.0012	U
cis 1,2-Dichloroethene	0.0023	0.005	0.0023	U
cis 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Chlorodibromomethane	0.0012	0.005	0.0012	U
Ethylbenzene	0.0023	0.005	0.0023	U
Methylene chloride	0.0023	0.005	0.0023	U
Styrene	0.0023	0.005	0.0023	U
Trichloroethene	0.0012	0.005	0.0012	U
Tetrachloroethene	0.0035	0.005	0.0035	U
Toluene	0.0012	0.005	0.0012	U
trans 1,2-Dichloroethene	0.0023	0.005	0.0023	U

Revised
953

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8240 ANALYSIS DATA SHEET

FIELD SAMPLE ID.

FC-SB05-02

Lab Name: INCHCAPE TESTING SERVICES Contract: 9610 ID IQ/3103

Lab Code: ITS-DALLAS AAB No.: V12056

Matrix: (soil/water) SOIL Lab Sample ID: D96-12056-13

Lab File ID: BB7560901009 Date Received: 10/24/96

% Solids: 84 ~~Date Extracted:10/30/96~~

Dilution Factor: 1.0 Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
trans 1,3-Dichloropropene	0.0012	0.005	0.0012	U
Vinyl acetate	0.0141	0.050	0.0141	U
Vinyl chloride	0.0012	0.010	0.0012	U
m,p-Xylene	0.0047	0.005	0.0047	U
o-Xylene	0.0047	0.005	0.0047	U

Revised
554

APPENDIX E

DATA SUMMARY FORMS

INORGANICS

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	23.27	500.0	597.33	M
Selenium				
Silver				
Sodium	30.91	30.0	193.53	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium	0.02	0.3	0.24	~~J~~F
Cadmium	0.03	4.0	0.03	UM
Calcium				
Chromium	0.08	7.0	3.87	F
Cobalt	0.06	7.0	1.60	F
Copper	0.21	6.0	2.60	F
Iron				
Lead				
Magnesium	0.30	30.0	693.05	M
Manganese	0.47	2.0	44.75	
Mercury				
Nickel	0.11	15.0	3.45	~~F~~M
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	6.29	F
Zinc	0.44	2.0	8.48	M
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.30	60.0	0.91	F
Barium	0.05	2.0	22.97	
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.73	80.0	0.73	U
Silver				
Sodium				
Thallium	0.55	40.0	0.70	F
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: 1:10

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.25	50.0	3026.25	M
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.16	7.0	3456.44	
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: 1:100

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.42	10.0	52028.64	J MB
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	24.04	500.0	1234.28	M
Selenium				
Silver				
Sodium	31.94	30.0	145.87	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium	0.02	0.3	0.50	J
Cadmium	0.03	4.0	0.03	U M
Calcium				
Chromium	0.09	7.0	8.29	
Cobalt	0.06	7.0	3.65	F
Copper	0.22	6.0	5.96	F
Iron				
Lead				
Magnesium	0.31	30.0	1459.43	M
Manganese	0.48	2.0	84.41	
Mercury				
Nickel	0.11	15.0	8.17	~~F~~ M
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	15.22	
Zinc	0.46	2.0	18.85	M
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.31	60.0	2.34	F
Barium	0.05	2.0	69.87	
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.75	80.0	1.23	F
Silver				
Sodium				
Thallium	0.57	40.0	0.57	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: 1:10

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.33	50.0	6782.98	M
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.20	7.0	7629.10	
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1030601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: 1:100

Date Extracted: 10/30/96

Matrix: SOIL

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium	10.76	10.0	119975.34	JMB
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.47	40.0	0.47	U
Arsenic				
Barium	0.05	2.0	107.69	
Berylium	0.02	0.3	0.43	
Cadmium	0.04	4.0	0.10	F
Calcium				
Chromium	0.08	7.0	5.01	F
Cobalt	0.06	7.0	2.10	F
Copper	0.22	6.0	3.90	F
Iron				
Lead				
Magnesium	0.30	30.0	1214.57	
Manganese	0.47	2.0	79.16	
Mercury				
Nickel	0.11	15.0	5.15	F
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	20.94	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.27	50.0	3760.00	
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.16	7.0	5260.00	B
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.30	60.0	2.63	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.73	80.0	0.73	U
Silver				
Sodium				
Thallium	0.55	40.0	0.55	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.47	10.0	79600.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	23.38	500.0	710.11	
Selenium				
Silver				
Sodium	31.06	30.0	119.63	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.05	50.0	1901.74	
Antimony	0.42	40.0	0.42	U
Arsenic				
Barium	0.04	2.0	44.23	
Berylium	0.02	0.3	0.21	F
Cadmium	0.03	4.0	0.21	F
Calcium				
Chromium	0.08	7.0	5.68	F
Cobalt	0.05	7.0	2.65	F
Copper	0.20	6.0	3.16	F
Iron				
Lead				
Magnesium	0.27	30.0	1615.73	
Manganese				
Mercury				
Nickel	0.10	15.0	6.89	F
Potassium				
Selenium				
Silver	0.04	7.0	0.04	U
Sodium				
Thallium				
Vanadium	0.04	8.0	18.44	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.05	7.0	6740.00	B
Lead				
Magnesium				
Manganese	0.42	2.0	522.00	
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.27	60.0	6.06	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.66	80.0	0.66	U
Silver				
Sodium				
Thallium	0.50	40.0	0.50	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	9.47	10.0	125000.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	21.15	500.0	402.16	F
Selenium				
Silver				
Sodium	28.09	30.0	167.63	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-02

% Solids: 85.1

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.22	50.0	2641.60	
Antimony	0.46	40.0	0.46	U
Arsenic				
Barium	0.05	2.0	66.56	
Berylium	0.02	0.3	0.34	
Cadmium	0.03	4.0	0.07	F
Calcium				
Chromium	0.08	7.0	4.33	F
Cobalt	0.06	7.0	2.53	F
Copper	0.21	6.0	3.73	F
Iron				
Lead				
Magnesium	0.29	30.0	1507.10	
Manganese	0.46	2.0	167.56	
Mercury				
Nickel	0.11	15.0	5.52	F
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	15.84	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-02

% Solids: 85.1

Date Received: 10/23/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.14	7.0	5105.41	B
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-02

% Solids: 85.1

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.29	60.0	3.87	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.72	80.0	0.72	U
Silver				
Sodium				
Thallium	0.54	40.0	0.54	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-02

% Solids: 85.1

Date Received: 10/23/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.25	10.0	89500.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-02

% Solids: 85.1

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	22.91	500.0	435.00	F
Selenium				
Silver				
Sodium	30.40	30.0	490.00	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-05

% Solids: 87.7

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.44	40.0	0.44	U
Arsenic				
Barium	0.05	2.0	42.43	
Berylium	0.02	0.3	0.48	
Cadmium	0.03	4.0	0.03	U
Calcium				
Chromium	0.08	7.0	6.11	F
Cobalt	0.06	7.0	3.99	F
Copper	0.21	6.0	5.55	F
Iron				
Lead				
Magnesium	0.29	30.0	1841.16	
Manganese	0.44	2.0	104.31	
Mercury				
Nickel	0.10	15.0	9.24	F
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	11.13	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-05

% Solids: 87.7

Date Received: 10/23/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.16	50.0	3949.14	
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.11	7.0	11600.91	B
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-05

% Solids: 87.7

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.29	60.0	6.20	F
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.70	80.0	0.70	U
Silver				
Sodium				
Thallium	0.52	40.0	0.52	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-05

% Solids: 87.7

Date Received: 10/23/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.00	10.0	80300.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-05

% Solids: 87.7

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	22.20	500.0	1440.00	
Selenium				
Silver				
Sodium	30.00	30.0	120.00	B
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.44	40.0	0.44	U
Arsenic				
Barium	0.05	2.0	97.78	
Berylium	0.02	0.3	0.62	
Cadmium	0.03	4.0	0.09	F
Calcium				
Chromium	0.08	7.0	9.84	
Cobalt	0.06	7.0	4.19	F
Copper	0.20	6.0	6.73	
Iron				
Lead				
Magnesium	0.28	30.0	2333.67	
Manganese	0.44	2.0	250.26	
Mercury				
Nickel	0.10	15.0	8.72	F
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	20.17	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.13	50.0	7459.23	
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.09	7.0	8984.57	
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

no qualifier

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.28	60.0	4.12	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.70	80.0	0.70	U
Silver				
Sodium				
Thallium	0.52	40.0	0.52	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	9.80	10.0	54500.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	22.00	500.0	1250.00	
Selenium				
Silver				
Sodium	29.00	30.0	940.00	
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.46	40.0	0.46	U
Arsenic				
Barium	0.05	2.0	85.40	
Berylium	0.02	0.3	0.48	
Cadmium	0.03	4.0	0.06	F
Calcium				
Chromium	0.08	7.0	5.09	F
Cobalt	0.06	7.0	2.78	F
Copper	0.21	6.0	3.35	F
Iron				
Lead				
Magnesium	0.30	30.0	1440.02	
Manganese	0.46	2.0	197.60	
Mercury				
Nickel	0.11	15.0	5.56	F
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	12.79	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.24	50.0	4116.69	
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.15	7.0	4909.82	
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.30	60.0	2.79	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.72	80.0	0.72	U
Silver				
Sodium				
Thallium	0.54	40.0	0.54	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.33	10.0	86500.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	23.00	500.0	576.78	
Selenium				
Silver				
Sodium	31.00	30.0	159.24	
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.48	40.0	0.48	U
Arsenic				
Barium	0.05	2.0	81.13	
Beryllium	0.02	0.3	0.71	
Cadmium	0.04	4.0	0.04	U
Calcium				
Chromium	0.09	7.0	8.26	
Cobalt	0.06	7.0	5.29	F
Copper	0.22	6.0	5.01	F
Iron				
Lead				
Magnesium	0.31	30.0	1757.46	
Manganese	0.48	2.0	232.04	
Mercury				
Nickel	0.11	15.0	10.07	
Potassium				
Selenium				
Silver	0.05	7.0	0.05	U
Sodium				
Thallium				
Vanadium	0.05	8.0	20.72	
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: 1:10

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	2.31	50.0	6449.76	
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron	1.19	7.0	9839.00	
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic	0.31	60.0	5.86	F
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium	0.75	80.0	0.83	~~J~~ F
Silver				
Sodium				
Thallium	0.56	40.0	0.56	U
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: 1:50

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium	10.70	10.0	52700.00	B
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1028601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOLID

Date Analyzed: 11/19/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	24.00	500.0	1247.31	
Selenium				
Silver				
Sodium	32.00	30.0	118.06	
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-01

Lab Sample ID: D96-12092-1

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	963.00	5000.0	963.00	U
Selenium				
Silver				
Sodium	226.00	300.0	654.57	
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-01

Lab Sample ID: D96-12092-1

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	49.30	500.0	49.30	U
Antimony	2.30	400.0	2.30	U
Arsenic	2.10	600.0	2.10	U
Barium				
Berylium	0.10	3.0	0.28	F
Cadmium	0.50	40.0	0.50	U
Calcium	29.60	100.0	686.69	B ←
Chromium	0.86	70.0	2.96	F
Cobalt	0.49	70.0	0.49	U
Copper	0.47	60.0	2.26	F
Iron	20.10	70.0	383.67	
Lead				
Magnesium	12.10	300.0	76.69	F
Manganese				
Mercury				
Nickel	0.93	150.0	1.51	F
Potassium				
Selenium	3.90	800.0	3.90	U
Silver	0.71	70.0	0.71	U
Sodium				
Thallium	3.60	400.0	4.54	F
Vanadium	0.78	80.0	0.78	U
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-01

Lab Sample ID: D96-12092-1

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/21/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium	0.50	20.0	3.84	F
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese	1.70	20.0	3.31	F
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	12.50	20.0	12.50	U
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-02

Lab Sample ID: D96-12092-4

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	963.00	5000.0	963.00	U
Selenium				
Silver				
Sodium	226.00	300.0	226.00	U
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-02

Lab Sample ID: D96-12092-4

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	49.30	500.0	49.30	U
Antimony	2.30	400.0	2.30	U
Arsenic	2.10	600.0	2.10	U
Barium				
Berylium	0.10	3.0	0.18	F
Cadmium	0.50	40.0	0.50	U
Calcium	29.60	100.0	313.54	B
Chromium	0.86	70.0	2.16	F
Cobalt	0.49	70.0	0.49	U
Copper	0.47	60.0	1.75	F
Iron	20.10	70.0	36.81	F
Lead				
Magnesium	12.10	300.0	66.05	F
Manganese				
Mercury				
Nickel	0.93	150.0	0.93	U
Potassium				
Selenium	3.90	800.0	3.90	U
Silver	0.71	70.0	0.71	U
Sodium				
Thallium	3.60	400.0	3.60	U
Vanadium	0.78	80.0	0.78	U
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-02

Lab Sample ID: D96-12092-4

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/21/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium	0.50	20.0	1.15	F
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese	1.70	20.0	1.70	U
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	12.50	20.0	12.50	U
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-03

Lab Sample ID: D96-12092-13

% Solids: NA

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/18/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	963.00	5000.0	963.00	U
Selenium				
Silver				
Sodium	226.00	300.0	300.83	J
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-03

Lab Sample ID: D96-12092-13

% Solids: NA

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/20/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	49.30	500.0	49.30	U
Antimony	2.30	400.0	2.30	U
Arsenic	2.10	600.0	2.10	U
Barium				
Beryllium	0.10	3.0	0.19	F J
Cadmium	0.50	40.0	0.50	U
Calcium	29.60	100.0	274.96	B
Chromium	0.86	70.0	1.25	F J
Cobalt	0.49	70.0	0.49	U
Copper	0.47	60.0	2.39	F J
Iron	20.10	70.0	30.34	F J
Lead				
Magnesium	12.10	300.0	64.89	F J
Manganese				
Mercury				
Nickel	0.93	150.0	0.93	U
Potassium				
Selenium	3.90	800.0	3.90	U
Silver	0.71	70.0	0.71	U
Sodium				
Thallium	3.60	400.0	3.60	U
Vanadium	0.78	80.0	0.78	U
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1027601002

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-03

Lab Sample ID: D96-12092-13

% Solids: NA

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/21/96

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium	0.50	20.0	0.74	F ~~J~~
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese	1.70	20.0	1.70	U
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	12.50	20.0	12.50	U
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421

AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: 1:5

Date Extracted: 11/6/96

Matrix: SOIL

Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	6.54	M
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421

AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: 1:5

Date Extracted: 11/6/96

Matrix: SOIL

Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	11.26	M
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421

AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9510IDIQ\3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: 1:5

Date Extracted: 11/6/96

Matrix: SOIL

Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	7.39	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB08-01 Lab Sample ID: 12092-7

% Solids: 92.2 Date Received: 10/25/96

Dilution: 1:5 Date Extracted: 11/6/96

Matrix: SOIL Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	6.25	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1027742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-01 Lab Sample ID: 12092-1

% Solids: NA Date Received: 10/23/96

Dilution: NA Date Extracted: 10/27/96

Matrix: LIQUID Date Analyzed: 11/14/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	1.50	5.0	1.50	U
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1027742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-02 Lab Sample ID: 12092-4

% Solids: NA Date Received: 10/23/96

Dilution: NA Date Extracted: 10/27/96

Matrix: LIQUID Date Analyzed: 11/14/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	1.50	5.0	1.50	U
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421

AAB#: 1027742101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-03

Lab Sample ID: 12092-13

% Solids: NA

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/27/96

Matrix: LIQUID

Date Analyzed: 11/14/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	1.50	5.0	1.50	U
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1031601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9510IDIQ/3103

Field Sample ID: FC-WQ-EB-05

Lab Sample ID: 12170-17

% Solids: NA

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/31/96

Matrix: LIQUID

Date Analyzed: 12/3/96

Concentration Units (ug/L or mg/Kg dry weight): UG/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium	963.00	5000.00	963.00	U
Selenium				
Silver				
Sodium	225.00	300.00	238.26	F
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010A

AAB#: 1031601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-WQ-EB-05

Lab Sample ID: 12170-17

% Solids: NA

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/31/96

Matrix: LIQUID

Date Analyzed: 12/4/96

Concentration Units (ug/L or mg/Kg dry weight): UG/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum	49.30	500.00	49.30	U
Antimony	2.30	400.00	2.57	F
Arsenic	2.10	600.00	2.10	U
Barium	0.50	20.00	2.02	F
Berylium	0.10	3.00	0.10	U
Cadmium	0.50	40.00	1.20	F
Calcium	29.60	100.00	306.34	
Chromium	0.86	70.00	1.94	F
Cobalt	0.49	70.00	0.49	U
Copper	0.47	60.00	4.15	F
Iron	20.10	70.00	50.49	F
Lead				
Magnesium	12.10	300.00	72.64	F
Manganese	1.70	20.00	1.70	U
Mercury				
Nickel	0.93	150.00	1.49	F
Potassium				
Selenium	3.90	800.00	3.90	U
Silver	0.71	70.00	0.71	U
Sodium				
Thallium	3.60	400.00	3.60	U
Vanadium	0.78	80.00	0.78	U
Zinc	12.50	20.00	18.68	F
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1210601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: NA

Date Extracted: 12/10/96

Matrix: SOLID

Date Analyzed: 12/12/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.56	40.0	1.37	J F M
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW6010A

AAB#: 1210601001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: NA

Date Extracted: 12/10/96

Matrix: SOLID

Date Analyzed: 12/12/96

Concentration Units (ug/L or mg/Kg dry weight): MG/KG

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony	0.58	40.0	1.39	J F M
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 6010IDIQ/3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-2

% Solids: 85.1

Date Received: 10/23/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.32	2.0	20.21	J
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-5

% Solids: 87.7

Date Received: 10/23/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.31	2.0	25.08	J
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.30	2.0	28.83	J
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.32	2.0	25.29	J
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.33	2.0	20.16	J
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421

AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-2

% Solids: 85.1

Date Received: 10/23/96

Dilution: 1:5

Date Extracted: 11/6/96

Matrix: SOIL

Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	6.59	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB01-02 Lab Sample ID: 12056-5

% Solids: 87.7 Date Received: 10/23/96

Dilution: 1:5 Date Extracted: 11/6/96

Matrix: SOIL Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	7.05	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB04-02 Lab Sample ID: 12056-11

% Solids: 88.8 Date Received: 10/24/96

Dilution: 1:5 Date Extracted: 11/6/96

Matrix: SOIL Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	9.77	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 | AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc. | Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB05-02 | Lab Sample ID: 12056-13

% Solids: 84.5 | Date Received: 10/24/96

Dilution: 1:5 | Date Extracted: 11/6/96

Matrix: SOIL | Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	8.55	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1106742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB06-02 Lab Sample ID: 12056-17

% Solids: 81.8 Date Received: 10/24/96

Dilution: 1:10 Date Extracted: 11/6/96

Matrix: SOIL Date Analyzed: 11/7/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	0.07	0.5	15.00	
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB03-02

Lab Sample ID: 12056-2

% Solids: 85.1

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB01-02

Lab Sample ID: 12056-5

% Solids: 87.7

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.03	0.1	0.03	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB04-02

Lab Sample ID: 12056-11

% Solids: 88.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.03	0.1	0.03	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB05-02

Lab Sample ID: 12056-13

% Solids: 84.5

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB06-02

Lab Sample ID: 12056-17

% Solids: 81.8

Date Received: 10/24/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7470A

AAB#: 1029747001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-01

Lab Sample ID: 12092-1

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/29/96

Matrix: LIQUID

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.06	1.0	0.09	F
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7470A

AAB#: 1029747001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-02

Lab Sample ID: 12092-4

% Solids: NA

Date Received: 10/23/96

Dilution: NA

Date Extracted: 10/29/96

Matrix: LIQUID

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.06	1.0	0.10	F
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7470A

AAB#: 1029747001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-03

Lab Sample ID: 12092-13

% Solids: NA

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/29/96

Matrix: LIQUID

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.06	1.0	0.07	F
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9510IDIQ\3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1028747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: NA

Date Extracted: 10/28/96

Matrix: SOIL

Date Analyzed: 10/29/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.03	0.1	0.03	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1031747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB11-03

Lab Sample ID: 12170-15

% Solids: 83.8

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/31/96

Matrix: SOIL

Date Analyzed: 11/1/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7471A

AAB#: 1031747101

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-SB12-03

Lab Sample ID: 12170-20

% Solids: 81.1

Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/31/96

Matrix: SOIL

Date Analyzed: 11/1/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.04	0.1	0.04	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7421 AAB#: 1105742101

Lab Name: Inchcape Testing Services, Inc. Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-05 Lab Sample ID: 12170-17

% Solids: NA Date Received: 10/26/96

Dilution: NA Date Extracted: 11/5/96

Matrix: LIQUID Date Analyzed: 11/6/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead	1.50	5.0	2.05	F
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: SW7470A

AAB#: 1030747001

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ\3103

Field Sample ID: FC-WQ-EB-05

Lab Sample ID: 12170-17

% Solids: NA

-Date Received: 10/26/96

Dilution: NA

Date Extracted: 10/30/96

Matrix: LIQUID

Date Analyzed: 10/31/96

Concentration Units (ug/L or mg/Kg dry weight): µg/L

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury	0.06	1.0	0.06	U
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc				
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 6010IDIQ/3103

Field Sample ID: FC-SB07-01

Lab Sample ID: 12092-6

% Solids: 83.4

Date Received: 10/25/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.32	2.0	19.88	J
Cyanide				

Comments:

AFCEE FORM I-2

AFCEE
INORGANIC ANALYSES DATA SHEET 2

Analytical Method: 6010a

AAB#: 1119601003

Lab Name: Inchcape Testing Services, Inc.

