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DRAFT SITE CHARACTERIZATION REPORT SITE 43 NAS PENSACOLA FL
4/1/2000
TETRA TECH INC

Rev. 1
04/20/00

SITE CHARACTERIZATION REPORT (SITE 43)

Naval Air Station
Pensacola
Pensacola, Florida

Southern Division
Naval Facilities Engineering Command
Contract Number N62467-94-D-0888
Contract Task Order CTO-0096

APRIL 2000

TETRA TECH NUS, INC.

FOREWORD

To meet its mission objectives, the U.S. Navy performs a variety of operations, some requiring the use, handling, storage, or disposal of hazardous materials. Through accidental spills and leaks and conventional methods of past disposal, hazardous materials may have entered the environment. With growing knowledge of the long-term effects of hazardous materials on the environment, the U. S. Department of Defense initiated various programs to investigate and remediate conditions related to suspected past releases of hazardous materials at its facilities.

One of these programs is the Installation Restoration (IR) program. This program complies with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA), the Resource Conservation and Recovery Act, and the Hazardous and Solid Waste Amendments of 1984. These acts establish the means to assess and clean up hazardous waste sites for both private-sector and federal facilities. The CERCLA and SARA acts form the basis for what is commonly known as the Superfund program.

Originally, the Navy's part of this program was called the Naval Assessment and Control of Installation Pollutants (NACIP) program. Early reports reflect the NACIP process and terminology. The Navy eventually adopted the program structure and terminology of the standard IR program.

The IR program consists of Preliminary Assessment (PA) and Site Inspections (SIs), Remedial Investigation (RI) and Feasibility Study (FS), and Remedial Design (RD) and Remedial Action (RA) at sites where chemicals were allegedly spilled or disposed of. The PA and SI identify the presence of pollutants. The nature and extent of contamination as well as the selected remedial solutions are determined during the RI/FS. The RD and RA are performed to complete implementation of the solution.

The Southern Division, Naval Facilities Engineering Command manages and the U.S. Environmental Protection Agency and the Florida Department of Environmental Protection (formerly the Florida Department of Environmental Regulation) oversee the Navy environmental program at Naval Air Station (NAS) Pensacola. All aspects of the program are conducted in compliance with state and federal regulations, as ensured by the participation of these regulatory agencies.

Questions regarding the CERCLA program at NAS Pensacola should be addressed to Mr. William Hill, Code 1851, at (843) 820-7324.

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ACRONYMS

BLS	below land surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COMPQAP	Comprehensive Quality Assurance Plan
DEL	Direct Exposure Limit
DOT	Department of Transportation
DPT	Direct Push Technology
E/A&H	EnSafe/Allen and Hoshall
FAC	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FID	Flame Ionization Detector
GPS	Global Positioning System
ID	Inner Diameter
IR	Installation Restoration
MSL	Mean Sea Level
NAD	North American Datum
NAS	Naval Air Station
NAVD	North American Vertical Datum
NTU	Nephelometric Turbidity Unit
PCB	Polychlorinated Biphenyls
OVA	Organic Vapor Analysis
SARA	Superfund Amendments and Reauthorization Act
SCM	Site Conceptual Model
SCR	Site Characterization Report
SOP	Standard Operating Procedure
SOUTHNAVFACENGCOM	Southern Division Naval Facilities Engineering Command
SOW	Scope of Work
SVOC	Semivolatile Organics
TAL	Target Analyte List
TCL	Target Compound List
TtNUS	Tetra Tech NUS
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

1.0 INTRODUCTION

Tetra Tech NUS, Inc., (TtNUS) under contract to the Department of Navy, Southern Division, Naval Facilities Engineering Command (SOUTHNAVFACENGCOM) is submitting this Site Characterization Report (SCR) for Site 43 at Naval Air Station (NAS) Pensacola located in Pensacola, Florida. The SCR was prepared on behalf of the Navy at Naval Air Station (NAS) Pensacola under contract No. N62467-94-D-0888. The SCR was developed based on the results of a field investigation conducted according to the Sampling and Analysis Plan for Preliminary Site Characterization Study for Site 43 (TtNUS, 1999).

1.1 PURPOSE OF REPORT

The purpose of this SCR is to document field investigation activities associated with the Site Characterization Investigation for Site 43, and to report the results from the soil, groundwater, and drum characterization. The report also presents recommendations for further action at the site based on these findings.

1.2 PHYSICAL DESCRIPTION OF THE SITE

1.2.1 Facility Background

NAS Pensacola (Figure 1-1) is located in Escambia County, in Florida's northwest coastal area, approximately 5 miles west of the Pensacola City limits. The approximately 5,000-acre installation was constructed in the 1800's. Prior to construction, the facility was undeveloped and sparsely vegetated. Land use at NAS Pensacola consists of various military housing, training, and support facilities as well as large industrial complexes for major repairs and refurbishment of aircraft engines and frames. The subject site is located at the southwest corner of Murray and Taylor Roads. The historical usage of the site was to dispose of metallic wastes resembling drums of unknown contents. Details on the NAS Pensacola facility may be found in the facility administrative record.