Contract#: 9610IDIQ/3103

Field Sample ID: FC-SB08-01

Lab Sample ID: 12092-7

% Solids: 92.2

Date Received: 10/25/96

Dilution: NA

Date Extracted: 11/19/96

Matrix: SOIL

Date Analyzed: 11/26/96

Concentration Units (ug/L or mg/Kg dry weight): mg/Kg

Analyte	MDL	PQL	Concentration	Qualifier
Aluminum				
Antimony				
Arsenic				
Barium				
Berylium				
Cadmium				
Calcium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Magnesium				
Manganese				
Mercury				
Nickel				
Potassium				
Selenium				
Silver				
Sodium				
Thallium				
Vanadium				
Zinc	0.29	2.0	15.41	J
Cyanide				

Comments:

AFCEE FORM I-2

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-19

Lab File ID: FD937

Date Received: 10/24/96

% Solids: 100

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.30	0.7	0.30	U
1,2-Dichlorobenzene	0.30	0.7	0.30	U
1,3-Dichlorobenzene	0.30	0.7	0.30	U
1,4-Dichlorobenzene	0.30	0.7	0.30	U
2,4-Dinitrotoluene	0.30	0.7	0.30	U
2,6-Dinitrotoluene	0.30	0.7	0.30	U
2-Chloronaphthalene	0.30	0.7	0.30	U
2-Methylnaphthalene	0.30	0.7	0.30	U
2-Nitroaniline	0.20	3.3	0.20	U
3-Nitroaniline	0.20	3.3	0.20	U
3,3'-Dichlorobenzidine	0.40	1.3	0.40	U
4-Bromophenyl phenyl ether	0.30	0.7	0.30	U
4-Chloroaniline	0.20	1.3	0.20	U
4-Chlorophenyl phenyl ether	0.30	0.7	0.30	U
4-Nitroaniline	0.30	3.3	0.30	U
Acenaphthylene	0.30	0.7	0.30	U
Acenaphthene	0.30	0.7	0.30	U
Anthracene	0.30	0.7	0.30	U
Benzo(a)anthracene	0.30	0.7	0.30	U
Benzo(a)pyrene	0.30	0.7	0.30	U
2,4-Dichlorophenol	0.15	0.3	0.15	U
Benzo(b)fluoranthene	0.30	0.7	0.30	U
Benzo(k)fluoranthene	0.30	0.7	0.30	U
Benzo(g,h,i)perylene	0.24	0.7	0.24	U
Benzyl alcohol	0.20	1.3	0.20	U
Bis(2-chloroethyl)ether	0.20	0.7	0.20	U
Bis(2-chloroethoxy)methane	0.20	0.7	0.20	U
Bis(2-chloroisopropyl)ether	0.30	0.7	0.30	U
Bis(2-ethylhexyl)phthalate	0.30	0.7	0.30	U
Butyl benzyl phthalate	0.30	0.7	0.30	U
Chrysene	0.30	0.7	0.30	U
Di-n-butylphthalate	0.30	0.7	0.30	U
Di-n-octylphthalate	0.30	0.7	0.30	U

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

469 . 716

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-84

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-19

Lab File ID: FD937

Date Received: 10/24/96

% Solids: 100

Date Extracted: 10/25/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.30	0.7	0.30	U
Dibenzofuran	0.30	0.7	0.30	U
Diethyl phthalate	0.24	0.7	0.24	U
Dimethyl phthalate	0.24	0.7	0.24	U
Fluoranthene	0.30	0.7	0.30	U
Fluorene	0.30	0.7	0.30	U
Hexachlorobenzene	0.30	0.7	0.30	U
Hexachlorobutadiene	0.30	0.7	0.30	U
Hexachlorocyclopentadiene	0.10	0.7	0.10	U
Hexachloroethane	0.30	0.7	0.30	U
Indeno(1,2,3-cd)pyrene	0.30	0.7	0.30	U
Isophorone	0.30	0.7	0.30	U
N-Nitrosodiphenylamine (1)	0.30	0.7	0.30	U
N-Nitrosodi-n-propylamine	0.30	0.7	0.30	U
Naphthalene	0.20	0.7	0.20	U
Nitrobenzene	0.30	0.7	0.30	U
Phenanthrene	0.30	0.7	0.30	U
Pyrene	0.30	0.7	0.30	U
2,4,5-Trichlorophenol	0.30	3.3	0.30	U
2,4,6-Trichlorophenol	0.15	0.3	0.15	U
2,4-Dimethylphenol	0.15	0.3	0.15	U
2,4-Dinitrophenol	0.20	3.3	0.20	U
2-Chlorophenol	0.15	0.3	0.15	U
2-Methylphenol	0.15	0.3	0.15	U
2-Nitrophenol	0.15	0.3	0.15	U
4,6-Dinitro-2-methylphenol	0.20	3.3	0.20	U
4-Chloro-3-methylphenol	0.20	1.3	0.20	U
4-Methylphenol	0.15	0.3	0.15	U
4-Nitrophenol	0.30	1.6	0.30	U
Benzoic acid	0.20	1.6	0.20	U
Pentachlorophenol	0.20	3.3	0.20	U
Phenol	0.15	0.3	0.15	U

(1) - Cannot be separated from Diphenylamine

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-25

Lab File ID: FE171

Date Received: 10/24/96

% Solids: 100

Date Extracted: 11/01/96

Dilution Factor: 1.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.30	0.7	0.30	U
1,2-Dichlorobenzene	0.30	0.7	0.30	U
1,3-Dichlorobenzene	0.30	0.7	0.30	U
1,4-Dichlorobenzene	0.30	0.7	0.30	U
2,4-Dinitrotoluene	0.30	0.7	0.30	U
2,6-Dinitrotoluene	0.30	0.7	0.30	U
2-Chloronaphthalene	0.30	0.7	0.30	U
2-Methylnaphthalene	0.30	0.7	0.30	U
2-Nitroaniline	0.20	3.3	0.20	U
3-Nitroaniline	0.20	3.3	0.20	U
3,3'-Dichlorobenzidine	0.40	1.3	0.40	U
4-Bromophenyl phenyl ether	0.30	0.7	0.30	U
4-Chloroaniline	0.20	1.3	0.20	U
4-Chlorophenyl phenyl ether	0.30	0.7	0.30	U
4-Nitroaniline	0.30	3.3	0.30	U
Acenaphthylene	0.30	0.7	0.30	U
Acenaphthene	0.30	0.7	0.30	U
Anthracene	0.30	0.7	0.30	U
Benzo(a)anthracene	0.30	0.7	0.30	U
Benzo(a)pyrene	0.30	0.7	0.30	U
2,4-Dichlorophenol	0.15	0.3	0.15	U
Benzo(b)fluoranthene	0.30	0.7	0.30	U
Benzo(k)fluoranthene	0.30	0.7	0.30	U
Benzo(g,h,i)perylene	0.24	0.7	0.24	U
Benzyl alcohol	0.20	1.3	0.20	U
Bis(2-chloroethyl)ether	0.20	0.7	0.20	U
Bis(2-chloroethoxy)methane	0.20	0.7	0.20	U
Bis(2-chloroisopropyl)ether	0.30	0.7	0.30	U
Bis(2-ethylhexyl)phthalate	0.30	0.7	0.30	U
Butyl benzyl phthalate	0.30	0.7	0.30	U
Chrysene	0.30	0.7	0.30	U
Di-n-butylphthalate	0.30	0.7	0.30	U
Di-n-octylphthalate	0.30	0.7	0.30	U

8270B BLANK ORGANIC ANALYSIS DATA SHEET

429 718

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-42

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12056-25

Lab File ID: FE171

Date Received: 10/24/96

% Solids: 100

Date Extracted: 11/01/96

Dilution Factor: 1.0

Date Analyzed: 11/14/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.30	0.7	0.30	U
Dibenzofuran	0.30	0.7	0.30	U
Diethyl phthalate	0.24	0.7	0.24	U
Dimethyl phthalate	0.24	0.7	0.24	U
Fluoranthene	0.30	0.7	0.30	U
Fluorene	0.30	0.7	0.30	U
Hexachlorobenzene	0.30	0.7	0.30	U
Hexachlorobutadiene	0.30	0.7	0.30	U
Hexachlorocyclopentadiene	0.10	0.7	0.10	U
Hexachloroethane	0.30	0.7	0.30	U
Indeno(1,2,3-cd)pyrene	0.30	0.7	0.30	U
Isophorone	0.30	0.7	0.30	U
N-Nitrosodiphenylamine (1)	0.30	0.7	0.30	U
N-Nitrosodi-n-propylamine	0.30	0.7	0.30	U
Naphthalene	0.20	0.7	0.20	U
Nitrobenzene	0.30	0.7	0.30	U
Phenanthrene	0.30	0.7	0.30	U
Pyrene	0.30	0.7	0.30	U
2,4,5-Trichlorophenol	0.30	3.3	0.30	U
2,4,6-Trichlorophenol	0.15	0.3	0.15	U
2,4-Dimethylphenol	0.15	0.3	0.15	U
2,4-Dinitrophenol	0.20	3.3	0.20	U
2-Chlorophenol	0.15	0.3	0.15	U
2-Methylphenol	0.15	0.3	0.15	U
2-Nitrophenol	0.15	0.3	0.15	U
4,6-Dinitro-2-methylphenol	0.20	3.3	0.20	U
4-Chloro-3-methylphenol	0.20	1.3	0.20	U
4-Methylphenol	0.15	0.3	0.15	U
4-Nitrophenol	0.30	1.6	0.30	U
Benzoic acid	0.20	1.6	0.20	U
Pentachlorophenol	0.20	3.3	0.20	U
Phenol	0.15	0.3	0.15	U

(1) - Cannot be separated from Diphenylamine

8270B BLANK ORGANIC ANALYSIS DATA SHEET

429 . 719

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-21

Lab File ID: FD990

Date Received: 10/25/96

% Solids: 100

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.30	0.7	0.30	U
1,2-Dichlorobenzene	0.30	0.7	0.30	U
1,3-Dichlorobenzene	0.30	0.7	0.30	U
1,4-Dichlorobenzene	0.30	0.7	0.30	U
2,4-Dinitrotoluene	0.30	0.7	0.30	U
2,6-Dinitrotoluene	0.30	0.7	0.30	U
2-Chloronaphthalene	0.30	0.7	0.30	U
2-Methylnaphthalene	0.30	0.7	0.30	U
2-Nitroaniline	0.20	3.3	0.20	U
3-Nitroaniline	0.20	3.3	0.20	U
3,3'-Dichlorobenzidine	0.40	1.3	0.40	U
4-Bromophenyl phenyl ether	0.30	0.7	0.30	U
4-Chloroaniline	0.20	1.3	0.20	U
4-Chlorophenyl phenyl ether	0.30	0.7	0.30	U
4-Nitroaniline	0.30	3.3	0.30	U
Acenaphthylene	0.30	0.7	0.30	U
Acenaphthene	0.30	0.7	0.30	U
Anthracene	0.30	0.7	0.30	U
Benzo(a)anthracene	0.30	0.7	0.30	U
Benzo(a)pyrene	0.30	0.7	0.30	U
2,4-Dichlorophenol	0.15	0.3	0.15	U
Benzo(b)fluoranthene	0.30	0.7	0.30	U
Benzo(k)fluoranthene	0.30	0.7	0.30	U
Benzo(g,h,i)perylene	0.24	0.7	0.24	U
Benzyl alcohol	0.20	1.3	0.20	U
Bis(2-chloroethyl)ether	0.20	0.7	0.20	U
Bis(2-chloroethoxy)methane	0.20	0.7	0.20	U
Bis(2-chloroisopropyl)ether	0.30	0.7	0.30	U
Bis(2-ethylhexyl)phthalate	0.30	0.7	0.30	U
Butyl benzyl phthalate	0.30	0.7	0.30	U
Chrysene	0.30	0.7	0.30	U
Di-n-butylphthalate	0.30	0.7	0.30	U
Di-n-octylphthalate	0.30	0.7	0.30	U

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

429 . 720

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-10

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12170-21

Lab File ID: FD990

Date Received: 10/25/96

% Solids: 100

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 11/01/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenz(a,h)anthracene	0.30	0.7	0.30	U
Dibenzofuran	0.30	0.7	0.30	U
Diethyl phthalate	0.24	0.7	0.24	U
Dimethyl phthalate	0.24	0.7	0.24	U
Fluoranthene	0.30	0.7	0.30	U
Fluorene	0.30	0.7	0.30	U
Hexachlorobenzene	0.30	0.7	0.30	U
Hexachlorobutadiene	0.30	0.7	0.30	U
Hexachlorocyclopentadiene	0.10	0.7	0.10	U
Hexachloroethane	0.30	0.7	0.30	U
Indeno(1,2,3-cd)pyrene	0.30	0.7	0.30	U
Isophorone	0.30	0.7	0.30	U
N-Nitrosodiphenylamine (1)	0.30	0.7	0.30	U
N-Nitrosodi-n-propylamine	0.30	0.7	0.30	U
Naphthalene	0.20	0.7	0.20	U
Nitrobenzene	0.30	0.7	0.30	U
Phenanthrene	0.30	0.7	0.30	U
Pyrene	0.30	0.7	0.30	U
2,4,5-Trichlorophenol	0.30	3.3	0.30	U
2,4,6-Trichlorophenol	0.15	0.3	0.15	U
2,4-Dimethylphenol	0.15	0.3	0.15	U
2,4-Dinitrophenol	0.20	3.3	0.20	U
2-Chlorophenol	0.15	0.3	0.15	U
2-Methylphenol	0.15	0.3	0.15	U
2-Nitrophenol	0.15	0.3	0.15	U
4,6-Dinitro-2-methylphenol	0.20	3.3	0.20	U
4-Chloro-3-methylphenol	0.20	1.3	0.20	U
4-Methylphenol	0.15	0.3	0.15	U
4-Nitrophenol	0.30	1.6	0.30	U
Benzoic acid	0.20	1.6	0.20	U
Pentachlorophenol	0.20	3.3	0.20	U
Phenol	0.15	0.3	0.15	U

(1) - Cannot be separated from Diphenylamine

8270B BLANK ORGANIC ANALYSIS DATA SHEET

429, 721

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: A5925-18

Matrix: (soil/water) WATER

Lab Sample ID: D96-12170-26

Lab File ID: FD957

Date Received: 10/26/96

% Solids: NA

Date Extracted: 10/30/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.60	U
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

O-6

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-18

Matrix: (soil/water) WATER

Lab Sample ID: D96-12170-26

Lab File ID: FD957

Date Received: 10/26/96

% Solids: NA

Date Extracted: 10/30/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine (1)	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	U
2,4,6-Trichlorophenol	1.50	10.0	1.50	U
2,4-Dichlorophenol	1.80	10.0	1.80	U
2,4-Dimethylphenol	2.30	10.0	2.30	U
2,4-Dinitrophenol	2.00	50.0	2.00	U
2-Chlorophenol	2.50	10.0	2.50	U
2-Methylphenol	2.40	20.0	2.40	U
2-Nitrophenol	2.30	10.0	2.30	U
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	U
4-Chloro-3-methylphenol	1.60	20.0	1.60	U
4-Methylphenol	1.80	10.0	1.80	U
4-Nitrophenol	3.10	50.0	3.10	U
Benzoic acid	3.90	50.0	3.90	U
Pentachlorophenol	5.70	50.0	5.70	U
Phenol	2.60	10.0	2.60	U

(1) - Cannot be separated from Diphenylamine

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-17

Lab File ID: FD949

Date Received: 10/25/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	2.60	10.0	2.60	U
1,2-Dichlorobenzene	3.20	10.0	3.20	U
1,3-Dichlorobenzene	3.30	10.0	3.30	U
1,4-Dichlorobenzene	3.40	10.0	3.40	U
2,4-Dinitrotoluene	2.00	10.0	2.00	U
2,6-Dinitrotoluene	1.60	10.0	1.60	U
2-Chloronaphthalene	1.70	10.0	1.70	U
2-Methylnaphthalene	1.90	10.0	1.90	U
2-Nitroaniline	2.10	50.0	2.10	U
3-Nitroaniline	1.90	50.0	1.90	U
3,3'-Dichlorobenzidine	3.10	20.0	3.10	U
4-Bromophenyl phenyl ether	1.00	10.0	1.00	U
4-Chloroaniline	2.10	20.0	2.10	U
4-Chlorophenyl phenyl ether	1.60	10.0	1.60	U
4-Nitroaniline	2.60	50.0	2.60	U
Acenaphthylene	1.60	10.0	1.60	U
Acenaphthene	1.60	10.0	1.60	U
Anthracene	1.80	10.0	1.80	U
Benzo(a)anthracene	1.80	10.0	1.80	U
Benzo(a)pyrene	1.60	10.0	1.60	U
Benzo(b)fluoranthene	4.30	10.0	4.30	U
Benzo(k)fluoranthene	4.30	10.0	4.30	U
Benzo(g,h,i)perylene	1.60	10.0	1.60	U
Benzyl alcohol	2.90	20.0	2.90	U
Bis(2-chloroethyl)ether	2.90	10.0	2.90	U
Bis(2-chloroethoxy)methane	2.20	10.0	2.20	U
Bis(2-chloroisopropyl)ether	2.30	10.0	2.30	U
Bis(2-ethylhexyl)phthalate	3.50	10.0	3.50	U
Butyl benzyl phthalate	1.80	10.0	1.80	U
Chrysene	1.60	10.0	1.60	U
Di-n-butylphthalate	1.60	10.0	1.60	U
Di-n-octylphthalate	2.40	10.0	2.40	U
Dibenz(a,h)anthracene	1.60	10.0	1.60	U

8270B BLANK ORGANIC ANALYSIS DATA SHEET

429 . 724

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB925-4

Matrix: (soil/water) WATER

Lab Sample ID: D96-12092-17

Lab File ID: FD949

Date Received: 10/25/96

% Solids: NA

Date Extracted: 10/29/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: UG/L

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	1.60	10.0	1.60	U
Diethyl phthalate	1.50	10.0	1.50	U
Dimethyl phthalate	1.20	10.0	1.20	U
Fluoranthene	3.20	10.0	3.20	U
Fluorene	1.80	10.0	1.80	U
Hexachlorobenzene	1.10	10.0	1.10	U
Hexachlorobutadiene	3.00	10.0	3.00	U
Hexachlorocyclopentadiene	0.20	10.0	0.20	U
Hexachloroethane	3.40	10.0	3.40	U
Indeno(1,2,3-cd)pyrene	1.40	10.0	1.40	U
Isophorone	1.60	10.0	1.60	U
N-Nitrosodiphenylamine (1)	1.20	10.0	1.20	U
N-Nitrosodi-n-propylamine	2.10	10.0	2.10	U
Naphthalene	2.20	10.0	2.20	U
Nitrobenzene	2.50	10.0	2.50	U
Phenanthrene	1.50	10.0	1.50	U
Pyrene	2.20	10.0	2.20	U
2,4,5-Trichlorophenol	1.60	50.0	1.60	U
2,4,6-Trichlorophenol	1.50	10.0	1.50	U
2,4-Dichlorophenol	1.80	10.0	1.80	U
2,4-Dimethylphenol	2.30	10.0	2.30	U
2,4-Dinitrophenol	2.00	50.0	2.00	U
2-Chlorophenol	2.50	10.0	2.50	U
2-Methylphenol	2.40	20.0	2.40	U
2-Nitrophenol	2.30	10.0	2.30	U
4,6-Dinitro-2-methylphenol	2.30	50.0	2.30	U
4-Chloro-3-methylphenol	1.60	20.0	1.60	U
4-Methylphenol	1.80	10.0	1.80	U
4-Nitrophenol	3.10	50.0	3.10	U
Benzoic acid	3.90	50.0	3.90	U
Pentachlorophenol	5.70	50.0	5.70	U
Phenol	2.60	10.0	2.60	U

(1) - Cannot be separated from Diphenylamine

O-6

8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB903-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-15

Lab File ID: FD928

Date Received: 10/25/96

% Solids: 100

Date Extracted:10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
1,2,4-Trichlorobenzene	0.30	0.7	0.30	U
1,2-Dichlorobenzene	0.30	0.7	0.30	U
1,3-Dichlorobenzene	0.30	0.7	0.30	U
1,4-Dichlorobenzene	0.30	0.7	0.30	U
2,4-Dinitrotoluene	0.30	0.7	0.30	U
2,6-Dinitrotoluene	0.30	0.7	0.30	U
2-Chloronaphthalene	0.30	0.7	0.30	U
2-Methylnaphthalene	0.30	0.7	0.30	U
2-Nitroaniline	0.20	3.3	0.20	U
3-Nitroaniline	0.20	3.3	0.20	U
3,3'-Dichlorobenzidine	0.40	1.3	0.40	U
4-Bromophenyl phenyl ether	0.30	0.7	0.30	U
4-Chloroaniline	0.20	1.3	0.20	U
4-Chlorophenyl phenyl ether	0.30	0.7	0.30	U
4-Nitroaniline	0.30	3.3	0.30	U
Acenaphthylene	0.30	0.7	0.30	U
Acenaphthene	0.30	0.7	0.30	U
Anthracene	0.30	0.7	0.30	U
Benzo(a)anthracene	0.30	0.7	0.30	U
Benzo(a)pyrene	0.30	0.7	0.30	U
Benzo(b)fluoranthene	0.30	0.7	0.30	U
Benzo(k)fluoranthene	0.30	0.7	0.30	U
Benzo(g,h,i)perylene	0.24	0.7	0.24	U
Benzyl alcohol	0.20	1.3	0.20	U
Bis(2-chloroethyl)ether	0.20	0.7	0.20	U
Bis(2-chloroethoxy)methane	0.20	0.7	0.20	U
Bis(2-chloroisopropyl)ether	0.30	0.7	0.30	U
Bis(2-ethylhexyl)phthalate	0.30	0.7	0.30	U
Butyl benzyl phthalate	0.30	0.7	0.30	U
Chrysene	0.30	0.7	0.30	U
Di-n-butylphthalate	0.30	0.7	0.30	U
Di-n-octylphthalate	0.30	0.7	0.30	U
Dibenz(a,h)anthracene	0.30	0.7	0.30	U

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8270B BLANK ORGANIC ANALYSIS DATA SHEET

FIELD SAMPLE ID.

BLK

Lab Name: ITS-DALLAS

Contract: 9610IDIQ\3103

Lab Code:

AAB No.: AB303-98

Matrix: (soil/water) SOIL

Lab Sample ID: D96-12092-15

Lab File ID: FD928

Date Received: 10/25/96

% Solids: 100

Date Extracted:10/28/96

Dilution Factor: 1.0

Date Analyzed: 10/30/96

CONCENTRATION UNITS: MG/KG

COMPOUND	MDL	PQL	RESULT	Q
Dibenzofuran	0.30	0.7	0.30	U
Diethyl phthalate	0.24	0.7	0.24	U
Dimethyl phthalate	0.24	0.7	0.24	U
Fluoranthene	0.30	0.7	0.30	U
Fluorene	0.30	0.7	0.30	U
Hexachlorobenzene	0.30	0.7	0.30	U
Hexachlorobutadiene	0.30	0.7	0.30	U
Hexachlorocyclopentadiene	0.10	0.7	0.10	U
Hexachloroethane	0.30	0.7	0.30	U
Indeno(1,2,3-cd)pyrene	0.30	0.7	0.30	U
Isophorone	0.30	0.7	0.30	U
N-Nitrosodiphenylamine (1)	0.30	0.7	0.30	U
N-Nitrosodi-n-propylamine	0.30	0.7	0.30	U
Naphthalene	0.20	0.7	0.20	U
Nitrobenzene	0.30	0.7	0.30	U
Phenanthrene	0.30	0.7	0.30	U
Pyrene	0.30	0.7	0.30	U
2,4,5-Trichlorophenol	0.30	3.3	0.30	U
2,4,6-Trichlorophenol	0.15	0.3	0.15	U
2,4-Dichlorophenol	0.15	0.3	0.15	U
2,4-Dimethylphenol	0.15	0.3	0.15	U
2,4-Dinitrophenol	0.20	3.3	0.20	U
2-Chlorophenol	0.15	0.3	0.15	U
2-Methylphenol	0.15	0.3	0.15	U
2-Nitrophenol	0.15	0.3	0.15	U
4,6-Dinitro-2-methylphenol	0.20	3.3	0.20	U
4-Chloro-3-methylphenol	0.20	1.3	0.20	U
4-Methylphenol	0.15	0.3	0.15	U
4-Nitrophenol	0.30	1.6	0.30	U
Benzoic acid	0.40	1.6	0.40	U
Pentachlorophenol	0.20	3.3	0.20	U
Phenol	0.15	0.3	0.15	U

(1) - Cannot be separated from Diphenylamine

APPENDIX F

DATA QUALIFIERS

ORGANIC DATA QUALIFIERS

U - Indicates that the compound was analyzed for, but not detected. The associated numerical value is at or below the Method Detection Limit (MDL).

J - The compound was positively identified. The associated numerical value is an estimated quantity.

UJ - The compound was analyzed for, but not detected. The sample quantitation limit is an estimated quantity due to variance from quality control limits.

F - The compound was positively identified. However, the associated numerical value is below the Practical Quantitation Limit (PQL).

B - The compound was found in the associated blank, as well as in the sample.

M - Designates that a matrix effect may be present due to accuracy and/or precision being generated out of specification for the MS/MSD.

E - Reported value is estimated due to quantitation above the calibration range.

D - Reported result taken from diluted sample analysis.

R - Reported value is unusable and rejected due to variance from quality control limits.

NA - Not Analyzed.

INORGANIC DATA QUALIFIERS

U - Indicates that the analyte was analyzed for, but not detected. The associated numerical value is at or below the Method Detection Limit (MDL).

J - The analyte was positively identified. The reported value is estimated due to variance from quality control limits.

UJ - The element was analyzed for, but not detected. The sample quantitation limit is an estimate due to variance from quality control limits.

B - The compound was found in the associated blank, as well as in the sample.

M - Designates that a matrix effect may be present due to accuracy and/or precision being generated out of specification for the MS/MSD.

F - The compound was positively identified. However, the associated numerical value is below the Practical Quantitation Limit (PQL).

R - Reported value is unusable and rejected due to variance from quality control limits.

NA - Not analyzed.

APPENDIX G

CASE NARRATIVES

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED: 23 & 24-OCT-1996 REPORT NUMBER: D96-12056
REPORT DATE: 26-DEC-1996

SAMPLE SUBMITTED BY : The Environmental Company
ADDRESS : 710 NW Juniper Street
Issaquah, WA 98027
ATTENTION : Mr. Bob Duffner
DATE SAMPLED : 22 & 23-OCT-96

CASE NARRATIVE COMMENTS:

Regarding ICP Metals, analyzed by EPA 6010A; the soil samples were re-prepared for Zinc analysis, and are reported in a separate package following the initial analysis.

Diesel Range Organics, by EPA 8015 Modified, have surrogate recoveries outside of acceptance limits for the following samples: FC-SB01-01, FC-SB02-01, and FC-SB02-02. High product recovery in the samples have caused matrix interference with surrogate recoveries.

Regarding Volatile Organics, by EPA 8240; sample FC-SB01-02 was re-analyzed due to low internal standard recoveries. The re-analysis was within internal standard recovery limits.

The Semivolatile Organics, by EPA 8270, have matrix interference demonstrated by the Matrix Spike, Matrix Spike Duplicate, and RPD between the MS/MSD. Benzoic acid is outside of recovery limits in the Matrix Spike sample. 2,4-Dimethylphenol, 2,4-Dinitrophenol, and Benzoic acid are outside of recovery limits in the Matrix Spike Duplicate sample. In addition, the RPD for 2,4-Dinitrophenol is outside of acceptance limits. All associated quality control samples have been flagged "M". Due to low recovery of acid surrogates, samples FC-SB01-01 and FC-SB02-01 have been flagged "R" for all acid target compounds. These samples were re-analyzed at a dilution of 10X, and confirmed that matrix interference was responsible for low surrogate recoveries.

No other comments were documented during the sample analysis of this job. If you have any questions, please call me at (972) 238-5591.

Janice McKittrick
Project Manager

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED: 25 & 26-OCT-1996 REPORT NUMBER: D96-12170
REPORT DATE: 31-DEC-1996

SAMPLE SUBMITTED BY : The Environmental Company
ADDRESS : 710 NW Juniper Street
Issaquah, WA 98027
ATTENTION : Mr. Bob Duffner
DATE SAMPLED : 25 & 26-OCT-96

CASE NARRATIVE COMMENTS:

Regarding ICP Metals, analyzed by EPA 6010A; the soil samples were re-prepared for Antimony analysis, and are reported in a separate package following the initial analysis. The Matrix Spike, Matrix Spike Duplicate, and RPD between the MS/MSD are outside of acceptance limits for: Aluminum, Antimony, Calcium, and Magnesium. The Matrix Spike and Matrix Spike Duplicate are outside of acceptance limits for: Cadmium, Iron, Nickel, Potassium, and Zinc. All associated quality control samples have been flagged "M".

Regarding Lead analysis by EPA Method 7421, the Matrix Spike, Matrix Spike Duplicate, and RPD between the MS/MSD are outside of acceptance criteria. All associated quality control samples have been flagged "M".

Due to the detection of target compounds exceeding the calibration range, Benzene, Toluene, Ethylbenzene, m,p-Xylene, and o-Xylene; samples FC-SB11-03 and FC-SB12-03 were re-analyzed with a dilution factor of 100 times, for Volatile Organics by EPA Method 8240.

Regarding the Semivolatile Organics by EPA Method 8270, the soil Matrix Spike / Matrix Spike Duplicate RPD was greater than 30%. All associated quality control samples have been flagged "M". The surrogate recovery for Phenol-d6 is below the lower control limit for FC-WQ-EB-04 and FC-WQ-EB-05. The samples were re-analyzed and the low surrogate recovery confirmed. All target compounds associated with this surrogate are flagged "J" in these samples.

No other comments were documented during the sample analysis of this job. If you have any questions, please call me at (972) 238-5591.

Janice McKittrick
Project Manager

Inchcape Testing Services
Environmental Laboratories

DATE RECEIVED: 23,24 & 25-OCT-1996 REPORT NUMBER: D96-12092
REPORT DATE: 26-DEC-1996

SAMPLE SUBMITTED BY : The Environmental Company
ADDRESS : 710 NW Juniper Street
Issaquah, WA 98027
ATTENTION : Mr. Bob Duffner
DATE SAMPLED : 22, 23 & 24-OCT-96

CASE NARRATIVE COMMENTS:

Regarding ICP Metals, analyzed by EPA 6010A; the soil samples were re-prepared for Zinc analysis, and are reported in a separate package following the initial analysis.

No other comments were documented during the sample analysis of this job. If you have any questions, please call me at (972) 238-5591.

Janice McKittrick
Project Manager

APPENDIX H

CHAIN-OF-CUSTODY FORMS

The Environmental Company, Inc.
1230 Collars Court • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT

SAMPLERS: (Signature)

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatile 8260	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	Metals 6010/7470/74					REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB01-01	10/22	940	SOIL	3		X	X	X	X						2056-4		
FC-SB01-02	10/22	1005	SOIL	4	X		X	X		X					5		
FC-SB01-03	10/22	1020	SOIL	3		X		X	X						6		
FC-SB02-01	10/22	1300	SOIL	3		X	X	X	X						7		
FC-SB02-02	10/22	1320	SOIL	3		X	X	X	X						8		
FC-SB02-03	10/22	1420	SOIL	3		X	X	X	X						9		
FC-WQ-TB-02																	
TEMP BLANK				1											COOLER TEMP		

Relinquished by: (Signature) ①	Date /	Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date /	Time	Shipped via:
Bob Duff	10/22	2050					
Relinquished by: (Signature) ②	**Date /**	**Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date /**	**Time**	**Shipping Ticket No.**
				C. McNair	10/23/96	1022	
Relinquished by: (Signature) ③	**Date /**	**Time**	**Received by: (Signature)**	**Remarks:**			
							EN RECEIVED 3 °C

1505

The Environmental Company, Inc.

1230 Cedars Court • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: #3103 FAM CAMP

SAMPLERS: (Signature) Bob Duffin

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	Inorg 6010/7421/7420					REMARKS OR SAMPLE LOCATION 12056-	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB04-01	10/23	0840	SOIL	3		1	1	x	1						SVOA & TPHD is same container -10		
~~FC-SB0~~																	
FC-SB04-02	10/23	0840	SOIL	~~4~~ 3	1		1	x	1	1					11		
FC-SB05-01	10/23	1035	SOIL	3		1	1	x	1						12		
FC-SB05-02	10/23	1135	SOIL	4	1		1	x	1	1					13		
FC-SB05-03	10/23	1150	SOIL	2		1			1						14		
FC-SB05-04	10/23	1035	SOIL	2		1			1						15		
FC-SB06-01	10/23	1450	SOIL	4		2			2						MS/MSD 16		
FC-SB06-02	10/23	1520	SOIL	2		1			1						17		
FC-SB06-03	10/23	1520	SOIL	2		1			1						18		
FC-WQ-EB-02	10/23	1630	WATER	4	2				2								
FC-WQ-TB-03	10/23	1740	WATER	2	2												
Temperature Control					1										Cooler Temp QC		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) R.M. Duff	10/23/96 1745		(4)		
Relinquished by: (Signature) (2)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
			[signature]	10/24/96 1000	
Relinquished by: (Signature) (3)	Date / Time	Received by: (Signature)	Remarks:		

900

507

Environmental Company, Inc.
1236 Cedar Hill Rd • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: FAM CAMP

SAMPLERS: (Signature): Bob Duffner, King Troensegaard

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatile 8240	BTEX 8020	SVOA 8270	TPH-D 8015	TPH-G 8015	Inorg 6010/7421/7470/7471	REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
~~FC-SB01-01~~	~~10/22~~	~~09:40~~	~~Soil~~	~~3~~		X	X	X	X			X	~~Inorg~~
~~FC-SB01-02~~	~~10/22~~	~~10:05~~	~~Soil~~	~~4~~	X		X	X		X		X	HNO_3
~~FC-SB01-03~~	~~10/22~~	~~10:20~~	~~Soil~~	~~3~~		X		X	X			X	~~TPH-D~~
~~FC-SB02-01~~	~~10/22~~	~~13:00~~	~~Soil~~	~~3~~		X	X	X	X			X	HCl
~~FC-SB02-02~~	~~10/22~~	~~13:20~~	~~Soil~~	~~3~~		X	X	X	X			X	~~VOA~~
~~FC-SB02-03~~	~~10/22~~	~~14:20~~	~~Soil~~	~~3~~		X	X	X	X			X	~~HCl~~
FC-SB03-01	10/22	17:10	Soil	3		X	X	X	X		✓ 12056-1	X	+
FC-SB03-02	10/22	17:25	Soil	4	X		X	X	X	X	✓ 2	X	<2.0
FC-SB03-03	10/22	17:45	Soil	3		X	X	X	X		✓ 3	X	
FC-WQ-EB-01	10/22	12:45	Water	8	X		X	X	X	X	✓	X	
~~TEMP BLANK~~				~~7~~							~~COOLER TEMP~~		
~~Trip~~													
FC-WQ-TB-01	10/22	22:18	Water	2	X						✓		
TEMP BLANK				1							Cooler Temp		

ORIGINAL

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
① Bob Duff	10/22 20:50				
Relinquished by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date / Time**	**Shipping Ticket No.**
②			C. McNair	10/23/96 1015	
Relinquished by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Remarks:**		
③				TEMPERATURE RECEIVED 3 °C	

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1230 Cedars Court • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3103 - FAM CAMP

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	CONTAINERS NO.	Volatiles 8260	BTEX 8020	Semi volatiles 8270	TPH-D 8015	TPH-G 8015	Inorganics 6010/7421/7470/7471	Grain size			REMARKS OR SAMPLE LOCATION	PRESERVATION: ICED	PRESERVATION: SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB11-01	10/26	9:05	Soil	3		1	1	x	1		12170		13		X	
FC-SB11-02	10/26	9:05	Soil	3		1	1	x	1				14			
FC-SB11-03	10/26	9:05	Soil	4	1	~~1~~ RMD	1	x	1	1			15	SB11-03 for VOAS NOT BTEX		
FC-WQ-TB-07	10/26	1245	water	2	2								16		X	HCl
FC-WQ-EB-05	10/26	1245	water		2		1	1	2	1			17			
~~FC-SB11-0~~																
FC-SB12-01	10/26		Soil	3		1	1	x	1				18			
FC-SB12-02	10/26		Soil	3		1	1	x	1				19			
FC-SB12-03	10/26		Soil	4	1		1	X	1	1			20			

Relinquished by: (Signature) ①	Date /	Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date /	Time	Shipped via:
Bob Duffner	10/26	1300 ~~1300~~ RMD	Jordan E Black	Jordan E Black	10/26/96	1600	
Relinquished by: (Signature) ②	**Date /**	**Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date /**	**Time**	**Shipping Ticket No.**
				James McKittrick	10/26/96	1600	
Relinquished by: (Signature) ③	**Date /**	**Time**	**Received by: (Signature)**	**Remarks:** Received on ice.			

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(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3103 - Fam Camp

SAMPLERS: (Signature) Lesley Myers

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	Semi-volatiles 8270	Pesticides/PCBs 8080	TPH-Diesel 8015	TPH-Gasoline 8015	Inorganics 6010/7421/747	Grain Size				REMARKS OR SAMPLE LOCATION	ICED	PRESERVATION: SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB19-01	10/25/96	11:10	soil	4	1	1	x	x	1	1		21	70	7	Semi-volatiles, pesticides	X	
FC-SBD19-02	10/25/96	11:10	soil	4	1	1	x	x	1	1				8	& TPH-Diesel in same		
FC-SB20-01	10/25/96	12:10	soil	4	1	1	x	x	1	1				9	container		
FC-SB20-02	10/25/96	13:56	soil	8	2	2	x	x	2	2	1			10	Matrix spike/MSD		
															Inorganics & Grain		
FC-WC-TB-06	10/25/96	16:00	w	2	2									11	Size Analysis		
															Material in same		HCl
															container		
FC-WQ-EB-04	10/25	1550	w	7	2	1		1	2	1				12			HCl VOA
																	TPHD
																	NO3-Inorg
COOLER TEMPERATURE WHEN RECEIVED: 4 °C																	

Relinquished by: (Signature) ①	Date / Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date / Time	Shipped via:
Bob Duffner	10/25/96 1615				
Relinquished by: (Signature) ②	**Date / Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date / Time**	**Shipping Ticket No.**
			[signature]	10-25 1830	
Relinquished by: (Signature) ③	**Date / Time**	**Received by: (Signature)**	**Remarks:**		

005

The Environmental Company, Inc.

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Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3101 - Fam Camp

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles 8240	Semivolatiles 8270	Pesticides/PCB 8080	TPH-Diesel 8015	TPH-Gasoline 8015	Inorganics 6010/7421	Grain Size				REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB16-01	10/25	0810	Soil	4	1	1	x	x	1	1				1	Semivolatiles, Pest/PCB	X	
FC-SB16-02	10/25	825	Soil	4	1	1	x	x	1	1	x			2	and TPH-Diesel		
FC-SB17-01	10/25	1040	Soil	4	1	1	x	x	1	1				3	in same container		
FC-SB18-01	10/25	1000	Soil	4	1	1	x	x	1	1				4	for soils		
FC-SB18-02	10/25	1015	Soil	4	1	1	x	x	1	1				5	Inorganics and Grain		
															Size in same		
															container for soils		
FC-WQTB-05	10/25	1530	Water	2	1									6		↓	HCl

COOLER TEMPERATURE WHEN RECEIVED: 4 °C

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duff	10/25/96 1615		(4)		
Relinquished by: (Signature) (2)	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
			[illegible]	10-25 1830	
Relinquished by: (Signature) (3)	Date / Time	Received by: (Signature)	Remarks: ORIGINAL		

Environmental Company, Inc.
1230 Ced[illegible] • Suite 100
Po[illegible] Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: #3103 FAM CAMP

SAMPLERS: (Signature) Bob Duffner

SAMPLE NUMBER	DATE	TIME	MATRIX	CONTAINERS NO.	Volat. 8240	BTEX 8020	SVOA 8270	TPHD 8015	TPHG 8015	HW020 6010/7421/7470			REMARKS OR SAMPLE LOCATION	PRESERVATION: ICED	PRESERVATION: SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB05-03	10/23		SOIL	1				1		120556	-14		SVOA & TPH D	X	
FC-SB05-04	10/23		SOIL	1			1	X				15	in same Jar	X	
FC-SB06-01	10/23		SOIL	2			2	X				16	MS/MSD	X	
FC-SB06-02	10/23		SOIL	2			1	X		1		17		X	
FC-SB06-03	10/23		SOIL	1				1				18		X	
FC-WQ-EB-02	10/23		~~SOIL~~ WATER							1				X	
FC-WQ-EB-02	10/23		WATER	2			1	1						X	HCL

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Shipped via:
(1) Bob Duff	10/23/96 1755		(4)		
Relinquished by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Received for Laboratory by: (Signature)**	**Date / Time**	**Shipping Ticket No.**
(2)			Laurel Mary	10/24/96 1000	
Relinquished by: (Signature)	**Date / Time**	**Received by: (Signature)**	**Remarks:**		
(3)					

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1230 Cedars Court • Suite 100
Post Office Box 5127
Charlottesville, Virginia 22905
(804)295-4446 • fax(804) 295-5535

CHAIN OF CUSTODY RECORD

PROJECT: 3103 - Fam Camp

SAMPLERS: (Signature) Lesley Myers

SAMPLE NUMBER	DATE	TIME	MATRIX	NO. CONTAINERS	Volatiles	BTEX	Semi-Volatiles 8270	TPH-D 8015	TPH-G 8015	INORG 6010/7421/7470/74				REMARKS OR SAMPLE LOCATION	ICED	SPECIFY CHEMICALS ADDED AND FINAL pH IF KNOWN
FC-SB10-01	10/24/96	1435	Soil	1			1	X			1	09	2	12	Semi-volatiles and	X	
FC-SB10-02	10/24/96	1525	Soil	1			1	X						11	TPH-D in same	X	
FC-WQ-EB-03	10/24/96	1615	Water	3			1	1		1				13	container for	X	TPHD-HCl
															soil samples	X	

Relinquished by: (Signature) ①	Date / Time	Received by: (Signature)	Relinquished by: (Signature) ④	Date / Time	Shipped via:
Lesley Myers	10/24 1745				
Relinquished by: (Signature) ②	Date / Time	Received by: (Signature)	Received for Laboratory by: (Signature)	Date / Time	Shipping Ticket No.
			[signature]	10/25/96 1100	
Relinquished by: (Signature) ③	Date / Time	Received by: (Signature)	Remarks:		

TAB

APPENDIX M

LABORATORY QUALITY CONTROL REPORT

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056
INORGANICS

Analytical Method: 6010A
Analytical Batch ID: 1119601003
Date of Analysis: 11/18/96-11/19/96
Units: mg/kg