1.2.2 Site Description

Site 43 (Figure 1-2) is located at the southwest corner of Murray and Taylor Roads, and currently consists of an area approximately 200 feet by 200 feet in size. The site is planted with grass and contains a tennis court, an old building foundation, and access roads to the officers' quarters. In December 1992, a child playing with a metal detector discovered two partially buried drums exposed at the surface just east of the tennis court. One drum was reported to be in a vertical position; its end punctured revealing standing water in the interior. The second drum was observed to be intact in a vertical position. A third iron object resembling a drum rim was observed between the fenced area and the tennis court. Smaller, rusted metal

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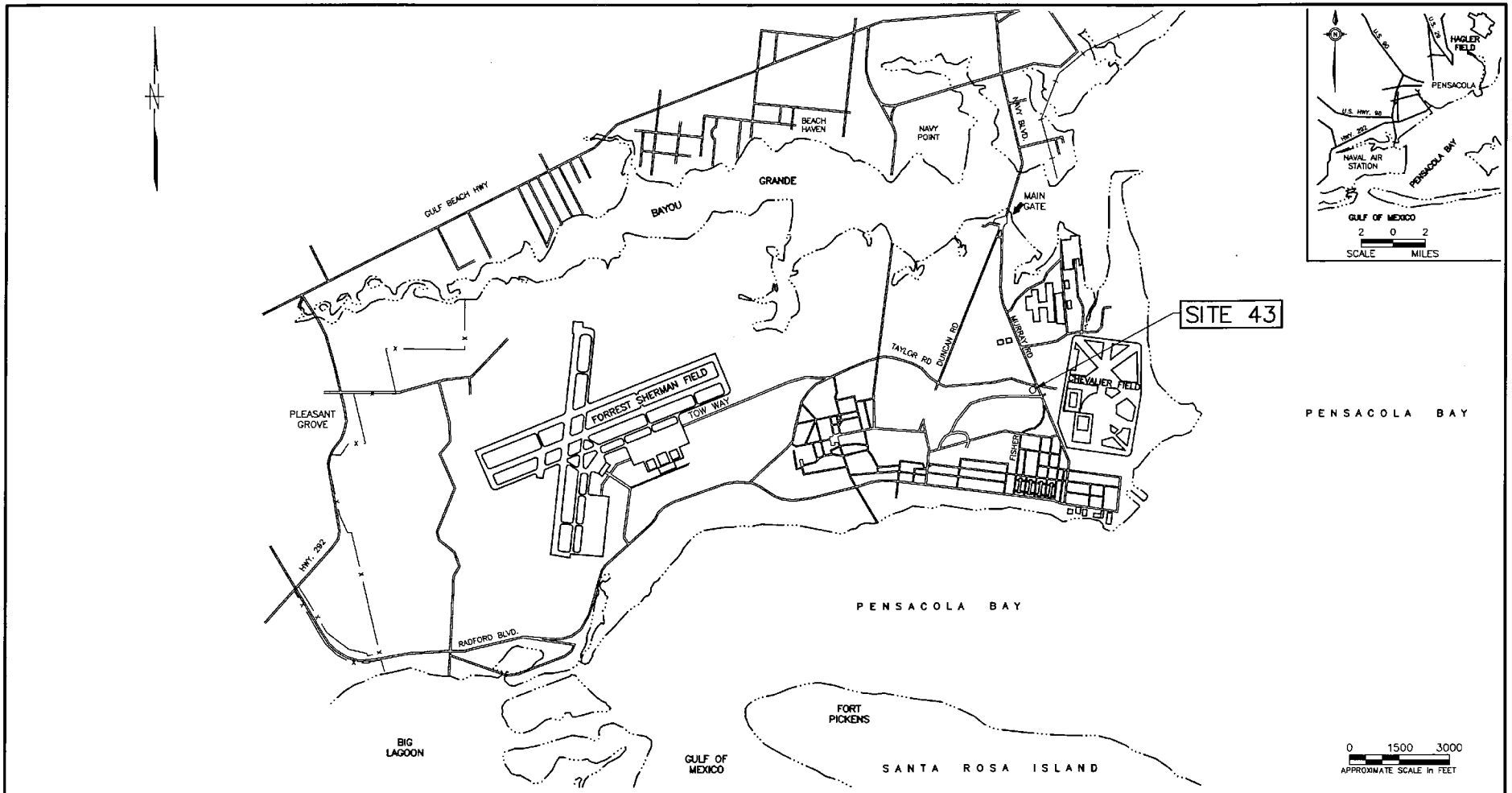

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SITE VICINITY MAP
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

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SOURCE: Geophysical Investigation of Buried Drum Area Site 10 (West), Naval Air Station Pensacola. ENSAFE/ALLEN & HOSHALL, 1994.

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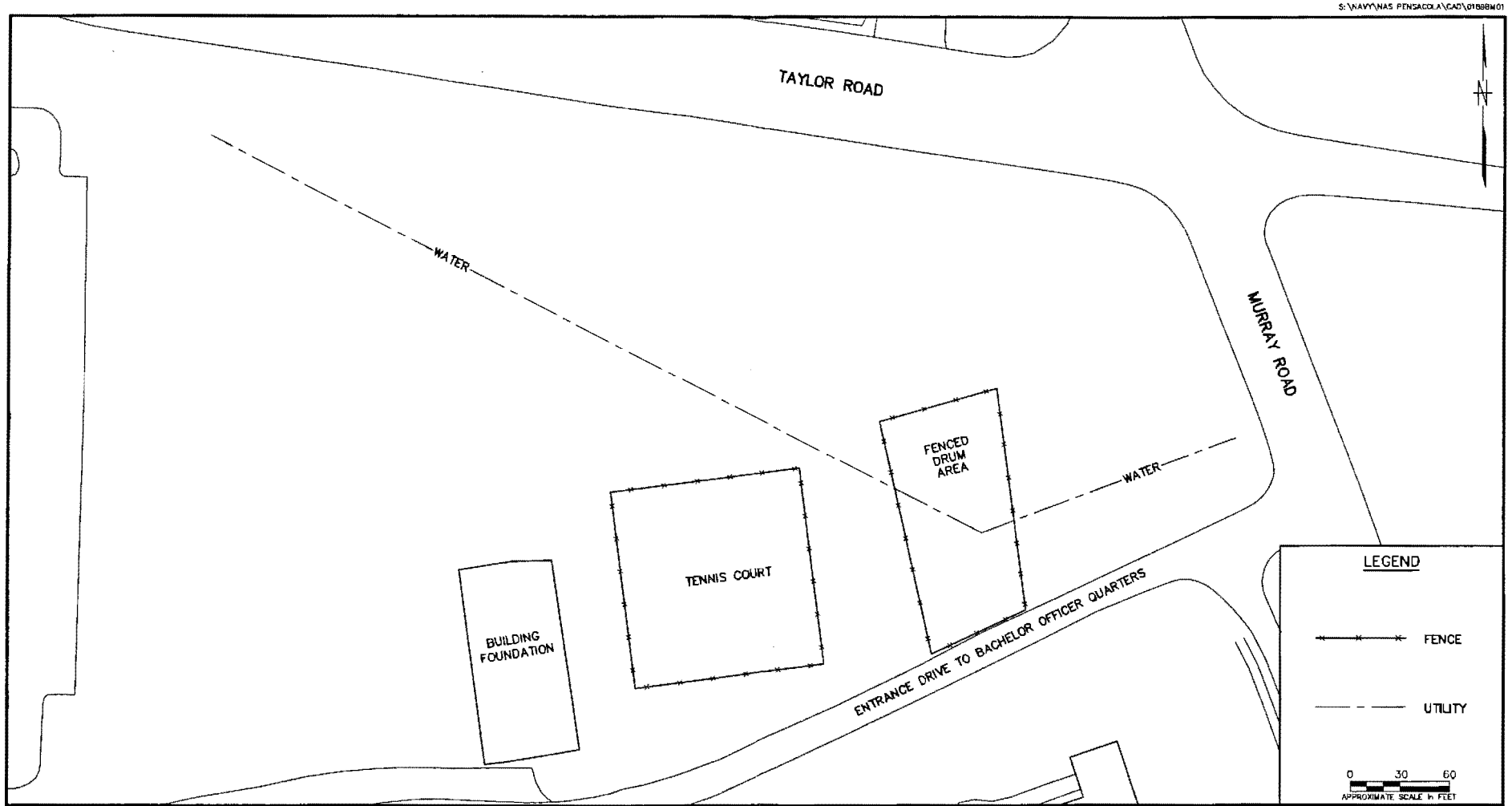

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SITE LOCATION MAP
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