Field SampleID:
FC-SB03-02 FC-SB-05-02
FC-SB01-02 FC-SB-05-02
FC-SB04-02

Marix: Soil

Method Blank Contamination Summary: PBS:1028601001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Magnesium	0.29	30	2.3	<PQL	Apply "B" to all results within 5X
Potassium	24	500	26.9	<PQL	

Quality Control Samples	Target Concentrations	Spike	Recovery(%) Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aluminum	100	108.1		80-120			
Antimony	1000	95.9		80-120			
Arsenic	5000	101.7		80-120			
Barium	1000	94.9		80-120			
Beryllium	100	105.5		80-120			
Cadmium	100	102.5		80-120			
Calcium	1000	102.6		80-120			
Chromium	100	102		80-120			
Cobalt	100	101.4		80-120			
Copper	100	101.4		80-120			
Iron	100	101.8		80-120			
Magnesium	100	105.4		80-120			
Manganese	100	100.2		80-120			
Nickel	100	101.9		80-120			
Potassium	1000	105.3		80-120			
Selenium	5000	100.2		80-120			
Silver	10	102.6		80-120			
Sodium	1000	96.9		80-120			
Thallium	100	103.6		80-120			
Vanadium	100	101.1		80-120			

(1)LCSS:1028601001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
INORGANICS

Analytical Method: SW7421
Analytical Batch ID: 1106742101
Date of Analysis: 11/7/96
Units: mg/kg

Field Sample ID:
FC-SB03-02 FC-SB-05-02
FC-SB01-02 FC-SB-06-02
FC-SB04-02

Matrix: Soil

Method Blank Contamination Summary: MB1106742101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Lead	2	107		74-124			

(1)LCS1106742101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
INORGANICS

Analytical Method:SW7471A
Analytical Batch ID: 1028747101
Date of Analysis: 10/29/96
Units: mg/kg

Field Sample ID:
FC-SB03-02 FC-SB-05-02
FC-SB01-02 FC-SB-06-02
FC-SB04-02

Matrix: Soil

Method Blank Contamination Summary: MB1028747101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

			Recovery(%)		RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Mercury	1	98.3		77-120			

(1)LCS1028747101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
INORGANICS

Analytical Method:SW 6010A
Analytical Batch ID: 1119601003
Date of Analysis: 11/26/96
Units: mg/kg

Field Sample ID:
FC-SB03-02 FC-SB-05-02
FC-SB01-02 FC-SB-06-02
FC-SB04-02

Matrix: Soil

Method Blank Contamination Summary: PBS:1119601003

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Zinc	0.32	2	0.63		Apply "B" to results within 5X

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Zinc	100	99.2		80-120			

(1)LCSS:1119601003

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-DRO
Analytical Batch ID: AB903-85
Date of Analysis: 10/28/96-10/29/96
Units: mg/kg

Field Sample IDs:

FC-SB02-03	FC-SB05-02	FC-SB06-01	FC-SB03-03	FC-SB01-01
FC-SB04-01	FC-SB05-03	FC-SB06-02	FC-SB01-02	FC-SB02-01
FC-SB04-02	FC-SB03-01	FC-SB06-03	FC-SB01-03	FC-SB06-01MS
FC-SB05-01	FC-SB05-04	FC-SB03-02	FC-SB02-02	FC-SB06-01MSD

Matrix: Soil

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1) TPH as Diesel	83.3	81		51-153			
Matrix Spike/MSD(2) TPH as Diesel	83.3	82	94	51-153	6	50	

(1) BLKLCS
(2)12056-16MS/16MSD

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-GRO
Analytical Batch ID: 1029801501
Date of Analysis: 10/29/96-10/30/96
Units: mg/kg

Field Sample IDs:

FC-SB02-03	FC-SB05-02	FC-SB06-01	FC-SB03-03	FC-SB01-01
FC-SB04-01	FC-SB05-03	FC-SB06-02	FC-SB01-02	FC-SB02-01
FC-SB04-02	FC-SB03-01	FC-SB06-03	FC-SB01-03	FC-SB06-01MS
FC-SB05-01	FC-SB05-04	FC-SB03-02	FC-SB02-02	FC-SB06-01MSD

Matrix: Soil

Method Blank Contamination Summary: 12056-19

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1) TPH as Gasoline	0.5	93.4		57-146			
Matrix Spike/MSD(2) TPH as Gasoline	0.5	81.2	96.4	57-146	17	50	

(1) 12056-20
(2) 12056-21, 12056-22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-1
VOLATILE ORGANIC AROMATICS

Analytical Method: SW8020
Analytical Batch ID: 1029802001
Date of Analysis: 10/29/96-10/30/96
Units: mg/kg

Field Sample IDs:

FC-SB02-03	FC-SB02-01	FC-SB06-01	FC-SB03-03
FC-SB04-01	FC-SB05-03	FC-SB06-02	FC-SB01-03
FC-SB01-01	FC-SB03-01	FC-SB06-03	FC-SB06-01MS
FC-SB05-01	FC-SB05-04	FC-SB02-02	FC-SB06-01MSD

Matrix: Soil

Method Blank Contamination Summary: 12056-19

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Recovery(%) Control Limits	RPD(%) Results	RPD(%) Control Limits	Corrective Action
Lab Control Sample(1)							
Benzene	0.05	86		66-135			
Toluene	0.05	84		60-135			
Ethyl Benzene	0.05	83		61-139			
m.p.-xylenes	0.1	89		61-143			
o-xylenes	0.05	83		61-143			
Methyl tert-Butyl Ether	0.05	95		70-130			
MS/MSD(2)							
Benzene	0.05	84	92	66-135	9	30	
Toluene	0.05	77	87	60-135	12	30	
Ethyl Benzene	0.05	74	86	61-139	15	30	
m.p.-xylenes	0.1	80	94	61-143	16	30	
o-xylenes	0.05	75	86	61-143	14	30	
Methyl tert-Butyl Ether	0.05	92	112	70-130	20	25	

(1) 12056-20
(2) 12056-21, 12056-22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12056
Date of Analysis: 10/30/96
Units: mg/kg

Field Sample ID:
FC-SB03-02 FC-SB01-02 FC-SB04-02
FC-SB01-02N2 FC-SB05-02

Matrix: Soil

Method Blank Contamination Summary: D96-12056-19

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(LCS)							
1,1,1-TCA	50	110		58-145			
1,1,2,2-Tetrachloroethane	50	108		45-148			
1,1,2-TCA	50	118		60-151			
1,1-DCA	50	114		52-151			
1,1-DCE	50	115		44-138			
1,2-DCA	50	115		58-145			
1,2-Dichloropropane	50	116		66-142			
2-Butanone	50	123		40-173			
2-Chloroethyl Vinyl Ether	50	116		25-175			
2-Hexanone	50	116		37-175			
4-Methyl-2-Pentanone	50	116		67-135			
Acetone	50	107		33-175			
Benzene	50	113		41-149			
Bromodichloromethane	50	116		58-145			
Bromoform	50	114		57-139			
Bromomethane	50	100		39-135			
Carbon Disulfide	50	108		65-135			
Carbon Tetrachloride	50	110		57-135			
Chlorobenzene	50	113		49-150			
Dibromochloromethane	50	118		54-135			
Chloroethane	50	119		52-135			
Chloroform	50	111		55-139			
Chloromethane	50	113		28-135			
Cis-1,2-DCE	50	111		51-148			
Cis-1,3-Dichloropropene	50	118		60-135			
Ethylbenzene	50	113		49-150			
Methylene Chloride	50	112		45-136			
Styrene	50	116		61-143			
TCE	50	117		57-147			
Tetrachloroethylene	50	112		57-141			
Toluene	50	115		51-147			
Trans-1,2-DCE	50	111		51-148			
Trans-1,3-Dichloropropene	50	117		25-164			
Vinyl Acetate	50	97		65-135			
Vinyl Chloride	50	116		25-135			
m,p-xylene	100	107		58-143			
o-Xylene	50	109		58-143			

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-42
Date of Analysis: 11/14/96
Units: mg/kg

Field Sample ID:
FC-SB01-01 DL
FC-SB02-01 DL

Matrix: Soil

Method Blank Contamination Summary: D96-12056-25

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	3.33	81		34-152			
1,2-DCB	3.33	78		32-135			
1,3-DCB	3.33	78		26-135			
1,4-DCB	3.33	76		25-135			
2,4-DNT	3.33	89		29-149			
2,6-DNT	3.33	86		41-135			
2-Chloronaphthalene	3.33	83		50-135			
2-Methylnaphthalene	3.33	84		31-135			
2-Nitroaniline	3.33	77		40-135			
3-Nitroaniline	3.33	54		25-175			
3,3'-Dichlorobenzidine	3.33	46		41-135			
4-Bromophenyl phenyl ether	3.33	83		43-137			
4-Chloroaniline	3.33	22*		35-146			"R" flag on data
4-Chlorophenyl phenyl ether	3.33	86		41-142			
4-Nitroaniline	3.33	62		30-153			
Acenaphthylene	3.33	71		37-135			
Acenapthene	3.33	84		39-135			
Anthracene	3.33	80		35-175			
Benz (a) anthracene	3.33	82		41-143			
Benzo (a) pyrene	3.33	88		31-135			
Benzo (b) fluoranthene	3.33	95		27-135			
Benzo (g,h,i) perylene	3.33	96		25-159			
Benzyl alcohol	3.33	83		25-135			
Bis (2-chloroethoxy) methane	3.33	83		39-135			
Bis (2-chlorethyl) ether	3.33	79		34-135			
Bis (2-chloroisopropyl) ether	3.33	82		26-175			
Bis(2-ethylhexyl)phthalate	3.33	86		25-139			
Butyl benzyl phthalate	3.33	85		25-135			
Chrysene	3.33	84		45-143			
Di-n-butylphthalate	3.33	85		25-136			

(1) D96-12056-26

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-42
Date of Analysis: 11/14/96
Units: mg/kg

Field Sample ID:
FC-SB01-01 DL
FC-SB02-01 DL

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Di-n-octylphthalate	3.33	96		28-137			
Dibenz (a,h) anthracene	3.33	100		40-135			
Dibenzofuran	3.33	85		42-135			
Diethyl phthalate	3.33	87		27-135			
Dimethly phthalate	3.33	85		25-175			
Fluoranthene	3.33	83		37-135			
Fluorene	3.33	85		38-149			
Hexachlorobenzene	3.33	82		36-143			
Hexachlorobutadiene	3.33	84		25-135			
Hexachlorocyclopentadiene	3.33	75		31-135			
Hexachloroethane	3.33	81		25-163			
Indeno (1,2,3-cd) pyrene	3.33	98		25-170			
Isophorone	3.33	86		25-175			
n-Nitrosodiphenylamine	3.33	95		27-135			
n-Nitrosodi-n-propylamine	3.33	49		25-135			
Naphthalene	3.33	80		40-135			
Nitrobenzene	3.33	80		36-143			
Phenanthrene	3.33	84		44-135			
Pyrene	3.33	82		37-146			
2,4,5-Trichlorophenol	3.33	88		25-175			
2,4,6-Trichlorophenol	3.33	84		29-138			
2,4-Dichlorophenol	3.33	80		36-135			
2,4-Dimethylphenol	3.33	80		35-149			
2,4-Dinitrophenol	3.33	80		25-161			
2-Chlorophenol	3.33	79		31-135			
2-Methylphenol	3.33	81		25-135			
2-Nitrophenol	3.33	80		34-135			
4,6-Dinitro-2-methylphenol	3.33	88		25-144			
4-Chloro-3-methylphenol	3.33	87		34-135			
4-Methylphenol	3.33	84		25-135			
4-Nitrophenol	3.33	108		25-141			
Benzoic acid	3.33	117		25-172			
Pentachlorophenol	3.33	92		38-146			
Phenol	3.33	79		25-135			

(1) D96-12056-26

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-84
Date of Analysis: 10/30-31/96
Units: mg/kg

Field Sample ID:

FC-SB06-01	FC-SB05-04	FC-SB03-02	FC-SB06-01MS
FC-SB06-02	FC-SB04-01	FC-SB02-01	FC-SB06-01MSD
FC-SB05-01	FC-SB04-02	FC-SB02-02	FC-SB01-02
FC-SB05-02	FC-SB03-01	FC-SB01-01	

Matrix: Soil

Method Blank Contamination Summary: D96-12056-19

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	3.33	78		34-152			
1,2-DCB	3.33	73		32-135			
1,3-DCB	3.33	75		26-135			
1,4-DCB	3.33	74		25-135			
2,4-DNT	3.33	83		29-149			
2,6-DNT	3.33	80		41-135			
2-Chloronaphthalene	3.33	77		50-135			
2-Methylnaphthalene	3.33	76		31-135			
2-Nitroaniline	3.33	74		40-135			
3-Nitroaniline	3.33	64		25-175			
3,3'-Dichlorobenzidine	3.33	54		41-135			
4-Bromophenyl phenyl ether	3.33	74		43-137			
4-Chloroaniline	3.33	56		35-146			
4-Chlorophenyl phenyl ether	3.33	80		41-142			
4-Nitroaniline	3.33	84		30-153			
Acenaphthylene	3.33	85		37-135			
Acenapthene	3.33	76		39-135			
Anthracene	3.33	79		35-175			
Benz (a) anthracene	3.33	77		41-143			
Benzo (a) pyrene	3.33	81		31-135			
Benzo (b) fluoranthene	3.33	69		27-135			
Benzo (g,h,i) perylene	3.33	87		25-159			
Benzyl alcohol	3.33	77		25-135			
Bis (2-chloroethoxy) methane	3.33	74		39-135			
Bis (2-chlorethyl) ether	3.33	68		34-135			
Bis (2-chloroisopropyl) ether	3.33	65		26-175			
Bis(2-ethylhexyl)phthalate	3.33	71		25-139			
Butyl benzyl phthalate	3.33	73		25-135			
Chrysene	3.33	74		45-143			

(1)D96-12056-20

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-84
Date of Analysis: 10/30-31/96
Units: mg/kg

Field Sample ID:

FC-SB06-01	FC-SB05-04	FC-SB03-02	FC-SB06-01MS
FC-SB06-02	FC-SB04-01	FC-SB02-01	FC-SB06-01MSD
FC-SB05-01	FC-SB04-02	FC-SB02-02	FC-SB01-02
FC-SB05-02	FC-SB03-01	FC-SB01-01	

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Di-n-butylphthalate	3.33	76		25-136			
Di-n-octylphthalate	3.33	71		28-137			
Dibenz (a,h) anthracene	3.33	86		40-135			
Dibenzofuran	3.33	81		42-135			
Diethyl phthalate	3.33	78		27-135			
Dimethyl phthalate	3.33	77		25-175			
Fluoranthene	3.33	76		37-135			
Fluorene	3.33	80		38-149			
Hexachlorobenzene	3.33	72		36-143			
Hexachlorobutadiene	3.33	80		25-135			
Hexachlorocyclopentadiene	3.33	95		31-135			
Hexachloroethane	3.33	80		25-163			
Indeno (1,2,3-cd) pyrene	3.33	85		25-170			
Isophorone	3.33	78		25-175			
n-Nitrosodiphenylamine	3.33	85		27-135			
n-Nitrosodi-n-propylamine	3.33	73		25-135			
Naphthalene	3.33	77		40-135			
Nitrobenzene	3.33	73		36-143			
Phenanthrene	3.33	77		44-135			
Pyrene	3.33	76		37-146			
2,4,5-Trichlorophenol	3.33	75		25-175			
2,4,6-Trichlorophenol	3.33	78		29-138			
2,4-Dichlorophenol	3.33	75		36-135			
2,4-Dimethylphenol	3.33	67		35-149			
2,4-Dinitrophenol	3.33	89		25-161			
2-Chlorophenol	3.33	70		31-135			
2-Methylphenol	3.33	69		25-135			
2-Nitrophenol	3.33	77		34-135			
4,6-Dinitro-2-methylphenol	3.33	92		25-144			
4-Chloro-3-methylphenol	3.33	74		34-135			
4-Methylphenol	3.33	71		25-135			
4-Nitrophenol	3.33	86		25-141			
Benzoic acid	3.33	86		25-172			
Pentachlorophenol	3.33	76		38-146			
Phenol	3.33	69		25-135			

(1)D96-12056-20

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-84
Date of Analysis: 10/30-31/96
Units: mg/kg

Field Sample ID:

FC-SB06-01	FC-SB05-04	FC-SB03-02	FC-SB06-01MS
FC-SB06-02	FC-SB04-01	FC-SB02-01	FC-SB06-01MSD
FC-SB05-01	FC-SB04-02	FC-SB02-02	FC-SB01-02
FC-SB05-02	FC-SB03-01	FC-SB01-01	

Matrix: Soil

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
MS/MSD(2)						30	
1,2,4-Trichlorobenzene	3.33	65	60	34-152	8	30	
1,2-DCB	3.33	61	56	32-135	8	30	
1,3-DCB	3.33	61	56	26-135	7	30	
1,4-DCB	3.33	60	56	25-135	7	30	
2,4-DNT	3.33	67	62	29-149	8	30	
2,6-DNT	3.33	66	61	41-135	8	30	
2-Chloronaphthalene	3.33	64	56	50-135	13	30	
2-Methylnaphthalene	3.33	64	61	31-135	5	30	
2-Nitroaniline	3.33	62	58	40-135	7	30	
3-Nitroaniline	3.33	65	59	25-175	10	30	
3,3'-Dichlorobenzidine	3.33	62	48	41-135	25	30	
4-Bromophenyl phenyl ether	3.33	62	56	43-137	10	30	
4-Chloroaniline	3.33	64	60	35-146	6	30	
4-Chlorophenyl phenyl ether	3.33	65	59	41-142	10	30	
4-Nitroaniline	3.33	75	68	30-153	10	30	
Acenaphthylene	3.33	70	64	37-135	9	30	
Acenapthene	3.33	63	58	39-135	8	30	
Anthracene	3.33	65	59	35-175	10	30	
Benz (a) anthracene	3.33	64	58	41-143	10	30	
Benzo (a) pyrene	3.33	64	60	31-135	6	30	
Benzo (b) fluoranthene	3.33	51	51	27-135	0	30	
Benzo (g,h,i) perylene	3.33	63	63	25-159	0	30	
Benzyl alcohol	3.33	64	61	25-135	5	30	
Bis (2-chloroethoxy) methane	3.33	65	61	39-135	6	30	
Bis (2-chloroethyl) ether	3.33	54	50	34-135	8	30	
Bis(2-chloroisopropyl)ether	3.33	55	56	26-175	2	30	
Bis(2-ethylhexyl)phthalate	3.33	47	42	25-139	11	30	
Butyl benzyl phthalate	3.33	60	55	25-135	9	30	
Chrysene	3.33	60	58	45-143	3	30	
Di-n-butylphthalate	3.33	64	59	25-136	8	30	
Di-n-octylphthalate	3.33	32	31	28-137	3	30	
Dibenz (a,h) anthracene	3.33	65	65	40-135	0	30	
Dibenzofuran	3.33	67	62	42-135	8	30	
Diethyl phthalate	3.33	64	60	27-135	6	30	
Dimethly phthalate	3.33	62	61	25-175	2	30	

(2)D96-12056-21/22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12056-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-84
Date of Analysis: 10/30-31/96
Units: mg/kg

Field Sample ID:

FC-SB06-01	FC-SB05-04	FC-SB03-02	FC-SB06-01MS
FC-SB06-02	FC-SB04-01	FC-SB02-01	FC-SB06-01MSD
FC-SB05-01	FC-SB04-02	FC-SB02-02	FC-SB01-02
FC-SB05-02	FC-SB03-01	FC-SB01-01	

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
MS/MSD(2)							
Fluoranthene	3.33	65	58	37–135	11	30	
Fluorene	3.33	64	60	38–149	6	30	
Hexachlorobenzene	3.33	60	54	36–143	10	30	
Hexachlorobutadiene	3.33	69	62	25–135	11	30	
Hexachlorocyclopentadiene	3.33	70	63	31–135	10	30	
Hexachloroethane	3.33	65	60	25–163	8	30	
Indeno (1,2,3-cd) pyrene	3.33	64	63	25–170	2	30	
Isophorone	3.33	68	62	25–175	9	30	
n-Nitrosodiphenylamine	3.33	71	65	27–135	9	30	
n-Nitrosodi-n-propylamine	3.33	60	57	25–135	5	30	
Naphthalene	3.33	64	60	40–135	6	30	
Nitrobenzene	3.33	61	56	36–143	8	30	
Phenanthrene	3.33	62	58	44–135	7	30	
Pyrene	3.33	58	53	37–146	9	30	
2,4,5-Trichlorophenol	3.33	61	56	25–175	8	30	
2,4,6-Trichlorophenol	3.33	64	59	29–138	8	30	
2,4-Dichlorophenol	3.33	62	57	36–135	8	30	
2,4-Dimethylphenol	3.33	35	31*	35–149	12	30	"M" flag on data
2,4-Dinitrophenol	3.33	33	21*	25–161	44*	30	"M" flag on data
2-Chlorophenol	3.33	59	56	31–135	5	30	
2-Methylphenol	3.33	58	52	25–135	11	30	
2-Nitrophenol	3.33	64	63	34–135	2	30	
4,6-Dinitro-2-methylphenol	3.33	67	57	25–144	16	30	
4-Chloro-3-methylphenol	3.33	58	58	34–135	0	30	
4-Methylphenol	3.33	58	55	25–135	5	30	
4-Nitrophenol	3.33	71	64	25–141	10	30	
Benzoic acid	3.33	13*	10*	25–172	26	30	"M" flag on data
Pentachlorophenol	3.33	44	45	38–146	2	30	
Phenol	3.33	58	56	25–135	4	30	