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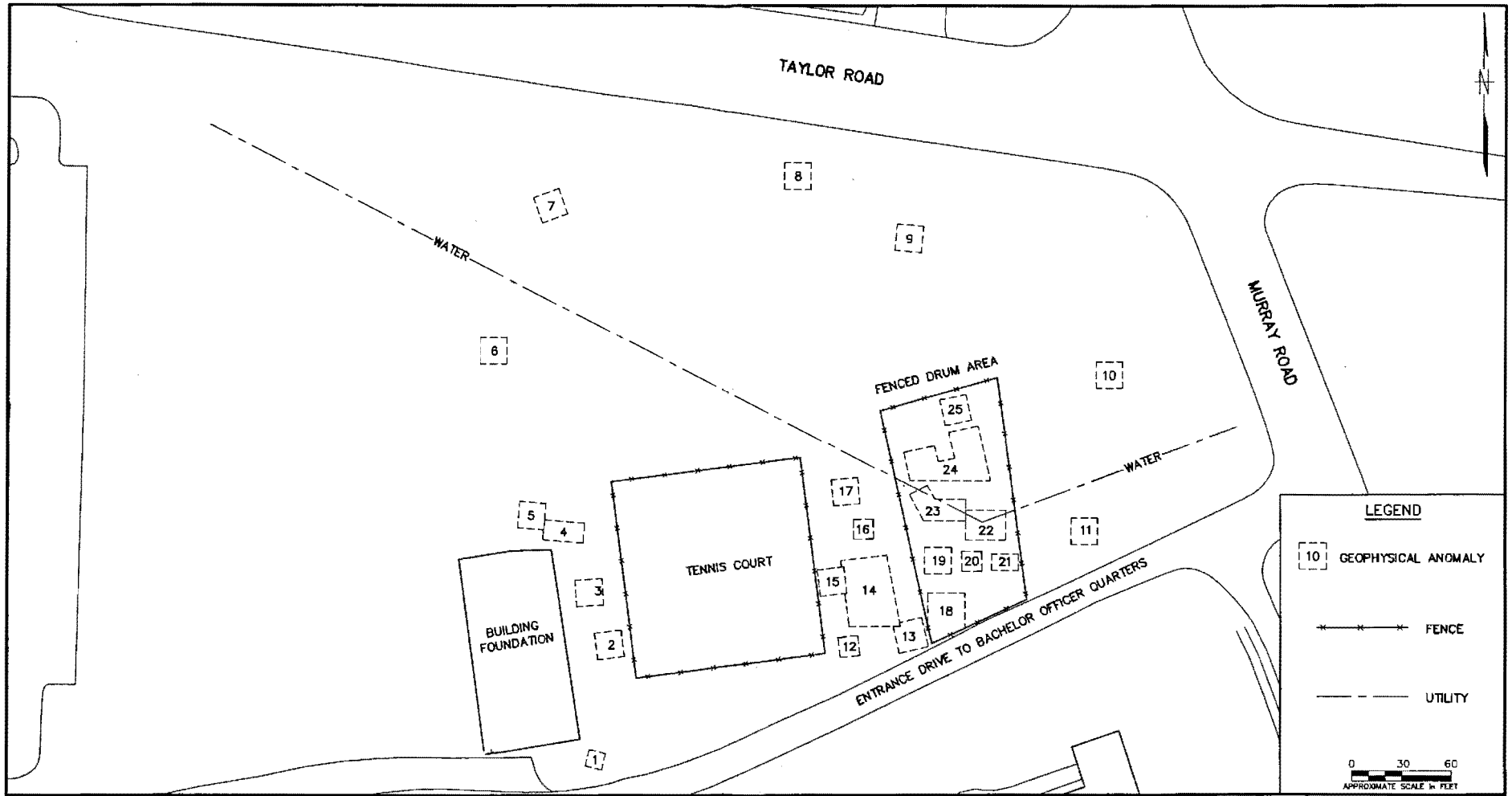

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GEOPHYSICAL ANOMALY LOCATIONS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 0189
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 1-3 REV. 0

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debris was observed at the surface indicating the presence of a possible landfill. No odors, visible soil stains, or other indications of contaminant release were observed at the time the drums were discovered. The area was fenced to prevent general access until further investigations could be conducted.

1.2.3 Previous Investigations

EnSafe/Allen & Hoshall conducted a geophysical investigation in March 1994 using gradient and total magnetic surveys (E/A & H, 1994) to provide the locations of potential buried metal objects, including drums, relatively quickly. The objectives of the investigation were to determine the areal extent of the drum disposal area and to evaluate if it was extensive or limited in area. The geophysical survey was performed using a gradient magnetic geophysical survey, which responds exclusively to ferrous metals. The total magnetic field and vertical magnetic gradient were measured during the survey.

Results of the geophysical investigation identified metal anomalies consistent with metal drums in an area approximately 100-feet by 120-feet as a possible drum disposal area. A large section of land in the north half of the surveyed area was interpreted as free of drums. Although cultural clutter (buried utilities, metal fences, poles, buildings, etc.) precluded a definitive interpretation. Figure 1-3 shows the locations of anomalies identified during this geophysical investigation.

The magnetic anomaly data indicated the disposal area did not contain systematic disposal areas, rather the anomalies were limited in number and randomly dispersed. The actual number of drums disposed in the area could not be determined. The report recommended that the drum disposal area, as well as several anomalies discovered outside the disposal area, should be further explored by trenching to a depth of 5 feet. Other anomalies less likely to be drums should be investigated with hand-tools.

1.3 REGULATORY SETTING

The Naval Installation Restoration (IR) program was designed to identify and abate or control contaminant migration resulting from past operations at naval installations, with the goal of expediting and improving environmental response actions while protecting human health and the environment. The IR program is conducted in accordance with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 and Executive Order 12580. CERCLA requires that federal facilities comply with the act, both procedurally and substantively. Site 43 was investigated as part of CERCLA requirements.

1.4 REPORT ORGANIZATION

The SCR is organized into seven chapters (Chapters 1.0 to 7.0). Chapter 1.0 presents the purpose, site description, and regulatory setting for the Site Characterization at NAS Pensacola. Chapter 2.0 summarizes site conditions. Chapter 3.0 presents the investigative methodologies that were used to conduct the assessment. Chapter 4.0 discusses the nature of contamination. Chapter 5.0 presents the conclusions and recommendations. Chapter 6.0 includes the Professional Review Certification. Chapter 7.0 includes the references used in preparing this report. Supporting data are provided in the Appendices.

2.0 SITE CONDITIONS

2.1 PHYSIOGRAPHY

Site 43 lies at the southwest corner of the intersections of Murray and Taylor Roads. The area covers approximately 40,000 square feet and the site elevation is approximately 20 feet above mean sea level (msl). The site lies in a low area between these two roads and across the street from the entrance to the Officers' Quarters. The land situated within the fenced portion of the site is grassy and overgrown with vegetation. The land outside the fenced area is grassy with mature trees and is maintained by the Navy Public Works Center. The site also contains a fenced in tennis court area and an unfenced old building foundation.

2.2 HYDROGEOLOGY

2.2.1 Regional

Naval Air Station (NAS) Pensacola is located in the extreme southeastern portion of Escambia County, Florida, which lies within the Coastal Plain Provence of the United States. As described in the *Initial Assessment of NAS Pensacola* (Naval Energy and Environmental Support Activity [NEESA], 1983), NAS Pensacola lies within the coastal lowland that is characterized by a series of broad, nearly level marine terraced that extend several miles from the coast and merge with the narrow terraces along the Escambia and Perdido Rivers. NAS Pensacola is bordered on the south by Big Lagoon, on the east by Pensacola Bay, and on the north by Bayou Grande. Swampy areas exist on or near the western portion of NAS, and man-made drainage ways and storm drains feed into the short intermittent streams emptying in to the bay and bayou. No perennial streams enter or exit the NAS, but the marshy areas and three small lakes retain water throughout the year. The general elevation of NAS Pensacola is approximately 40 above msl.

The surficial geology of the area consists of Pleistocene marine deposits made up of light brown to tan fine quartz sand with associated stringers of and lenses of gravel and clay. Underlying these deposits, increasing with age, are the Citronelle Formation, the Miocene Coarse Clastics, the Pensacola Clay, the Tampa Formation, the Chickasawhay Limestone, the Bucatunna Clay member of the Byram Formation, the Ocala Group, the Lisbon equivalent, the Tallahatta Formation, and the Hatchetigbee Formation. The Pleistocene deposits and Citronelle formation are often impossible to differentiate, and together range in thickness from approximately 30 feet to 800 feet across the county (NEESA, 1983).

The groundwater is under artesian conditions where layers of clay, sandy clay, or hardpan are present, and under non-artesian conditions where such clays and hardpans are absent. Water levels in the shallow aquifer range from zero to approximately 30 feet bls across in the NAS Pensacola area. The groundwater flow has

historically been found toward the Gulf of Mexico and the Escambia and Perdido rivers although groundwater flow can vary locally due to the effect of topography or surface water bodies. The aquifer recharge is most dominantly from local precipitation. The Floridan aquifer is separated from the sand and gravel aquifer by a thick section of clay and is subdivided into two parts, upper and lower, by an extensive clay bed.

2.2.2 Site Specific

Lithologic descriptions of soil samples collected from borings advance during the Site Characterization Investigation were used to evaluate the site specific geology. Since the deepest borings were advanced to approximately 20 feet below land surface (bls) to facilitate monitoring well installation, discussion of soil characteristics is limited to the top 20 feet of soils.

Based on lithologic descriptions from the soil samples, the subsurface soil generally consists of light to dark brown fine to medium sand with interspersed white fine sand. The water table was encountered at approximately 15 to 16 feet below land surface (bls). No cross section was constructed for this site due to the continuous lithology. Soil sample log sheets are provided in Appendix A. Boring logs are provided in Appendix B.

3.0 METHODOLOGIES AND EQUIPMENT

3.1 FIELD INVESTIGATION METHODS

The 1994 geophysical survey conducted by E/A&H indicated that an additional investigation was needed to confirm the presence or absence of additional buried drums and other metallic debris within the study area. The Site Characterization Investigation at Site 43 therefore focused primarily on the investigation of geophysical anomalies identified during this 1994 survey and to determine the associated impacts (if any) to soil and groundwater.