(2)D96-12056-21/22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1028601001
Date of Analysis: 11/18/96-11/19/96
Units: mg/kg

Field Sample ID:
FC-SB07-01
FC-SB08-01

Matrix: Soil

Method Blank Contamination Summary: PBS:1028601001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Magnesium	0.3	30	2.3	>PQL	Apply "B" qualifier to all results within 5X
Potassium	21.2	500	26.9	>PQL	

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aluminum	1000	108.1		80-120			
Antimony	10000	95.9		80-120			
Arsenic	5000	101.7		80-120			
Barium	10000	94.9		80-120			
Beryllium	1000	105.5		80-120			
Cadmium	1000	102.5		80-120			
Calcium	10000	102.6		80-120			
Chromium	1000	102		80-120			
Cobalt	1000	103.3		80-120			
Copper	1000	101.4		80-120			
Iron	1000	101.8		80-120			
Magnesium	1000	105.4		80-120			
Manganese	1000	100.2		80-120			
Nickel	1000	101.9		80-120			
Potassium	10000	105.3		80-120			
Selenium	5000	100.2		80-120			
Silver	100	102.6		80-120			
Sodium	10000	96.9		80-120			
Thallium	1000	103.6		80-120			
Vanadium	1000	101.1		80-120			

(1) LCSS: 1028601001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW7241
Analytical Batch ID: 1106742101
Date of Analysis: 11/7/96
Units: mg/kg

Field Sample ID:
FC-SB07-01
FC-SB08-01

Matrix: Soil

Method Blank Contamination Summary: MB1106742101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Recovery(%) Spike Duplicate	Recovery(%) Control Limits	RPD(%) Results	RPD(%) Control Limits	RPD(%) Corrective Action
Lab Control Sample(1)							
Lead	2	107		74-124			

(1)LCS1106742101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW7471A
Analytical Batch ID: 1028747101
Date of Analysis: 10/29/96
Units: mg/kg

Field Sample ID:
FC-SB07-01
FC-SB08-01

Matrix: Soil

Method Blank Contamination Summary: MB1028747101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Mercury	1	98.3		77-120			

(1)LCS1028747101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1119601003
Date of Analysis: 11/26/96
Units: mg/kg

Field Sample ID:
FC-SB07-01
FC-SB08-01

Matrix: Soil

Method Blank Contamination Summary: PBS:1119601003

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Zinc	0.32	2	0.63	>PQL	Apply "B" to all results within 5X

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Zinc	100	99.2		80-120			

(1)LCSS:1119601003

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1027601002
Date of Analysis: 11/18/96-11/21/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: PBW:1027601002

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Chromium	0.86	70	1.62	>PQL	Apply "B" qualifier to all results within 5X
Copper	0.47	60	1.33	>PQL	
Iron	20.1	70	29	>PQL	
Magnesium	12.1	300	63.9	>PQL	
Barium	0.5	20	0.72	>PQL	

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aluminum	1000	100.2		80-120			
Antimony	10000	93.5		80-120			
Arsenic	5000	90.9		80-120			
Barium	10000	95.5		80-120			
Beryllium	1000	97.2		80-120			
Cadmium	1000	94.3		80-120			
Calcium	10000	95.6		80-120			
Chromium	1000	94.4		80-120			
Cobalt	1000	95.4		80-120			
Copper	1000	96.0		80-120			
Iron	1000	98.8		80-120			
Magnesium	1000	99.4		80-120			
Manganese	1000	91.7		80-120			
Nickel	1000	93.4		80-120			
Potassium	10000	97.8		80-120			
Selenium	5000	92.6		80-120			
Silver	100	99.4		80-120			
Sodium	10000	99.1		80-120			
Thallium	1000	93.9		80-120			
Vanadium	1000	93.2		80-120			
Zinc	1000	88.4		80-120			

(1) LCSW: 1027601002

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW7241
Analytical Batch ID: 102742101
Date of Analysis: 11/14/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: MB1027742101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Recovery(%) Spike Duplicate	Recovery(%) Control Limits	RPD(%) Results	RPD(%) Control Limits	RPD(%) Corrective Action
Lab Control Sample(1)							
Lead	20	96		74-124			

(1)LCS1108742101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
INORGANICS

Analytical Method: SW7470A
Analytical Batch ID: 1029747001
Date of Analysis: 10/29/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: MB1029747001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Mercury	0.06	1	0.08	>PQL	Apply "B" to all results within 5X

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Mercury	1	103		77-120			

(1)LCS1029747001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-DRO
Analytical Batch ID: AB903-96
Date of Analysis: 10/29/96
Units: mg/kg

Field Sample IDs:
FC-SB07-01 FC-SB09-03
FC-SB08-01 FC-SB10-01
FC-SB09-01 FC-SB10-02
FC-SB09-02

Matrix: Soil

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Diesel	83.3	110		50-153			

(1) BLKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-GRO
Analytical Batch ID: 1101801502
Date of Analysis: 11/1/96-11/2/96
Units: mg/kg

Field Sample IDs:
FC-SB07-01 FC-SB09-03
FC-SB08-01 FC-SB10-01
FC-SB09-01 FC-SB10-02
FC-SB09-02

Matrix: Soil

Method Blank Contamination Summary: 12092-15

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Gasoline	0.5	94		57-146			

(1) BLANKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-DRO
Analytical Batch ID: AB903-91
Date of Analysis: 10/29/96
Units: ug/L

Field Sample IDs:
FC-WR-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Diesel	2500	102		61-143			

(1) BLKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-GRO
Analytical Batch ID: 1028801501
Date of Analysis: 10/28/96
Units: ug/L

Field Sample IDs:
FC-WQ-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: BLANK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Gasoline	500	96.8		67-136			

(1) BLANKLCS

QUALITY CONTROL REPORT
LAB SAMPLE ID: 12092-1
VOLATILE ORGANIC AROMATICS

Analytical Method: SW8020
Analytical Batch ID: 1101802001
Date of Analysis: 11/1/96-11/2/96
Units: mg/kg

Field Sample IDs:
FC-SB09-01 FC-SB10-01
FC-SB09-02 FC-SB10-02
FC-SB09-03

Matrix: Soil

Method Blank Contamination Summary: 12092-15

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Benzene	0.05	80		66-135			
Toluene	0.05	78		60-135			
Ethyl Benzene	0.05	78		61-139			
m.p.-xylenes	0.1	84		61-143			
o-xylenes	0.05	77		61-143			
Methyl tert-Butyl Ether	0.05	92		70-130			

(1) 12092-18

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-02
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12092
Date of Analysis: 10/30/96
Units: ug/kg

Field Sample ID:
FC-SB07-01
FC-SB08-01
FC-SB07-01N2

Matrix: Soil

Method Blank Contamination Summary: D96-12092-15

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,1,1-TCA	50	110		58–145			
1,1,2,2-Tetrachloroethane	50	108		45–148			
1,1,2-TCA	50	118		60–151			
1,1-DCA	50	114		52–151			
1,1-DCE	50	115		44–138			
1,2-DCA	50	115		58-145			
1,2-Dichloropropane	50	116		66-142			
2-Butanone	50	123		40-173			
2-Chloroethyl Vinyl Ether	50	116		25–175			
2-Hexanone	50	116		37–175			
4-Methyl-2-Pentanone	50	116		67–135			
Acetone	50	107		33–175			
Benzene	50	113		41–149			
Bromodichloromethane	50	116		58–145			
Bromoform	50	114		57–139			
Bromomethane	50	100		39–135			
Carbon Disulfide	50	108		65–135			
Carbon Tetrachloride	50	110		57–135			
Chlorobenzene	50	113		49–150			
Dibromochloromethane	50	118		54–135			
Chloroethane	50	119		52–135			
Chloroform	50	111		55–139			
Chloromethane	50	113		28–135			
Cis-1,2-DCE	50	111		51-148			
Cis-1,3-Dichloropropene	50	118		60–135			
Ethylbenzene	50	113		49–150			
Methylene Chloride	50	112		45–136			
Styrene	50	116		61–143			
TCE	50	117		57–147			
Tetrachloroethylene	50	112		57–141			
Toluene	50	115		51–147			
Trans-1,2-DCE	50	111		51–148			
Trans-1,3-Dichloropropene	50	117		25–164			
Vinyl Acetate	50	97		65–135			
Vinyl Chloride	50	116		25–135			
m,p-xylene	100	107		58–143			
o-Xylene	50	109		58-143			

(1)D96-12092-16

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-02
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12092
Date of Analysis: 10/31/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-01 FC-WQ-EB-03 FC-WQ-EB-03
FC-WQ-TB-01 FC-WQ-TB-03
FC-WQ-TB-02 FC-WQ-TB-04

Matrix: Water

Method Blank Contamination Summary: D96-12092-17

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,1,1-TCA	50	102		68-135			
1,1,2,2-Tetrachloroethane	50	104		55-138			
1,1,2-TCA	50	98		70-141			
1,1-DCA	50	94		62-141			
1,1-DCE	50	84		54-128			
1,2-DCA	50	100		68-135			
1,2-Dichloropropane	50	105		75-132			
2-Butanone	50	60		50-163			
2-Chloroethyl Vinyl Ether	50	126		25-175			
2-Hexanone	50	94		47-165			
4-Methyl-2-Pentanone	50	92		75-125			
Acetone	50	68		43-165			
Benzene	50	112		51-139			
Bromodichloromethane	50	104		68-135			
Bromoform	50	110		67-129			
Bromomethane	50	97		49-125			
Carbon Disulfide	50	94		75-125			
Carbon Tetrachloride	50	114		67-125			
Chlorobenzene	50	92		59-140			
Dibromochloromethane	50	108		64-125			
Chloroethane	50	114		62-125			
Chloroform	50	95		65-129			
Chloromethane	50	97		38-125			
Cis-1,2-DCE	50	77		70-131			
Cis-1,3-Dichloropropene	50	101		70-125			
Ethylbenzene	50	97		59-140			
Methylene Chloride	50	92		55-126			
Styrene	50	108		71-133			
TCE	50	103		67-137			
Tetrachloroethylene	50	96		67-131			
Toluene	50	91		61-137			
Trans-1,2-DCE	50	90		61-138			
Trans-1,3-Dichloropropene	50	103		42-154			
Vinyl Acetate	50	109		75-125			
Vinyl Chloride	50	95		31-125			
m,p-xylene	100	92		68-133			
o-Xylene	50	95		68-133			

(1)D96-12092-17

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-98
Date of Analysis: 10/30/96
Units: mg/kg

Field Sample ID:
FC-SB07-01 FC-SB09-03
FC-SB08-01 FC-SB10-01
FC-SB09-01 FC-SB10-02
FC-SB09-02

Matrix: Soil

Method Blank Contamination Summary: D96-12092-15

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	3.33	78		34–152			
1,2-DCB	3.33	75		32–135			
1,3-DCB	3.33	76		26–135			
1,4-DCB	3.33	76		25–135			
2,4-DNT	3.33	78		29–149			
2,6-DNT	3.33	78		41–135			
2-Chloronaphthalene	3.33	78		50–135			
2-Methylnaphthalene	3.33	76		31–135			
2-Nitroaniline	3.33	74		40–135			
3-Nitroaniline	3.33	64		25–175			
3,3'-Dichlorobenzidine	3.33	63		41–135			
4-Bromophenyl phenyl ether	3.33	76		43–137			
4-Chloroaniline	3.33	55		35-146			
4-Chlorophenyl phenyl ether	3.33	78		41–142			
4-Nitroaniline	3.33	85		30–153			
Acenaphthylene	3.33	86		37–135			
Acenapthene	3.33	76		39–135			
Anthracene	3.33	80		35–175			
Benz (a) anthracene	3.33	76		41–143			
Benzo (a) pyrene	3.33	80		31–135			
Benzo (b) fluoranthene	3.33	67		27–135			
Benzo(k) fluoranthene	3.33	82		27-135			
Benzo (g,h,i) perylene	3.33	83		25–159			
Benzyl alcohol	3.33	75		25–135			
Bis (2-chloroethoxy) methane	3.33	76		39–135			
Bis (2-chlorethyl) ether	3.33	64		34–135			
Bis (2-chloroisopropyl) ether	3.33	67		26–175			
Bis(2-ethylhexyl)phthalate	3.33	71		25-139			
Butyl benzyl phthalate	3.33	72		25-135			
Chrysene	3.33	76		45-143			

(1)D96-12092-16

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB903-98
Date of Analysis: 10/30/96
Units: mg/kg

Field Sample ID:
FC-SB07-01 FC-SB09-03
FC-SB08-01 FC-SB10-01
FC-SB09-01 FC-SB10-02
FC-SB09-02

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Di-n-butylphthalate	3.33	76		25-136			
Di-n-octylphthalate	3.33	71		28-137			
Dibenz (a,h) anthracene	3.33	84		40-135			
Dibenzofuran	3.33	80		42-135			
Diethyl phthalate	3.33	77		27-135			
Dimethly phthalate	3.33	75		25-175			
Fluoranthene	3.33	77		37-135			
Fluorene	3.33	78		38-149			
Hexachlorobenzene	3.33	72		36-143			
Hexachlorobutadiene	3.33	84		25-135			
Hexachlorocyclopentadiene	3.33	95		31-135			
Hexachloroethane	3.33	81		25-163			
Indeno (1,2,3-cd) pyrene	3.33	82		25-170			
Isophorone	3.33	78		25-175			
n-Nitrosodiphenylamine	3.33	86		27-135			
n-Nitrosodi-n-propylamine	3.33	72		25-135			
Naphthalene	3.33	78		40-135			
Nitrobenzene	3.33	72		36-143			
Phenanthrene	3.33	77		44-135			
Pyrene	3.33	70		37-146			
2,4,5-Trichlorophenol	3.33	76		25-175			
2,4,6-Trichlorophenol	3.33	78		29-138			
2,4-Dichlorophenol	3.33	75		36-135			
2,4-Dimethylphenol	3.33	73		35-149			
2,4-Dinitrophenol	3.33	70		25-161			
2-Chlorophenol	3.33	70		31-135			
2-Methylphenol	3.33	68		25-135			
2-Nitrophenol	3.33	77		34-135			
4,6-Dinitro-2-methylphenol	3.33	85		25-144			
4-Chloro-3-methylphenol	3.33	71		34-135			
4-Methylphenol	3.33	68		25-135			
4-Nitrophenol	3.33	79		25-141			
Benzoic acid	3.33	76		25-172			
Pentachlorophenol	3.33	54		38-146			
Phenol	3.33	65		25-135			

(1)D96-12092-16

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-4
Date of Analysis: 10/30/96
Units: ug/L

Field Sample ID:
FC-WQ-EB01
FC-WQ-EB02
FC-WQ-EB03

Matrix: Water

Method Blank Contamination Summary: D96-12092-17

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	100	84		44–142			
1,2-DCB	100	76		42–155			
1,3-DCB	100	78		36–125			
1,4-DCB	100	77		30–125			
2,4-DNT	100	93		39–139			
2,6-DNT	100	94		51–125			
2-Chloronaphthalene	100	86		60–125			
2-Methylnaphthalene	100	86		41–125			
2-Nitroaniline	100	87		50–125			
3-Nitroaniline	100	87		51-125			
3,3'-Dichlorobenzidine	100	77		29-175			
4-Bromophenyl phenyl ether	100	82		53–127			
4-Chloroaniline	100	85		45-136			
4-Chlorophenyl phenyl ether	100	88		51–132			
4-Nitroaniline	100	103		40–143			
Acenaphthylene	100	96		47–125			
Acenapthene	100	86		49–125			
Anthracene	100	89		45–165			
Benz (a) anthracene	100	84		51–133			
Benzo (a) pyrene	100	89		41–125			
Benzo (b) fluoranthene	100	70		37–125			
Benzo(k) fluoranthene	100	81		37-125			
Benzo (g,h,i) perylene	100	96		34–149			
Benzyl alcohol	100	77		35–125			
Bis (2-chloroethoxy) methane	100	81		49–125			
Bis (2-chlorethyl) ether	100	70		44–125			
Bis (2-chloroisopropyl) ether	100	72		36-166			
Bis(2-ethylhexyl) phthalate	100	80		33–129			
Butyl benzyl phthalate	100	79		26–125			

(1) D96-12092-18

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12092-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-4
Date of Analysis: 10/30/96
Units: ug/L

Field Sample ID:
FC-WQ-EB01
FC-WQ-EB02
FC-WQ-EB03

Matrix: Water

Quality Control Samples	Target Concentrations	Recovery(%)			RPD(%)		
		Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Chrysene	100	82		55-133			
Di-n-butylphthalate	100	85		34-126			
Di-n-octylphthalate	100	75		38-127			
Dibenz (a,h) anthracene	100	95		50-125			
Dibenzofuran	100	91		52-125			
Diethyl phthalate	100	88		37-125			
Dimethly phthalate	100	88		25-175			
Fluoranthene	100	85		47-125			
Fluorene	100	88		48-139			
Hexachlorobenzene	100	78		46-133			
Hexachlorobutadiene	100	85		25-125			
Hexachlorocyclopentadiene	100	105		41-125			
Hexachloroethane	100	83		25-153			
Indeno (1,2,3-cd) pyrene	100	93		27-160			
Isophorone	100	87		26-175			
n-Nitrosodiphenylamine	100	93		37-125			
n-Nitrosodi-n-propylamine	100	80		27-125			
Naphthalene	100	84		50-125			
Nitrobenzene	100	81		46-133			
Phenanthrene	100	83		54-125			
Pyrene	100	78		47-136			
2,4,5-Trichlorophenol	100	85		25-175			
2,4,6-Trichlorophenol	100	88		39-128			
2,4-Dichlorophenol	100	82		46-125			
2,4-Dimethylphenol	100	75		45-139			
2,4-Dinitrophenol	100	108		30-151			
2-Chlorophenol	100	76		41-125			
2-Methylphenol	100	69		25-125			
2-Nitrophenol	100	85		44-125			
4,6-Dinitro-2-methylphenol	100	102		26-134			
4-Chloro-3-methylphenol	100	83		44-125			
4-Methylphenol	100	68		33-125			
4-Nitrophenol	100	53		25-131			
Benzoic acid	100	43		25-162			
Pentachlorophenol	100	83		28-136			
Phenol	100	45		25-125			

(1) D96-12092-18

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW7421
Analytical Batch ID: 1105742101
Date of Analysis: 11/6/96
Units: ug/L

Field Sample ID:
FC-WQ-EB04
FC-WQ-EB05

Matrix: Water

Method Blank Contamination Summary: MB1105742101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Lead	20	104.5		74-124			

(1)LCS1105742101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
INORGANICS

Analytical Method: SW7470A
Analytical Batch ID: 1030747101
Date of Analysis: 10/31/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-04
FC-WQ-EB-05

Matrix: Water

Method Blank Contamination Summary: MB1030747101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Mercury	0.06	1	0.07	<PQL	Apply "B" to all results within 5X

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Mercury	1	113		77-120			

(1)LCS1030747101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-DRO
Analytical Batch ID: AB925-19
Date of Analysis: 10/31/96
Units: ug/L

Field Sample IDs:
FC-WQ-EB-04
FC-WQ-EB-05

Matrix: Water

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Diesel	2.5	72		51-143			

(1) BLKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: 8015M-GRO
Analytical Batch ID: 1028801501
Date of Analysis: 10/29/96-10/30/96
Units: ug/L

Field Sample IDs:
FC-WQ-EB-01
FC-WQ-EB-02
FC-WQ-EB-03

Matrix: Water

Method Blank Contamination Summary: BLANK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Gasoline	500	96.8		67-136			

(1) BLANKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-18
Date of Analysis: 10/30/96-11/1/96
Units: ug/L

Field Sample ID:
FC-WQ-EB04 FC-WQ-EB05RE
FC-WQ-EB05 FC-WQ-EB04RE

Matrix: Water

Method Blank Contamination Summary: D96-12170-26

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	100	77		44-142			
1,2-DCB	100	70		42-155			
1,3-DCB	100	73		36-125			
1,4-DCB	100	71		30-125			
2,4-DNT	100	85		39-139			
2,6-DNT	100	82		51-125			
2-Chloronaphthalene	100	79		60-125			
2-Methylnaphthalene	100	78		41-125			
2-Nitroaniline	100	77		50-125			
3-Nitroaniline	100	69		29-175			
3,3'-Dichlorobenzidine	100	66		51-125			
4-Bromophenyl phenyl ether	100	77		53-127			
4-Chloroaniline	100	59		45-136			
4-Chlorophenyl phenyl ether	100	80		51-132			
4-Nitroaniline	100	90		40-143			
Acenaphthylene	100	87		47-125			
Acenapthene	100	78		49-125			
Anthracene	100	83		45-165			
Benzo(a) anthracene	100	78		51-133			
Benzo (a) pyrene	100	86		41-125			
Benzo (b) fluoranthene	100	60		37-125			
Benzo (k) fluoranthene	100	86		37-125			
Benzo (g,h,i) perylene	100	90		34-149			
Benzyl alcohol	100	62		35-125			
Bis (2-chloroethoxy) methane	100	74		49-125			
Bis (2-chlorethyl) ether	100	62		44-125			
Bis (2-chloroisopropyl) ether	100	65		36-166			
Bis(2-ethylhexyl)phthalate	100	74		33-129			
Butyl benzyl phthalate	100	75		26-125			
Chrysene	100	77		55-133			

(1) D96-12170-27

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-18
Date of Analysis: 10/30/96-11/1/96
Units: ug/L

Field Sample ID:
FC-WQ-EB04 FC-WQ-EB05RE
FC-WQ-EB05 FC-WQ-EB04RE

Matrix: Water

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Di-n-butylphthalate	100	80		34-126			
Di-n-octylphthalate	100	74		38-127			
Dibenz (a,h) anthracene	100	90		50-125			
Dibenzofuran	100	83		52-125			
Diethyl phthalate	100	80		37-125			
Dimethyl phthalate	100	78		25-175			
Fluoranthene	100	80		47-125			
Fluorene	100	79		48-139			
Hexachlorobenzene	100	74		46-133			
Hexachlorobutadiene	100	80		25-125			
Hexachlorocyclopentadiene	100	95		41-125			
Hexachloroethane	100	77		25-153			
Indeno (1,2,3-cd) pyrene	100	88		27-160			
Isophorone	100	88		26-175			
n-Nitrosodiphenylamine	100	88		37-125			
n-Nitrosodi-n-propylamine	100	69		27-125			
Naphthalene	100	77		50-125			
Nitrobenzene	100	73		46-133			
Phenanthrene	100	79		54-125			
Pyrene	100	77		47-136			
2,4,5-Trichlorophenol	100	77		25-175			
2,4,6-Trichlorophenol	100	81		39-128			
2,4-Dichlorophenol	100	75		46-125			
2,4-Dimethylphenol	100	71		45-139			
2,4-Dinitrophenol	100	85		30-151			
2-Chlorophenol	100	66		41-125			
2-Methylphenol	100	59		25-125			
2-Nitrophenol	100	79		44-125			
4,6-Dinitro-2-methylphenol	100	95		26-134			
4-Chloro-3-methylphenol	100	75		44-125			
4-Methylphenol	100	55		33-125			
4-Nitrophenol	100	42		25-131			
Benzoic acid	100	29		25-162			
Pentachlorophenol	100	74		28-136			
Phenol	100	33		25-125			

(1) D96-12170-27

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1030601001
Date of Analysis: 11/19/96-11/20/96
Units: mg/kg

Field Sample ID: FC-SB18-02, FC-SB16-01, FC-SB19-01, FC-SB20-02MS, FC-SB20-02MSD, FC-SB16-02, FC-SB19-02, FC-SB11-03, FC-SB17-01, FC-SB20-01, FC-SB12-03, FC-SB18-01, FC-SB20-02

Matrix: Soil

Method Blank Contamination Summary: PBS:1030601001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Cadmium	0.03	4	0.26	<PQL	Apply "B" to all results within 5X
Magnesium	0.31	30	0.56	<PQL	
Zinc	0.46	2	1.1	<PQL	

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aluminum	100	106.8		80-120			
Arsenic	5000	105.5		80-120			
Barium	1000	106.9		80-120			
Beryllium	100	103		80-120			
Cadmium	100	100.4		80-120			
Calcium	1000	96.5		80-120			
Chromium	100	99.9		80-120			
Cobalt	100	101.1		80-120			
Copper	100	100.6		80-120			
Iron	100	103		80-120			
Magnesium	100	102		80-120			
Manganese	100	98		80-120			
Nickel	100	98.4		80-120			
Potassium	1000	104.4		80-120			
Selenium	5000	102.2		80-120			
Silver	10	100.9		80-120			
Sodium	1000	97.8		80-120			
Thallium	100	99.2		80-120			
Vanadium	100	99.1		80-120			
Zinc	100	95.8		80-120			

(1)LCSS:1030601001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1030601001
Date of Analysis: 11/19/96-11/20/96
Units: mg/kg

Field Sample ID: FC-SB18-02, FC-SB16-01, FC-SB19-01, FC-SB20-02MS, FC-SB16-02, FC-SB19-02, FC-SB20-02MSD, FC-SB17-01, FC-SB20-01, FC-SB11-03, FC-SB18-01, FC-SB20-02, FC-SB12-03

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
MS/MSD(2)							
Aluminum	100	5100	7120	80-120	33	<25	see(3)
Arsenic	500	103	93.4	80-120	9.7	<25	
Barium	1000	82.5	82.3	80-120	0.2	<25	
Beryllium	100	88.9	88.7	80-120	0.2	<25	
Cadmium	100	79	78.7	80-120	0.3	<25	see(3)
Calcium	1000	2060	1190	80-120	53.5	<25	see(3)
Chromium	100	83.5	85.5	80-120	2.5	<25	
Cobalt	100	80	80	80-120	0	<25	
Copper	100	84.8	85.3	80-120	0.6	<25	
Iron	100	1100	1210	80-120	9.5	<25	see(3)
Magnesium	100	420	677	80-120	46.7	<25	see(3)
Manganese	100	80.7	85.3	80-120	5.6	<25	
Nickel	100	75.9	76.2	80-120	0.5	<25	see(3)
Potassium	1000	149	177	80-120	17.2	<25	see(3)
Selenium	500	101.1	91.7	80-120	9.8	<25	
Silver	10	92.9	93	80-120	0.1	<25	
Sodium	1000	94.5	88.9	80-120	6.2	<25	
Thallium	100	82.2	82	80-120	0.2	<25	
Vanadium	100	82.8	86.7	80-120	4.6	<25	
Zinc	100	74.5	76	80-120	1.9	<25	see(3)

(2)FC-SB20-02MS/MSD
(3)"M" applied to associated data on Form 2's

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1031601001
Date of Analysis: 12/3/96-12/4/96
Units: ug/L

Field Sample ID:
FC-WQ-EB-04
FC-WQ-EB-05

Matrix: Water

Method Blank Contamination Summary: PBS:1030601001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Chromium	0.86	70	3.5	<PQL	Apply "B" to all results within 5X
Copper	0.47	60	0.85	<PQL	
Zinc	12.5	20	15.9	<PQL	

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aluminum	1000	98.1		80-120			
Antimony	10000	102.8		80-120			
Arsenic	5000	96		80-120			
Barium	10000	94.6		80-120			
Beryllium	1000	102.7		80-120			
Cadmium	1000	97.6		80-120			
Calcium	10000	92.6		80-120			
Chromium	1000	97		80-120			
Cobalt	1000	98.2		80-120			
Copper	1000	97.8		80-120			
Iron	1000	97.4		80-120			
Magnesium	1000	97.9		80-120			
Manganese	1000	98.3		80-120			
Nickel	1000	98		80-120			
Potassium	10000	97.2		80-120			
Selenium	5000	93.1		80-120			
Silver	100	96.6		80-120			
Sodium	10000	95.3		80-120			
Thallium	1000	96.2		80-120			
Vanadium	1000	96.2		80-120			
Zinc	1000	97.9		80-120			

(1)LCSW:1031601001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW6010A
Analytical Batch ID: 1210601001
Date of Analysis: 12/12/96
Units: mg/kg

Field Sample ID: FC-SB17-01, FC-SB20-01, FC-SB20-02, FC-SB16-01, FC-SB16-02, FC-SB18-01, FC-SB18-02, FC-SB19-01, FC-SB19-02, FC-SB20-02MSD, FC-SB20-02MS, FC-SB11-03, FC-SB12-03

Matrix: Soil

Method Blank Contamination Summary: PBS:1210601001

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action
Antimony	0.54	40	4.7	<PQL	Apply "B" to sample results within 5X

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Antimony	995	105.5		80-120			

(1)LCS:1210601001

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170
INORGANICS

Analytical Method: SW7421
Analytical Batch ID: 1106742101
Date of Analysis: 11/7/96
Units: mg/kg

Field Sample ID: FC-SB18-02, FC-SB16-01, FC-SB16-02, FC-SB17-01, FC-SB18-01, FC-SB19-01, FC-SB19-02, FC-SB20-01, FC-SB20-02, FC-SB20-02MSD, FC-SB20-02MS, FC-SB11-03, FC-SB12-03

Matrix: Soil

Method Blank Contamination Summary: MB1106742101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Lead	2	107		74-124			

(1)LCS1106742101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
INORGANICS

Analytical Method: SW7471A
Analytical Batch ID: 1031747101
Date of Analysis: 11/1/96
Units: mg/kg

Field Sample ID: FC-SB18-02, FC-SB16-01, FC-SB16-02, FC-SB17-01, FC-SB18-01, FC-SB19-01, FC-SB19-02, FC-SB20-01, FC-SB20-02, FC-SB20-02MSD, FC-SB20-02MS, FC-SB11-03, FC-SB12-03

Matrix: Soil

Method Blank Contamination Summary: MB1031747101

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Recovery(%) Spike Duplicate	Recovery(%) Control Limits	RPD(%) Results	RPD(%) Control Limits	RPD(%) Corrective Action
Lab Control Sample(1)							
Mercury	1	89.7		77-120			

(1)LCS1031747101

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-DRO
Analytical Batch ID: AB925-13
Date of Analysis: 10/30/96
Units: mg/kg

Field Sample IDs:

FC-SB16-01	FC-SB19-01	FC-SB11-02	FC-SB20-02MS
FC-SB16-02	FC-SB19-02	FC-SB11-03	FC-SB20-02MSD
FC-SB17-01	FC-SB20-01	FC-SB12-01	
FC-SB18-01	FC-SB20-02	FC-SB12-02	
FC-SB18-02	FC-SB11-01	FC-SB12-03	

Matrix: Soil

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Recovery(%) Spike Duplicate	Recovery(%) Control Limits	RPD(%) Results	RPD(%) Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Diesel	83.3	106		50-153			
MS/MSD(2)							
TPH as Diesel	83.3	100	118	50-153	34	50	

(1) BLKLCS
(2)12170-23MS/24MSD

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
TOTAL PETROLEUM HYDROCARBONS

Analytical Method: SW8015M-GRO
Analytical Batch ID: 1031801501
Date of Analysis: 10/31/96-11/1/96
Units: mg/kg

Field Sample IDs:

FC-SB11-01	FC-SB20-02	FC-SB18-01	FC-SB20-02MS
FC-SB11-02	FC-SB12-03	FC-SB18-02	FC-SB20-02MSD
FC-SB11-03	FC-SB16-02	FC-SB19-01	
FC-SB12-01	FC-SB16-01	FC-SB19-02	
FC-SB12-02	FC-SB17-01	FC-SB20-01	

Matrix: Soil

Method Blank Contamination Summary: BLANK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
TPH as Gasoline	0.5	81.4		57-146			
MS/MSD(2)							
TPH as Gasoline	0.5	93	93	57-146	0	50	

(1) BLANKLCS
(2)12170-10MS/MSD

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
VOLATILE ORGANIC AROMATICS

Analytical Method: SW8020
Analytical Batch ID: 1031802001
Date of Analysis: 10/31/96-11/1/96
Units: mg/kg

Field Sample IDs:
FC-SB11-01 FC-SB12-01
FC-SB11-02 FC-SB12-02

Matrix: Soil

Method Blank Contamination Summary: 12170-21

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Spike	Recovery(%) Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Benzene	0.05	92		66-135			
Toluene	0.05	84		60-135			
Ethyl Benzene	0.05	74		61-139			
m.p.-xylenes	0.1	81		61-143			
o-xylenes	0.05	76		61-143			
Methyl tert-Butyl Ether	0.05	120		70-130			

(1) BLANKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-02
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12170-SOIL/LIO
Date of Analysis: 10/30/96-10/31/96
Units: ug/kg
(ug/L see last sheet)

Field Sample ID:

FC-SB16-01	FC-SB19-01	FC-WQ-TB05	FC-SB12-03
FC-SB16-02	FC-SB19-02	FC-WQ-TB06	FC-SB20-02MS
FC-SB17-01	FC-SB20-01	FC-WQ-TB07	FC-SB20-02MSD
FC-SB18-01	FC-SB20-02	FC-WQ-EB04	FC-SB11-03RE
FC-SB18-02	FC-SB11-03	FC-WQ-EB05	FC-SB12-03RE

Matrix: Soil/Water

Method Blank Contamination Summary: D96-12170-21/26

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(LCS) (1)							
1,1,1-TCA	50	110		58-145			
1,1,2,2-Tetrachloroethane	50	108		45-148			
1,1,2-TCA	50	118		60-151			
1,1-DCA	50	114		52-151			
1,1-DCE	50	115		44-138			
1,2-DCA	50	115		58-145			
1,2-Dichloropropane	50	116		66-142			
2-Butanone	50	123		40-173			
2-Chloroethyl Vinyl Ether	50	116		25-175			
2-Hexanone	50	116		37-175			
4-Methyl-2-Pentanone	50	116		67-135			
Acetone	50	107		33-175			
Benzene	50	113		41-149			
Bromodichloromethane	50	116		58-145			
Bromoform	50	114		57-139			
Bromomethane	50	100		39-135			
Carbon Disulfide	50	108		65-135			
Carbon Tetrachloride	50	110		57-135			
Chlorobenzene	50	113		49-150			
Dibromochloromethane	50	118		54-135			
Chloroethane	50	119		52-135			
Chloroform	50	111		55-139			
Chloromethane	50	113		28-135			
Cis-1,2-DCE	50	111		51-148			
Cis-1,3-Dichloropropene	50	118		60-135			
Ethylbenzene	50	113		40-150			
Methylene Chloride	50	112		45-136			
Styrene	50	116		61-143			
TCE	50	117		57-147			
Tetrachloroethylene	50	112		57-141			
Toluene	50	115		51-147			
Trans-1,2-DCE	50	111		51-148			
Trans-1,3-Dichloropropene	50	117		25-164			
Vinyl Acetate	50	97		65-135			
Vinyl Chloride	50	116		25-135			
m,p-xylene	100	107		58-143			
o-Xylene	50	109		58-143			

(1)D96-12170-23/24

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-02
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12170-SOIL/LIQ
Date of Analysis: 10/30/96-10/31/96
Units: ug/kg
(ug/L see last sheet)

Field Sample ID:

FC-SB16-01	FC-SB19-01	FC-WQ-TB05	FC-SB12-03
FC-SB16-02	FC-SB19-02	FC-WQ-TB06	FC-SB20-02MS
FC-SB17-01	FC-SB20-01	FC-WQ-TB07	FC-SB20-02MSD
FC-SB18-01	FC-SB20-02	FC-WQ-EB04	FC-SB11-03RE
FC-SB18-02	FC-SB11-03	FC-WQ-EB05	FC-SB12-03RE

Matrix: Soil/Water

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
MS/MSD(2)						30	
1,1,1-TCA	57.1	86	88	58-145	2	30	
1,1,2,2-Tetrachloroethane	57.1	84	85	45-148	1	30	
1,1,2-TCA	57.1	87	89	60-151	2	30	
1,1-DCA	57.1	84	86	52-151	2	30	
1,1-DCE	57.1	86	86	44-138	0	30	
1,2-DCA	57.1	81	82	58-145	1	30	
1,2-Dichloropropane	57.1	87	88	66-142	1	30	
2-Butanone	57.1	65	72	40-173	10	30	
2-Chloroethyl Vinyl Ether	57.1	87	88	25-175	1	30	
2-Hexanone	57.1	47	54	37-175	14	30	
4-Methyl-2-Pentanone	57.1	98	94	67-135	4	30	
Acetone	57.1	63	57	33-175	10	30	
Benzene	57.1	88	88	41-149	0	30	
Bromodichloromethane	57.1	89	90	58-145	1	30	
Bromoform	57.1	83	82	57-139	1	30	
Bromomethane	57.1	73	79	39-135	8	30	
Carbon Disulfide	57.1	79	81	65-135	2	30	
Carbon Tetrachloride	57.1	90	89	57-135	1	30	
Chlorobenzene	57.1	89	88	49-150	1	30	
Dibromochloromethane	57.1	91	92	54-135	1	30	
Chloroethane	57.1	88	92	52-135	4	30	
Chloroform	57.1	84	85	55-139	1	30	
Chloromethane	57.1	66	76	28-135	14	30	
Cis-1,2-DCE	57.1	87	88	51-148	1	30	
Cis-1,3-Dichloropropene	57.1	91	92	60-135	1	30	
Ethylbenzene	57.1	93	89	49-150	4	30	
Methylene Chloride	57.1	87	87	45-136	0	30	
Styrene	57.1	89	90	61-143	1	30	
TCE	57.1	90	93	57-147	3	30	
Tetrachloroethylene	57.1	93	89	57-141	4	30	
Toluene	57.1	98	90	51-147	8	30	
Trans-1,2-DCE	57.1	87	88	51-148	1	30	
Trans-1,3-Dichloropropene	57.1	88	89	25-164	1	30	
Vinyl Acetate	57.1	86	83	65-135	4	30	
Vinyl Chloride	57.1	77	81	25-135	5	30	
m,p-xylene	114.0	90	86	58-143	4	30	
o-Xylene	57.1	91	88	58-143	3	30	

(2)D96-12170-27

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-02
VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8240
Analytical Batch ID: V12170-SOIL/LIQ
Date of Analysis: 10/30/96-10/31/96
Units: ug/kg
(ug/L see last sheet)

Field Sample ID:

FC-SB16-01	FC-SB19-01	FC-WQ-TB05	FC-SB12-03
FC-SB16-02	FC-SB19-02	FC-WQ-TB06	FC-SB20-02MS
FC-SB17-01	FC-SB20-01	FC-WQ-TB07	FC-SB20-02MSD
FC-SB18-01	FC-SB20-02	FC-WQ-EB04	FC-SB11-03RE
FC-SB18-02	FC-SB11-03	FC-WQ-EB05	FC-SB12-03RE

Matrix: Soil/Water

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(3)							
1,1,1-TCA	50	102		68-135			
1,1,2,2-Tetrachloroethane	50	104		55-138			
1,1,2-TCA	50	98		70-141			
1,1-DCA	50	94		62-141			
1,1-DCE	50	84		54-128			
1,2-DCA	50	100		68-135			
1,2-Dichloropropane	50	105		75-132			
2-Butanone	50	57		50-163			
2-Chloroethyl Vinyl Ether	50	116		25-175			
2-Hexanone	50	92		47-165			
4-Methyl-2-Pentanone	50	93		75-125			
Acetone	50	74		43-165			
Benzene	50	112		51-139			
Bromodichloromethane	50	104		68-135			
Bromoform	50	110		67-129			
Bromomethane	50	97		49-125			
Carbon Disulfide	50	94		75-125			
Carbon Tetrachloride	50	114		67-125			
Chlorobenzene	50	92		59-140			
Dibromochloromethane	50	108		64-125			
Chloroethane	50	114		62-125			
Chloroform	50	95		65-129			
Chloromethane	50	97		38-125			
Cis-1,2-DCE	50	77		61-138			
Cis-1,3-Dichloropropene	50	101		70-125			
Ethylbenzene	50	97		59-140			
Methylene Chloride	50	92		55-126			
Styrene	50	108		71-133			
TCE	50	104		67-137			
Tetrachloroethylene	50	96		67-131			
Toluene	50	91		61-137			
Trans-1,2-DCE	50	90		61-138			
Trans-1,3-Dichloropropene	50	103		42-154			
Vinyl Acetate	50	109		75-125			
Vinyl Chloride	50	95		31-125			
m,p-xylene	100	92		68-133			
o-Xylene	50	95		68-133			

(3)D96-12170-27

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-10
Date of Analysis: 11/1/96-11/7/96
Units: mg/kg

Field Sample ID:

FC-SB16-01	FC-SB19-01	FC-SB11-02	FC-SB12-03
FC-SB16-02	FC-SB19-02	FC-SB11-01	FC-SB20-02MS
FC-SB17-01	FC-SB20-01	FC-SB12-01	FC-SB20-02MSD
FC-SB18-01	FC-SB20-02	FC-SB12-02	
FC-SB18-02	FC-SB11-03	FC-SB12-02RE	

Matrix: Soil

Method Blank Contamination Summary: D96-12170-21

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
1,2,4-Trichlorobenzene	3.33	84		34–152			
1,2-DCB	3.33	82		32–135			
1,3-DCB	3.33	83		26–135			
1,4-DCB	3.33	83		25–135			
2,4-DNT	3.33	91		29–149			
2,6-DNT	3.33	91		41–135			
2-Chloronaphthalene	3.33	90		50–135			
2-Methylnaphthalene	3.33	87		31–135			
2-Nitroaniline	3.33	84		40–135			
3-Nitroaniline	3.33	64		25–175			
3,3'-Dichlorobenzidine	3.33	58		41–135			
4-Bromophenyl phenyl ether	3.33	85		43–137			
4-Chloroaniline	3.33	48		35-146			
4-Chlorophenyl phenyl ether	3.33	89		41–142			
4-Nitroaniline	3.33	86		30–153			
Acenaphthylene	3.33	97		37–135			
Acenapthene	3.33	88		39–135			
Anthracene	3.33	90		35–175			
Benz (a) anthracene	3.33	86		41–143			
Benzo (a) pyrene	3.33	91		31–135			
Benzo (b) fluoranthene	3.33	79		27–135			
Benzo (k) fluoranthene	3.33	88		27-135			
Benzo (g,h,i) perylene	3.33	104		25–159			
Benzyl alcohol	3.33	97		25–135			
Bis (2-chloroethoxy) methane	3.33	88		39–135			
Bis (2-chlorethyl) ether	3.33	73		34–135			
Bis (2-chloroisopropyl) ether	3.33	76		26–175			
Bis(2-ethylhexyl)phthalate	3.33	78		25-139			
Butyl benzyl phthalate	3.33	78		25-135			
Chrysene	3.33	84		45-143			

(1) D96-12170-22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-10
Date of Analysis: 11/1/96-11/7/96
Units: mg/kg

Field Sample ID:
FC-SB16-01, FC-SB16-02, FC-SB17-01, FC-SB18-01, FC-SB18-02, FC-SB19-01, FC-SB19-02, FC-SB20-01, FC-SB20-02, FC-SB11-03, FC-SB11-02, FC-SB11-01, FC-SB12-01, FC-SB12-02, FC-SB12-02RE, FC-SB12-03, FC-SB20-02MS, FC-SB20-02MSD