A variety of field investigation activities were conducted at NAS Pensacola to meet the objectives of the preliminary site characterization scope of work (SOW). The data collection activities followed the Standard Operating Procedures (SOPs) issued by the USEPA in *Environmental Investigations Standard Operating Procedures Quality Assurance Manual* (1996b). All such activities also complied with TtNUS's FDEP Comprehensive Quality Assurance Plan (COMPQAP) #980038 (1998), which was approved by FDEP on August 24, 1998. In some instances, the planned investigation activities (e.g., well construction) were not specifically addressed in the (COMPQAP); in other cases a methodology presented in the COMPQAP, or a specific step thereof, may have been deemed inconsistent with site-specific conditions or previous investigation methods used at NAS Pensacola. In these cases the United States Environmental Protection Agency (USEPA) Region 4 Environmental Investigations SOPs (USEPA 1996b), Navy technical guidance, or project-specific SOPs adopted by or prepared by TtNUS were invoked.

3.2 FIELD INVESTIGATION ACTIVITIES

The following activities were performed during this preliminary site characterization:

- Installation of test pits to investigate anomalies identified during the E/A&H survey;
- Collection of surface soil samples from each anomaly location;
- Collection of subsurface soil samples from each excavation containing a drum;
- Organic Vapor Analysis (OVA) headspace Analysis;
- Installation of soil borings and collection of subsurface soil samples using direct-push (DPT) techniques;
- Installation of direct push technology (DPT) groundwater monitoring wells in the shallow zone of the alluvial aquifer;
- Monitoring well development and collection of groundwater samples;
- Measurement of groundwater potentiometric surface;

- Location survey.

The following sections address each of these field investigation activities specifically.

3.2.1 Surface Soil Sampling

TtNUS personnel collected seventeen surface soil samples (PEN-43SS001 through PEN-43SS017) at Site 43 during the week of October 4, 1999. The samples were collected with a stainless steel spoon at each suspected anomaly location from 0-6 inches below land surface (bls). Encore® samplers were used to collect soil for volatile organic compound (VOC) analysis. Each sample was screened for organic vapor analysis as described in Section 3.2.2, and sent to the laboratory for analysis of contract laboratory program (CLP)-target compound list (TCL) VOCs (USEPA method 8260), semivolatile organics (SVOCs) (USEPA method 8270), pesticides and polychlorinated biphenyls (PCBs) (USEPA method 8081), target analyte list (TAL) metals and cyanide (USEPA methods SW 6010, SW7470, SW7471, SW9010, and SW9065). Quality control samples (duplicates, trip blanks, matrix spike/matrix spike duplicates, and equipment blanks) were collected where applicable. Surface soil sample locations are shown on Figure 3-1. Soil sample log sheets are found in Appendix A.

3.2.2 OVA Headspace Sampling

Soil vapor headspace analyses were performed on soil samples according to the method prescribed in FDEP Rule 62-770.200(8) of the Florida Administrative Code (FAC). All surface and subsurface soil samples were analyzed with a calibrated organic vapor analyzer (OVA) of the flame ionization detector (FID) type. The samples were collected and split into two clean, 16-ounce glass jars. The jars were then covered with aluminum foil and left to equilibrate for approximately five minutes. At that point the FID-OVA was pierced through the aluminum foil covering and the highest sustained reading was recorded. If the FID-OVA readings detected in the first jar were above background, the second sample jar was measured using an in-line charcoal filter to determine the portion of the total reading attributable to methane gas. All of the samples analyzed for headspace were sent to the laboratory for analysis.

3.2.3 Test Pitting

Test pitting was performed in order to investigate the geophysical anomalies identified during the 1994 E/A&H geophysical survey. Test pitting was performed at each of the seventeen magnetic anomaly locations. The pits were advanced to a depth of 5 feet bls using a tracked excavator or shovels. The open pits were visually inspected for the presence of drums or other metal debris. Drums were encountered in only two of the seventeen excavations, anomalies 15 and 20. The majority of excavations contained metal debris and trash that most likely resulted in the geophysical anomalies that did not contain drums.