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Di-n-butylphthalate	3.33	92		25-136			
Di-n-octylphthalate	3.33	76		28-137			
Dibenz (a,h) anthracene	3.33	103		40-135			
Dibenzofuran	3.33	92		42-135			
Diethyl phthalate	3.33	87		27-135			
Dimethyl phthalate	3.33	86		25-175			
Fluoranthene	3.33	91		37-135			
Fluorene	3.33	88		38-149			
Hexachlorobenzene	3.33	84		36-143			
Hexachlorobutadiene	3.33	87		25-135			
Hexachlorocyclopentadiene	3.33	100		31-135			
Hexachloroethane	3.33	91		25-163			
Indeno (1,2,3-cd) pyrene	3.33	101		25-170			
Isophorone	3.33	89		25-175			
n-Nitrosodiphenylamine	3.33	98		27-135			
n-Nitrosodi-n-propylamine	3.33	85		25-135			
Naphthalene	3.33	88		40-135			
Nitrobenzene	3.33	82		36-143			
Phenanthrene	3.33	89		44-135			
Pyrene	3.33	78		37-146			
2,4,5-Trichlorophenol	3.33	89		25-175			
2,4,6-Trichlorophenol	3.33	90		29-138			
2,4-Dichlorophenol	3.33	82		36-135			
2,4-Dimethylphenol	3.33	74		35-149			
2,4-Dinitrophenol	3.33	99		25-161			
2-Chlorophenol	3.33	82		31-135			
2-Methylphenol	3.33	83		25-135			
2-Nitrophenol	3.33	87		34-135			
4,6-Dinitro-2-methylphenol	3.33	106		25-144			
4-Chloro-3-methylphenol	3.33	85		34-135			
4-Methylphenol	3.33	85		25-135			
4-Nitrophenol	3.33	105		25-141			
Benzoic acid	3.33	104		25-172			
Pentachlorophenol	3.33	91		38-146			
Phenol	3.33	82		25-135			

(1)D96-12170-22

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-10
Date of Analysis: 11/1/96-11/7/96
Units: mg/kg

Field Sample ID:

FC-SB16-01	FC-SB19-01	FC-SB11-02	FC-SB12-03
FC-SB16-02	FC-SB19-02	FC-SB11-01	FC-SB20-02MS
FC-SB17-01	FC-SB20-01	FC-SB12-01	FC-SB20-02MSD
FC-SB18-01	FC-SB20-02	FC-SB12-02	
FC-SB18-02	FC-SB11-03	FC-SB12-02RE	

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
MS/MSD(2)							
1,2,4-Trichlorobenzene	3.33	99	90	34–152	10	30	
1,2-DCB	3.33	96	88	32–135	9	30	
1,3-DCB	3.33	96	88	26–135	9	30	
1,4-DCB	3.33	95	87	25–135	9	30	
2,4-DNT	3.33	104	102	29–149	2	30	
2,6-DNT	3.33	104	101	41–135	3	30	
2-Chloronaphthalene	3.33	101	92	50–135	9	30	
2-Methylnaphthalene	3.33	99	91	31–135	8	30	
2-Nitroaniline	3.33	97	96	40–135	1	30	
3-Nitroaniline	3.33	78	76	25–175	2	30	
3,3'-Dichlorobenzidine	3.33	66	67	41–135	1	30	
4-Bromophenyl phenyl ether	3.33	95	91	43–137	4	30	
4-Chloroaniline	3.33	56	56	35-146	0	30	
4-Chlorophenyl phenyl ether	3.33	100	94	41–142	6	30	
4-Nitroaniline	3.33	108	107	30–153	1	30	
Acenaphthylene	3.33	109	100	37–135	9	30	
Acenapthene	3.33	99	93	39–135	6	30	
Anthracene	3.33	101	98	35–175	3	30	
Benzo (a) anthracene	3.33	93	92	41–143	1	30	
Benzo (a) pyrene	3.33	105	102	31–135	3	30	
Benzo (b) fluoranthene	3.33	86	88	27–135	2	30	
Benzo (k) fluoranthene	3.33	106	104	27-135	2	30	
Benzo (g,h,i) perylene	3.33	117	112	25–159	5	30	
Benzyl alcohol	3.33	111	107	25–135	4	30	
Bis (2-chloroethoxy) methane	3.33	96	92	39–135	4	30	
Bis (2-chloroethyl) ether	3.33	86	82	34–135	4	30	
Bis(2-chloroisopropyl)ether	3.33	89	82	26-175	8	30	
Bis(2-ethylhexyl)phthalate	3.33	82	84	25-139	2	30	
Butyl benzyl phthalate	3.33	86	85	25-135	1	30	
Chrysene	3.33	96	92	45-143	4	30	
Di-n-butylphthalate	3.33	94	86	25–136	9	30	
Di-n-octylphthalate	3.33	86	88	28–137	2	30	
Dibenz (a,h) anthracene	3.33	116	111	40–135	4	30	
Dibenzofuran	3.33	103	97	42–135	6	30	
Diethyl phthalate	3.33	99	94	27–135	5	30	

(2)D96-12170-23/24

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-2
SEMI-VOLATILE ORGANIC COMPOUNDS

Analytical Method: SW8270B
Analytical Batch ID: AB925-10
Date of Analysis: 11/1/96-11/7/96
Units: mg/kg

Field Sample ID:
FC-SB16-01, FC-SB16-02, FC-SB17-01, FC-SB18-01, FC-SB18-02, FC-SB19-01, FC-SB19-02, FC-SB20-01, FC-SB20-02, FC-SB11-03, FC-SB11-02, FC-SB11-01, FC-SB12-01, FC-SB12-02, FC-SB12-02RE, FC-SB12-03, FC-SB20-02MS, FC-SB20-02MSD

Matrix: Soil

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
MS/MSD(2)							
Dimethly phthalate	3.33	98	94	25–175	4	30	
Fluoranthene	3.33	96	93	37–135	3	30	
Fluorene	3.33	101	94	38–149	7	30	
Hexachlorobenzene	3.33	90	90	36–143	0	30	
Hexachlorobutadiene	3.33	103	90	25–135	13	30	
Hexachlorocyclopentadiene	3.33	108	95	31–135	13	30	
Hexachloroethane	3.33	103	92	25–163	11	30	
Indeno (1,2,3-cd) pyrene	3.33	115	109	25–170	5	30	
Isophorone	3.33	102	98	25–175	4	30	
n-Nitrosodiphenylamine	3.33	108	106	27–135	2	30	
n-Nitrosodi-n-propylamine	3.33	95	94	25–135	1	30	
Naphthalene	3.33	99	93	40–135	6	30	
Nitrobenzene	3.33	92	90	36–143	2	30	
Phenanthrene	3.33	97	94	44–135	3	30	
Pyrene	3.33	92	86	37–146	7	30	
2,4,5-Trichlorophenol	3.33	98	94	25–175	4	30	
2,4,6-Trichlorophenol	3.33	99	100	29–138	1	30	
2,4-Dichlorophenol	3.33	86	90	36–135	6	30	
2,4-Dimethylphenol	3.33	87	85	35–149	2	30	
2,4-Dinitrophenol	3.33	101	97	25–161	4	30	
2-Chlorophenol	3.33	94	90	31–135	4	30	
2-Methylphenol	3.33	94	95	25–135	1	30	
2-Nitrophenol	3.33	99	96	34–135	3	30	
4,6-Dinitro-2-methylphenol	3.33	115	118	25–144	2	30	
4-Chloro-3-methylphenol	3.33	96	92	34–135	4	30	
4-Methylphenol	3.33	95	94	25–135	1	30	
4-Nitrophenol	3.33	118	120	25–141	2	30	
Benzoic acid	3.33	46	32	25–172	36*	30	see (3)
Pentachlorophenol	3.33	91	92	38–146	1	30	
Phenol	3.33	108	91	25–135	17	30	

(2) D96-12170-23/24
(3) Associated data flagged "M" on Form 2's

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
PCBs

Analytical Method: SW8080
Analytical Batch ID: AB925-12
Date of Analysis: 10/31-11/1/96
Units: mg/kg

Field Sample IDs:

FC-SB16-01	FC-SB18-02	FC-SB20-02
FC-SB16-02	FC-SB19-01	FC-SB20-02MS
FC-SB17-01	FC-SB19-02	FC-SB20-02MSD
FC-SB18-01	FC-SB20-01	

Matrix: Soil

Method Blank Contamination Summary: 12170-21

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aroclor 1016	0.333	77		44-135			
Aroclor 1260	0.333	73		31-136			
Matrix Spike/MSD(2)							
Aroclor 1016	0.333	73	73	44-135	0	50	
Aroclor 1260	0.333	71	71	31-136	0	50	

(1) 12170-22
(2)12170-23/24

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
PESTICIDES

Analytical Method: SW8080
Analytical Batch ID: AB925-12
Date of Analysis: 11/5/96
Units: mg/kg

Field Sample IDs:

FC-SB16-01	FC-SB18-02	FC-SB20-02
FC-SB16-02	FC-SB19-01	FC-SB20-02MS
FC-SB17-01	FC-SB19-02	FC-SB20-02MSD
FC-SB18-01	FC-SB20-01	

Matrix: Soil

Method Blank Contamination Summary: BLK

Analytes	Detection Limits	Quantitation Limits	Lab Blank Result	Acceptance Criteria	Corrective Action

Quality Control Samples	Target Concentrations	Recovery(%) Spike	Spike Duplicate	Control Limits	RPD(%) Results	Control Limits	Corrective Action
Lab Control Sample(1)							
Aldrin	83.3	88		37–135			
a-BHC	83.3	88		65–135			
b-BHC	83.3	78		41–133			
d-BHC	83.3	85		65–136			
g-BHC (Lindane)	83.3	87		63–135			
Chlordane (technical)	100	93		35–135			
4,4'-DDD	83.3	88		38–146			
4,4'-DDE	83.3	88		35–149			
4,4'-DDT	83.3	89		25–153			
Dieldrin	83.3	90		32–142			
Endosulfan I	83.3	76		39–153			
Endosulfan II	83.3	79		65–169			
Endosulfan Sulfate	83.3	88		36–151			
Endrin	83.3	90		33–144			
Endrin Aldehyde	83.3	90		65–160			
Heptachlor	83.3	86		35–138			
Heptachlor Epoxide	83.3	89		43–144			
Methoxychlor	83.3	92		63–152			

(1)BLKLCS

QUALITY CONTROL REPORT
LAB SAMPLE GROUP ID: 12170-1
PESTICIDES

Analytical Method: SW8080
Analytical Batch ID: AB925-12
Date of Analysis: 11/5/96
Units: mg/kg

Field Sample IDs:
FC-SB16-01 FC-SB18-02 FC-SB20-02
FC-SB16-02 FC-SB19-01 FC-SB20-02MS
FC-SB17-01 FC-SB19-02 FC-SB20-02MSD
FC-SB18-01 FC-SB20-01

Matrix: Soil

		Recovery(%)			RPD(%)		
Quality Control Samples	Target Concentrations	Spike	Spike Duplicate	Control Limits	Results	Control Limits	Corrective Action
MS/MSD(2)						50	
Aldrin	83.3	91	89	37–135	2	50	
a-BHC	83.3	87	88	65–135	1	50	
b-BHC	83.3	86	91	41–133	6	50	
d-BHC	83.3	87	90	65–136	3	50	
g-BHC (Lindane)	83.3	87	90	63–135	3	50	
Chlordane (technical)	100	91	92	35–135	1	50	
4,4'-DDD	83.3	89	92	38–146	3	50	
4,4'-DDE	83.3	91	92	35–149	1	50	
4,4'-DDT	83.3	88	93	25–153	6	50	
Dieldrin	83.3	90	93	32–142	3	50	
Endosulfan I	83.3	76	78	39–153	2	50	
Endosulfan II	83.3	73	82	65–169	12	50	
Endosulfan Sulfate	83.3	79	91	36–151	14	50	
Endrin	83.3	91	92	33–144	1	50	
Endrin Aldehyde	83.3	81	93	65–160	14	50	
Heptachlor	83.3	90	91	35–138	1	50	
Heptachlor Epoxide	83.3	89	91	43–144	2	50	
Methoxychlor	83.3	93	95	63–152	2	50	

(2)12170-10MS/MSD

TAB

N

APPENDIX N

VOLATILE ORGANIC ANALYTICAL RESULTS QUALITY ASSESSMENT

ITS Intertek Testing Services
Environmental Laboratories

December 23, 1997

Ms. Rosemary Condit
OHM Remediation
5731 W. Las Positas Blvd
Pleasanton, CA 95588

Post-it® Fax Note 7671	Date 12-30	# of pages ▶ 2
To Joe Strz.	From Emma P.	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

RE: Laboratory Performance

Dear Ms. Rosemary Condit:

Intertek Testing Services, Environmental Laboratories, Inc. (ITS) is providing analytical services to numerous engineering firms in support of AFCEE programs. In an effort to continually improve the quality of our results and overall service, we recently completed another routine, internal audit of our performance.

Unfortunately, the results of this audit demonstrated that some inappropriate manual integrations had been used in reference to performance of AFCEE Version 2 low level volatile analyses of water samples by GC/MS. Our investigation was initiated on Thursday, December 11, 1997 and is still on-going. We felt however that it was imperative to advise you of status of this investigation.

At the present time, we know that manual integration of a few select GC/MS VOA constituents in standards used for calibration purposes in low level aqueous analysis consistent with AFCEE Version 2, were manipulated by addition and/or subtraction of peak areas to indicate compliance. We are confident that this problem is limited to samples submitted for aqueous analysis by AFCEE Version 2, as the audit and our subsequent investigations did not identify any other irregularities. We also believe that none of the constituents impacted were ever detected or reported for any AFCEE contractors but we have yet to confirm this belief. It would appear therefore that the actual reported data is usable even though compliance with AFCEE requirements for these select constituents were not met.

Since the degree and extent of the problem is not yet fully known, we are currently notifying the engineering firms that might be impacted by this problem. Upon completion of the investigation, which is scheduled for the end of December, we will advise you in detail of all sites impacted by these irregularities. We will also develop and distribute a schedule of any report to be re-issued.

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RE: Laboratory Performance

Upon discovery of this problem, the GC/MS Department Manager was discharged, an additional employee was suspended, the staff was retrained in appropriate QA/QC procedures, and our ethics policy was reinforced through a meeting of all employees. The Laboratory Director, under whose tutelage these practices occurred, is no longer employed by ITS.

We value our relationship with OHM Remediation and we are working with absolute urgency to rectify the situation. I will contact you in a few days to update you on our finding and answer any questions you might have.

Respectfully submitted,

Martin Jeffus
Regional Director/Vice President
Intertek Testing Services, Environmental Laboratories, Inc.

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Post-it™ Fax Note 7671	Date 2/4/98	# of pages ▶ 3
To Pete Chapman	From Lynnea Peterson	
Co./Dept. TEC	Co. Parsons - Denver	
Phone # (804) 295-4446	Phone # (303) 831-8100	
Fax # (804) 295-5535	Fax # (303) 831-8208	

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
BROOKS AIR FORCE BASE, TEXAS

January 15, 1998

MEMORANDUM FOR HQ AFCEE/ER
ATTENTION: ERB, ERD, ERT

FROM: ERC

SUBJECT: LABORATORY AUDIT OF ITS LABORATORIES-DALLAS FOR POTENTIAL FRAUDULENT DATA PRACTICES

At the request of the ERC Division Chief, an on-site evaluation of ITS Laboratory in Dallas, Texas, was performed on 13 – 14 January 1998 to investigate improper manipulation of laboratory analytical data. Mr. Ed Brown, AFCEE/ERC (lead evaluator) and Mr. Frank Schweitzer, Booz Allen & Hamilton, Inc. were the evaluators. Prior to the audit, ITS Laboratory released a letter (Attachment 1) to AFCEE and several AFCEE prime contractors on December 23, 1997 describing problems with the Gas Chromatography/Mass Spectrometry (GC/MS) sample volatile organic data. The problems involved inappropriate manipulation of data by the supervisor and members of the GC/MS Volatile Organic Analysis (VOA) section to meet AFCEE Quality Control/Quality Assurance (QA/QC) criteria. The laboratory presented examples of peak shaving and peak enhancement involving initial and continuing calibration standards and QC samples.

During the audit Mr. Robert Wyeth, Director of ITS Operations, described the chronology of events surrounding the data quality problems (Attachment 2). In the chronology Mr. Wyeth describes how the Organic Area Director, Mr. Mike Ludwick, had pressured the GC/MS (VOA) analysts to produce only compliant data by whatever means necessary. Three analysts were involved with this situation. Mr. Ludwick trained the analysts in how to perform manual integrations. Mr. Wyeth points out that Mr. Ludwick had a policy in which analysts were told there were to be no non-compliant data reported. If the analysts didn't make the data compliant when it was reported, Mr Ludwick would make the data compliant in his secondary data review. Mr. Ludwick resigned on December 11, 1997. Other analysts received disciplinary actions ranging from suspension to demotion.

In response to the AFCEE audit conducted on October 27 – 29, 1997, the laboratory brought in an ITS data reviewer, Ms. Mina Shah, from San Jose, California to perform an independent internal audit of the laboratory data. Ms. Shah identified instances of improper QC sample data manipulations including alteration of peak areas, peak shaving and peak enhancement, for method detection limit studies, initial calibrations, continuing calibrations, QC samples, and internal standards. ITS laboratory management was

informed of the inappropriate manual integrations in the GC/MS VOA section on December 9, 1997 and AFCEE was informed of the situation on December 23, 1997. The laboratory provided examples of improper QC sample data manipulations (Attachment 3). The examples in the attachment are taken from an 8260 initial calibration. The examples labeled "A" show the proper and acceptable manual peak integration while the corresponding examples labeled "B" show inappropriate manual integrations. The inappropriate QC data manipulations were performed to ensure compliance with AFCEE program requirements. The laboratory made the statement to the auditors that based on an initial sampling of the data by Ms. Shah, all the samples submitted to the laboratory for the Air Force might be effected. AFCEE will need to determine the actual extent or amount of effected data packages.

The laboratory provided a list (Attachment 4) of 27 AFCEE bases whose data could be effected by this fraudulent activity. The laboratory indicated that this practice had been ongoing for over two years. The laboratory indicated that no AFCEE data for method SW 8260 has been reported to their clients (the AFCEE prime contractors) since the initial discovery of the situation on December 9, 1997. However, the laboratory continues to accept and analyze AFCEE samples for all methods including method 8260. In addition all of the analysts that were implicated in the illicit data manipulations with the exception of Mr. Ludwick, who was terminated, are still analyzing AFCEE samples.

One of the significant findings from the October 1997 AFCEE on-site audit was that the laboratory's QA, analytical, and human systems were being stressed. Some analysts were working 60 to 70 hours per week. Standard Operating Procedures (SOP) were either not updated, incomplete or not available in the sections. Mistakes were being made and not caught during QA/QC reviews or the QA/QC review was not even performed. During this audit the AFCEE auditors confirmed the laboratory's data review process was not implemented as described in the laboratory's SOPs. Data packages for Bellows AFS and Camp Stanley were reviewed for completeness. The VOA data packages did not contain the laboratory mandated QA/QC checklists, which are necessary to verify that a data quality review had been accomplished. When questioned about the absence of the QA/QC checklists Mr. McQueen, a VOA analyst stated that the analysts were often too busy to document the QA/QC review. Mr. McQueen's statement was confirmed by Ms. Sheila Petty, a data reviewer, who stated that upper management had told her that it was more important to get the data packages out than to worry about documenting the fact of a QA/QC review.

The method 6010 and 8270 data were also reviewed in the Bellows AFS and Camp Stanley data packages. Documentation of a data review was present for these methods. The data packages for method 8270 contained signed signatory data stamps but not the laboratory prescribed QA/QC checklist. Method 6010 contained a signed checklist but the checklist was different than the one prescribed in the laboratory's data review SOP. In no case was the laboratory found to be following their SOP for data review.

It is the auditors' assessment that the current laboratory management lacks overall commitment to quality and is emphasizing production at the expense of quality. Examples are as follows:

- Analysts that admitted performing improper data manipulations are still actively engaged in GC/MS analysis of samples including Air Force samples. (Laboratory management informed the auditors that currently no Air Force data packages are being released to AFCEE prime contractors. This has not been confirmed by AFCEE.
- The analysts admitted that they do not have time to perform laboratory prescribed QA/QC data reviews. However management has instructed the data review section to release reports without the required documentation of data review.

RECOMMENDATIONS:

The following recommendations are made:

- ITS laboratory should be suspended from doing further analysis for AFCEE until ITS can verify that all of the proper QA/QC is in place and is being used to prevent the recurrence of inappropriate data manipulation.
- All of the SW 8260 volatile data effected by the inappropriate QA/QC manipulations generated by the laboratory for Air Force should be rejected.
- The laboratory must implement electronic and manual QA/QC data review practices to eliminate any future data quality problems. Such practices should be implemented prior to release of any AFCEE data.
- ITS shall have an independent third party audit of the laboratory performed to ensure improper QA/QC manipulations are not a common practice throughout the laboratory.
- ITS management must implement the necessary personnel and QA/QC changes in the laboratory to assure compliance with AFCEE requirements and Good Laboratory Practices.

EDWARD J. BROWN, GS-13
Chemistry Consultant
Consultant Operations Division

ITS Intertek Testing Services
Environmental Laboratories

January 30, 1998

Mr. Glenn Metzler
The Environmental Co.
P.O. Box 5127
Charlottesville, Virginia 22905

Dear Mr. Glenn Metzler

I am writing to inform you of a recently discovered problem at our Dallas facility. In view of our long standing business relationship and our commitment to provide a high quality analytical product, I want to personally apprise you of the situation and that some of your data may have been affected.

On December 9, 1997, through an internal audit, we discovered that inappropriate manual integrations of chromatographic peak areas were being performed by one of our Organic Analyses Departments in the Dallas facility. The specific department involved was GC/MS volatiles and the affected analyses appear to be AFCEE and SW-846 Method 8260 testing of soils and waters. The inappropriate manual integrations were being performed for the purpose of meeting method/protocol criteria.

Since the discovery of this problem, ITS has been working diligently to correct the problem and notify all potentially affected government agencies including USEPA, AFCEE and USACE. Additionally, we are continuing our investigation and have hired an independent consultant to audit our Dallas facility. Other actions include the termination of the Organic Area Director, sanctioning of other employees and instituting appropriate corrective actions which include immediate retraining in both ethics and proper manual integrations. Our remedial measures include a top to bottom review of our Quality Assurance and Data Review departments. ITS is fully committed to cooperate with all federal agencies to quickly resolve any questions or issues surrounding our disclosure.

We believe that upon discovery of the inappropriate manual integrations we have acted responsibly by initially notifying the USEPA through its voluntary disclosure policy and all other agencies and businesses involved. It is our understanding that due to our voluntary disclosure and the responsible nature with which we have handled this matter, ITS will be allowed to continue to perform work for the federal government. We intend to keep you informed of all developments and plan to follow up this letter within two weeks to appraise you of the additional remedial measures taken to better insure that this incident will not reoccur.

We are absolutely aware of the severity of this problem and fully realize the difficulties it places on you and all our clients. You can be assured, that we are prepared to take all possible action to swiftly resolve any questions in this matter and to minimize the potential impact on your business. We stand unconditionally prepared to resolve this situation to your satisfaction and welcome the opportunity to further discuss the situation with you at your convenience.

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ITS Intertek Testing Services
Environmental Laboratories

I encourage you to call your ITS sales representative or project manager if you have any questions regarding this matter. A list of sales and project manager phone numbers is included here for your convenience. Alternatively, you may call Mr. Bob Wyeth, Laboratory Operations Director, or myself.

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Very truly yours,

Martin Jeffus
Environmental Division Vice President

Sales

Keith Kirkpatrick / ITS Dallas: (972)238-5591
Tracy Kreitz / ITS San Antonio: (210)863-0265
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APPENDIX O

RESPONSE TO COMMENTS

RESPONSE TO AFCEE REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

General Comments

Item	Comment	Response and/or Action Taken
1	The contractor presented a partial risk evaluation of the Unnamed Stream area and the West Fork of the Trinity River area. Action levels were not determined for these areas since the contamination identified at these sites was attributed to sources other than the pipeline being investigated by this project. Risk assessments are being performed for sites encompassing the Unnamed Stream and the West Fork of the Trinity River areas as part of site investigations conducted under separate contracts. The contractor's evaluation of the exposure scenarios for these areas was unnecessary for the reasons indicated above. The partial evaluation of the risk assessment process was somewhat confusing, presenting pathways and not evaluating them. All of these requirements for the risk assessment process at these areas will be addressed by the other contracts.	Concur, risk evaluation modified.
2	The contractor should reevaluate the screening action levels (SALS) presented in Table 2-5. Practical quantitation limits (PQLS) should only be used in place of lower background levels if it is demonstrated that lower levels of quantitation of a contaminant are not possible. Additionally, background levels used for arsenic, lead, and cadmium are higher than those determined in the most recent draft Basewide Background Study (Jacobs 1997). The contractor should reevaluate contaminants as necessary if the SALs are changed.	PQLs were not used as SALs in the final report. The SALs were revised in the final report to reflect the results of the draft Basewide Background Study (Jacobs 1997) and contaminants were reevaluated with respect to the SALs.
3	The contractor did not present a conceptual site model (CSM) as stated in the Work Plan (WP) and statement of work (SOW). A CSM in tabular format as specified in the Air Force Center for Environmental Excellence (AFC-EE) "Handbook" (September 1993) would greatly clarify the exposure pathway analysis presented in the risk evaluation.	A tabular CSM based on AFCEE guidelines is included in the final report.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Specific Comments

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
1	xiii	Executive Summary	The last sentence of this page is not complete. This sentence would describe the recommended management category for the RV Fam Camp if completed. The value box area and Farmers Branch Creek area should also be categorized.	Text added to recommend that the RV Fam Camp and Valve Box areas be managed under Category 1. No site-related contaminants were identified at the Farmers Branch Creek area.
2	1-7	1.4.1.2	The contractor should clarify the reference to lead exceeding action levels. Is the contractor referring to action levels developed in this report or action levels developed in the RFI (Law 1995) being discussed?	The text refers to action levels devloped in the RFI. Text was modified.
3	1-10	1.5.1	The contractor should clarify that the galvanized water trough to be installed at the former oil/water separator location at the Unnamed Stream will only be in place until the removal project is completed.	Point clarified.
4	1-10	1.5.3	The contractor should clarify the tank removal date at the Base Service Station (BSS). This section conflicts with section 1.4.1.3.	The date was revised to 1993.
5	Figure 1-3	Figure 1-3	The road identified as River Oaks Boulevard should be identified as White Settlement Road.	Figure modified.
6	Figure 1-4	Figure 1-4	Soil borings shown on the map should be included in the legend. The site symbol consisting of horizontal lines should also be identified in the legend.	Figure modified.
7	Figure 1-4	Figure 1-4	The term "abandoned USTs" is used in the figure to represent the former location of underground storage tanks (USTs). The contractor should label the location "former UST location".	Figure modified.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE
DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
8	2-7	2.2.2.2	The text indicates that a split-spoon sampler was driven in accordance with ASTM D-1586. The contractor should correct the text to indicate the manner in which samples were actually collected. The sampler was not driven. The borehole logs in Appendix G indicate that a 5-foot sampler was utilized and no blow counts are presented.	Text modified.
9	2-8	2.2.2.2	The contractor indicates that decontamination fluids were contained and disposed of in accordance with Texas Natural Resource Conservation Commission (TNRCC) regulations. Decontamination fluids were contained but not disposed. No analytical results or disposal receipts are presented for investigation-derived waste (IDW). The SOW and WP indicate that the contractor will dispose of IDW. The contractor should explain the disposition of the IDW including soil and fluids.	Text modified.
10	2-12	2.2.6.1	The contractor should indicate the location of the ambient blank sample.	Text modified.
11	2-13	2.3.1	The contractor indicates that the hydrocarbon fingerprinting identified the exact type of product present in the sample. Suggest the contractor delete the word "exact" from the text,	Text modified.
12	2-17	2.4.3	The contractor should indicate that the reason for evaluating the RV Fam Camp under Texas Administrative Code (TAC) 335, Subchapter S, instead of Petroleum Storage Tank (PST) guidelines is that it is not a PST area.	Concur. Text modified.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE
DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
13	2-19	2.4.3.1	The contractor indicates that the SALs for PST areas are based on the PQLs if the PQLs are higher that background levels. The contractor should only consider using the PQL as the SAL if it is demonstrated that lower levels of quantitation of a contaminant are not possible.	PQLs were not used as SALs in the final report.
14	2-19	2.4.3.1	The contractor indicates that the SALs for the Unnamed Stream and RV Fam Camp areas are based on the PQLs if the PQLs are higher than background levels. The contractor should address the statement in TAC 335.554 (d) that the PQL can only be used as the SAL if it is demonstrated that lower levels of quantitation of a contaminant are not possible.	PQLs were not used as SALs in the final report.
15	2-24	Table 2-5	Suggest the contractor utilize background concentrations for arsenic instead of the PQLs. The contractor should verify the background concentrations utilized for arsenic, cadmium, and lead. The levels are considerably higher than the levels determined in the January 1997 Jacobs Engineering Basewide Background Study at NAS Fort Worth. NOTE: The January 1997 Jacobs Basewide Background Study is a draft version.	SALs were revised to reflect the upper tolerance limit (UTL) concentrations presented in Jacobs' draft Basewide Background Study (Jacobs 1997) and subsequent revisions to some of the UTLs (Jacobs 1998).

RESPONSE TO AFCEE REVIEW COMMENTS ON THE
DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
16	3-11	3.3.4.3	The text indicates that an analysis of the potential risks posed by compounds exceeding SALs at the Unnamed Stream is presented in section 5.0 of the report. The contractor should correct this statement since action levels were not developed for these compounds at the Unnamed Stream in this report. The risks posed are to be evaluated under another contract.	Concur, text modified.
17	3-13	3.3.5.3	See above comment. The above comment also applies to the West Fork of the Trinity River area.	Concur, text modified.
18	3-24	Table 3-8	The summary of detected results does not list benzene under the heading of BTEX (benzene, toluene, ethylbenzene, xylenes). Similar situations exist for other samples listed on other tables following this table. The same omission occurs for figure 3-1. The contractor should correct or clarify.	Footnotes were added to Table 3-8 and figures indicating that only detected compounds were included. Benzene was not detected in Valve Box soil samples.
19	4-1	4.3	The reference to section 3.4 should be corrected to section 3.3.4.	Text modified.
20	5-1	5.0	The contractor should present a CSM in this section of the report as required by the WP and SOW. The AFCEE Handbook specifies a CSM in tabular format.	A tabular CSM based on AFCEE guidelines is included in the final report.
21	5-2	5.0	The contractor should not present an evaluation of the exposure scenarios for sites which were determined not to be sources.	Concur, text modified.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
22	5 - 2	5.1.2	The contractor indicates that the selection of potential human receptors was based in part on the migration potential evaluation in section 4.0; however, the migration potentials of the Unnamed Stream and the West Fork of the Trinity River were not discussed in section 4.0 since the pipelines did not contribute to the contamination.	Concur, text modified.
23	5 - 3	5.1.2	The contractor infers that the Unnamed Stream is located next to the golf course; however, the Unnamed Stream is separated from the golf course by a significant distance and buildings, roads and undeveloped land not associated with the golf course. The contractor should delete or clarify the manner in which the Unnamed Stream could be associated with the golf course.	Concur, text deleted.
24	5 - 3	5.1.2	If potential beneficial use of the groundwater at the Unnamed Stream and RV Fam Camp is designated Category I due to the potential to impact groundwater, this reasoning and designation would also apply to the West Fork of the Trinity River area. Seepage to the river in this area has already been noted (section 1.4.1.3).	Eliminated discussion of the Unnamed Stream and West Fork of the Trinity River areas.
25	5 - 4	5.1.3	The contractor should eliminate use of the term "expanded golf club" or include reference to the Unnamed Stream and RV Fam Camp.	Concur, reference eliminated.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE
DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
26	5 - 4	5.1.3	The contractor begins the fourth paragraph indicating that the only environmental media of concern for this risk evaluation is subsurface soil. This is an inaccurate statement which seems to indicate an incomplete risk evaluation. This section on exposure pathway evaluation must evaluate all practical potential for exposure. Only after the evaluation of each potential pathway can the complete pathways be identified. The pathways must also consider future transport to other media of concern. The contractor indicates that no exposure exists for surface soils; however, no surface soil samples were obtained.	Text was modified to reflect results of Section 4.0, which concludes that chemicals of concern were only detected in subsurface soil and future contaminant migration to other media is not expected. Surface soil was screened using PID. Because PID results indicated no surface soil contamination and the pipelines are located below the ground surface, no surface soil samples were collected for laboratory analysis.
27	5 - 4	5.1.3	The contractor indicates that groundwater is not likely to be impacted by sources identified in this study, as indicated in section 4.0. Section 4.0 clearly indicates the groundwater contamination exists in the area of the Unnamed Stream and the West Fork of the Trinity River. If the contractor is attempting to indicate the groundwater is not impacted by the sources investigated for this report, the pipeline areas, why are they being evaluated in this section?	Based on AFCEE's general comments, discussion of these areas was eliminated from the exposure pathway analysis.

RESPONSE TO AFCEE REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
28	5 - 5	5.1.3	The future exposure scenarios have failed to consider dermal exposure to the construction worker. The recreational visitor should not contact or ingest subsurface soils	Dermal exposure was considered in the final report. Future recreational visitors in the vicinity of the RV Fam Camp area could contact subsurface soil via inhalation if it is excavated and brought to the ground surface during construction and development activities. However, because of the lower exposure frequency and fewer exposure routes associated with the recreational scenario compared to the residential and construction scenarios, action levels were not calculated for the recreational scenario in the final report.
29	5 - 1 7	Table 5-5	The contractor should clarify the status of arsenic. Was arsenic detected or evaluated?	Arsenic was not detected at the RV Fam Camp area. A footnote was added to Table 5-5 indicating that only detected compounds are listed in this table.

RESPONSE TO EPA REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

General Comments

Item	Comment	Response and/or Action Taken
A.	USAF's Draft SC Report should include a document intended to be used in fulfilling deed recordation requirements if appropriate.	Not appropriate because no deed restrictions are required.

Specific Comments

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
B.	xiii	Executive Summary	USAF recommends that the RV Fam Camp be managed under Category 1 (no further action). USAF should include a statement that specifies which of the TNRCC's Risk Reduction Standards are applicable to the RV Fam Camp.	Text added.
C.	1 - 3	1.2.4	USAF provided a brief description of the regional geology. USAF should include a stratigraphic map in the Draft SC Report that represents the subsurface at the RV Fam Camp. This detailed cross-section of the study area should utilize the information obtained from the field investigations.	A stratigraphic map is included in the final report.

RESPONSE TO EPA REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
D.	2-19	2.4.3.1	USAF states that the screening action levels (SALS) for the RV Fam Camp area were based on the maximum background concentrations measured during the Oil/Water Separator Assessment and RCRA Facility Investigation conducted by Law Environmental, Inc. in 1994. USAF adds that the background soil samples were obtained from five boreholes drilled within the vicinity of the investigation area to depths ranging from 4 to 14 feet below the ground's surface. Table 2-5 (Basis for TNRCC Screening Action Levels (SALS) for the RV Fam Camp Site Investigation) lists the SALs chosen by USAF for the RV Fam Camp. USAF should provide additional information in the Draft SC Report that justifies the selection of background concentrations. EPA does not believe that the use of maximum concentrations of inorganics is appropriate for use as background concentrations and comparison to soil analytical data or TNRCC's media-specific concentrations (MSCs). The technical issues that should be addressed by USAF include selection of background sampling locations, considerations in selection of sampling procedures, and statistical analyses.	Background upper tolerance limit (UTL) concentrations from Jacobs Engineering draft Basewide Background Study (Jacobs Engineering 1997) were used as SALs in the final report. Some of the UTLs were revised subsequent to release of the study report (Jacobs personal communication 1998). These revised values were used as SALs. PQLs were not used as SALs in the final report.

RESPONSE TO EPA REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
D. (cont)	2-19	2.4.3.1	USAF should consider the protocols described in the following EPA guidance documents in the establishment of background for all environmental media of concern. These documents, not all inclusive, are titled Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities" (Addendum to Interim Final Guidance, June 1992), "Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities" (Interim Final Guidance, April 1989, EPA/530-SW-89-026), and "Determination of Background Concentrations of Inorganics in Soils and Sediments at Hazardous Waste Sites" (December 1995, EPA/540/5-96/500). Although the document has not been approved by TNRCC, USAF should also consider USAF's "Draft Base-Wide Background Study" (January 1997) in the development background for the RV Fam Camp. The Draft SC Report may require amendment based on TNRCC's comments concerning this background study. For clarification purposes, the objective of the RCRA Facility investigation is to delineate the full vertical and horizontal extent of contamination to background conditions. Therefore, it is imperative that true background conditions are established for the RV Fam Camp.	

RESPONSE TO EPA REVIEW COMMENTS ON THE DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
D. (cont)	2-1.9	2.4.3.1	Once background conditions are established, USAF should determine whether the analytical data collected to date are representative of the full vertical and horizontal extent of contamination, if present, at the RV Fam Camp. EPA realizes that in some cases delineating the extent of contamination to unaffected background may not be possible or practical, USAF should discuss this issue with EPA and TNRCC if this is the case at NAS FW. Additionally, USAF must demonstrate in the Draft SC Report that lower levels of quantitation are not possible if Practical Quantitation Limits are used as the basis for the selection of action levels (e.g., the PQLs are greater than their respective background and/or MSCS).	
E.	3-33	Table 3-12	Table 3-12 provides a comparison of the soil sampling results with the TNRCC screening levels. USAF should also consider EPA's Region 6 Human Health Media-Specific Screening Levels in the comparison to the soil analytical results and background concentrations.	Screening of site concentrations at the RV Fam Camp area (Table 3-12) is based on Risk Reduction Standard Number 1, which relies on background concentrations for determining compliance. Because the focus is on background, risk-based concentrations are not considered in the screening step for this study area. Methodolgies provided in EPA guidances, which are consistent with those used to develop Region 6 Human Health Media-Specific Screening Levels, were considered during development of action levels in the final report.

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DRAFT SITE ASSESSMENT, INVESTIGATION, AND CHARACTERIZATION OF THE RECREATIONAL VEHICLE (RV) FAMILY CAMPING (FAM CAMP) AND PIPELINE AREAS AT NAVAL AIR STATION (NAS) FORT WORTH, TEXAS

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
F.	5 - 6	5.1.5	USAF provided Table 5-3 (Action Levels for COPC at the RV Fam Camp Area) which lists the MSCs applicable to the RV Fam Camp. USAF modified the residential MSCs to generate recreational and industrial soil scenarios by multiplying the values by a factor to account for the lower exposure frequency. This modification may be reasonable for noncarcinogens but is not recommended for carcinogens since the non-threshold assumption for estimating carcinogenic risk does not allow for the modification based on exposure frequency.	Per TEC/EPA personal communication regarding this comment (Martinez 1997), adjusting the exposure frequency is appropriate for both carcinogens and noncarcinogens. This approach, however, was not followed in the final report.

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General Comments

Item	Comment	Response and/or Action Taken
A.	Efforts should be made to identify any Leaking Petroleum Storage Tank (LPST) sites that are referenced in the report (BSG, BSS, etc.) which provide evidence to the final findings of the investigation.	Added LPST ID numbers next to LPST sites (eg. BSS, BSG) throughout report, per Antonio Pena (TNRCC, February 23, 1998).

Specific Comments

Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
A.	xiii	Executive Summary	USAF states that no further action status is recommended because no significant impact to human health and environment exists. USAF should also state that no potential for significant impact exists under future exposure scenarios for the sub-population chosen in Section 5.0 (Risk Evaluation).	Concur. Text added.
B.	1 - 3	1.2.4	USAF should include a geologic stratigraphic map that represents the subsurface along the pipeline areas. Information from field investigations in combination with regional geologic knowledge should be utilized to prepare such a map.	A stratigraphic map is included in the final report.

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Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
C.	1 - 9	1.4.1.3	USAF should make efforts to include the most up-to-date information obtained through the latest field investigations at the BSS. Also, SC report should mention that the sources at this location have been removed/eliminated.	Concur. Text added.
D.	2 - 17	2.4.3	Please identify the references TNRCC PST Division documents utilized for risk evaluation/methodology as RG-175 and RG-36 respectively.	Text added.
E.	2 - 19	2.4.3.2	Different methodologies were used to set SALs for organics and inorganics due to some chemicals not being in Table A-1 of Beneficial Groundwater Use Category 1 Levels. For SALs set to background levels, additional justification should be provided for the selection of background concentrations as maximum concentrations obtained during 1994 field investigations of other areas. Characterization of background conditions should be determined by placement of borings outside the area of potential contamination. Because direct sampling data from the area of concern prior to waste management activities is seldom available, the use of nearby, non-impacted sampling data in conjunction with statistical/geostatistical estimation techniques and/or statistical models is recommended.	Background upper tolerance limit (UTL) concentrations from Jacobs Engineering draft Basewide Background Study (Jacobs 1997) were used as SALs in the final report. Some of the UTLs were revised subsequent to release of the study report (Jacobs personal communication 1998). These revised values were used as SALs.

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Item	Page	Section/ Paragraph	Comment	Response and/or Action Taken
F.	2-19	2.4.3.2	USAF should provide the basis (ex: TDS, receptors, groundwater depth, etc..) for selecting the more stringent Beneficial Groundwater Use Category I target levels over Category II, which is the denomination currently applied to other PSTD areas at the Base. Information about the probable well yield, based on nearby and/or regional experience, at the depths of concern is critical to a risk-based approach.	Assumption of Category I was a conservative measure for screening purposes (i.e. in development of screening action levels), before an exposure analysis was performed. In addition, beneficial use of the groundwater in the vicinity of the Unnamed Stream and RV Family Camp areas is designated as Category I by TNRCC because of potential contaminant migration into local surface water (Parsons Engineering 1996). Therefore, Category I was assumed in the screening step of the Risk Evaluation.
G		Section 5.0	An attempt should be made to identify all complete exposure pathways. The ingestion of COPCs in subsurface soil pathway for the industrial worker population appears to be incomplete due to unlikely excavation activities. TNRCC PSTD recommends the inclusion of the future construction worker scenario because the possibility for repairs/maintenance of the active Pride Petroleum pipeline appears to be likely. Also, target risk for the future pipeline construction/repair/maintenance worker scenario would be protective of the industrial worker. USAF should specify the target risk in the SC report, for PSTD areas, the permissible risk for future exposure scenario is $1x10^{-4}$.	Concur. Because no action levels were developed for PSTD areas due to the lack of COPCs, specifying the target risk level was unnecessary in the Risk Evaluation.

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