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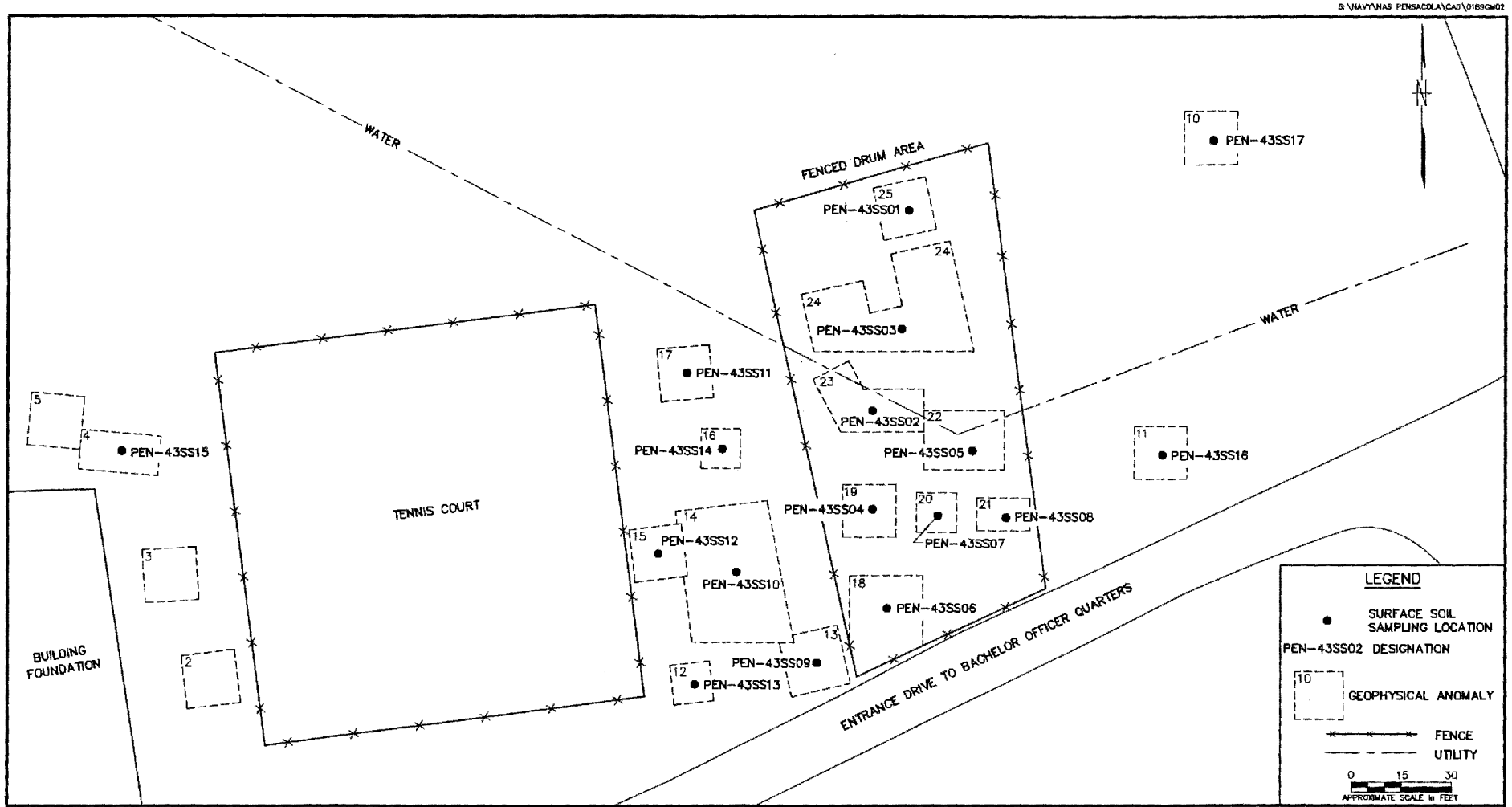

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SURFACE SOIL SAMPLING LOCATIONS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

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If no drums were encountered, the test pit was subsequently backfilled with native soil. If drums were encountered, the drums were removed and placed into DOT-approved overpack; subsurface soil samples were collected from below each drum location (see section 3.2.4), and the pits were backfilled with the native soil.

3.2.4 Drum Characterization

Fourteen drums were excavated from two different locations, one from anomaly 15 and thirteen from anomaly 20. Each drum was examined onsite to characterize its contents. The drums were examined for type, size, head configuration, identifiable markings, estimated volume of contents, general condition, and drum contents. The drums were then screened for radioactivity and organic vapors. Each excavated drum was subsequently placed in a DOT-approved overpack container and secured onsite.

3.2.5 Test Pit Subsurface Soil Sampling

TtNUS personnel collected seven subsurface soil samples (PEN-43SV01 through PEN-43SV07) during the week of October 4, 1999 from the two anomaly excavations containing drums. Each sample was collected with a stainless steel spoon from directly under where the drums were located. Encore® samplers were used to collect soils for VOC analysis. One sample was collected from underneath the drum at anomaly 15. Six subsurface samples were collected below the drums in anomaly 20. The samples were collected in each of the four quadrants of the test pit, and in places where there was evidence of drum contents possibly leaking onto the soil. Each soil sample was screened with an OVA (Section 3.2.2) and sent to the laboratory for analysis of CLP-TCL VOCs (USEPA method 8260), SVOCS (USEPA method 8270), pesticides and PCBs (USEPA method 8081), and TAL metals and cyanide (USEPA methods SW 6010, SW7470, SW7471, SW9010, and SW9065). Quality control samples were collected where applicable. Subsurface soil sample locations are shown in Figure 3-2. Soil sample sheets are found in Appendix A

3.2.6 Direct Push Borings and Monitoring Well Installation

Five soil borings (PEN-43SB01 through PEN-43SB05) were advanced at Site 43 using a DPT rig on October 15, 1999. Each boring was advanced to a depth of 20 feet bls, with the exception of PEN-43SB04 which was advanced to 15 ft. bls due to the shallower water table. Five subsurface soils samples (PEN-43SB01415 through PEN-43SB051415) were collected from soils just above the water table in each boring and sent for fixed base laboratory analysis for CLP-TCL VOCs (USEPA method 8260), SVOCs (USEAP method 8270), pesticides and PCBs (USEPA method 8081), and TAL metals and cyanide

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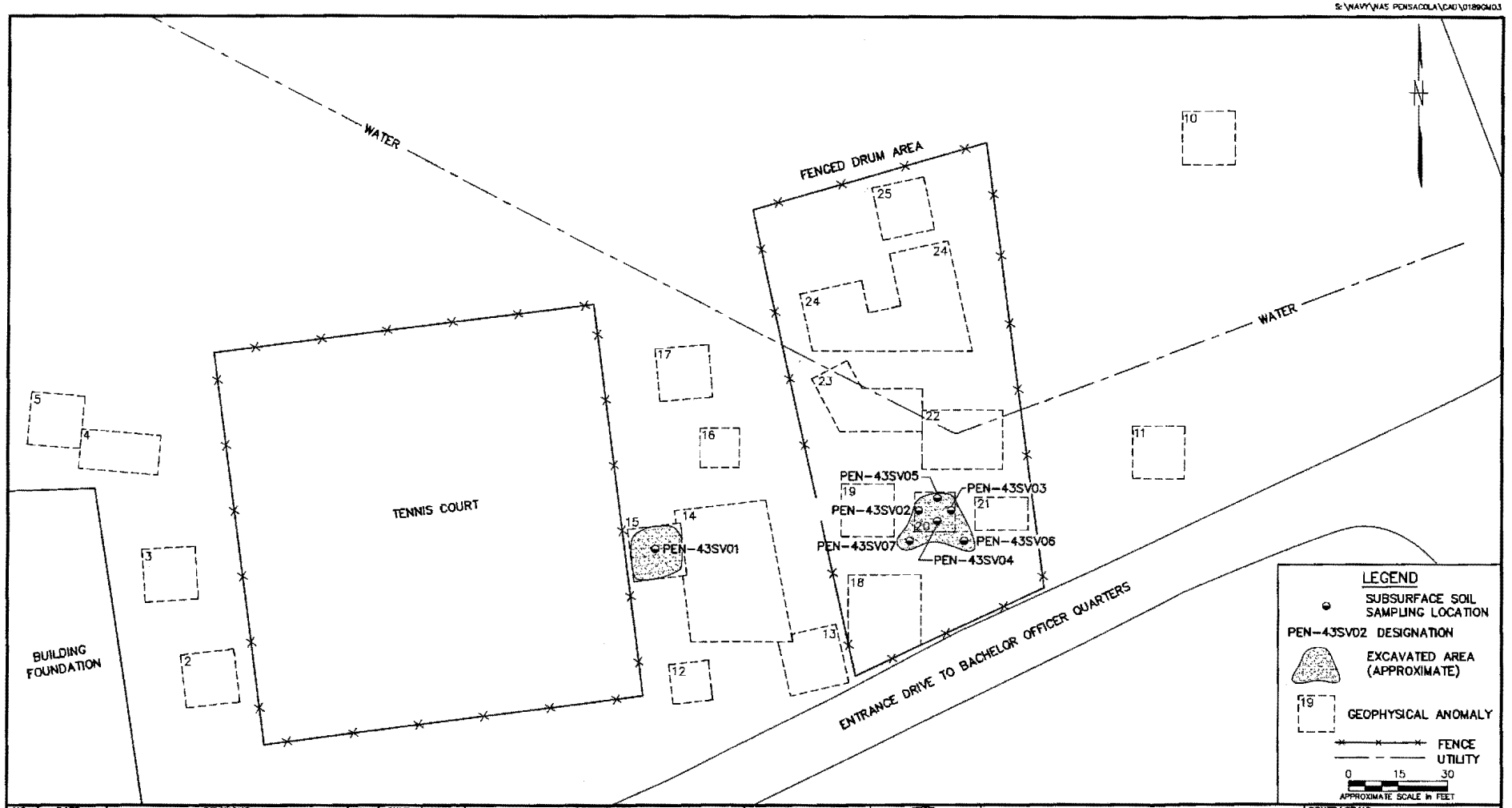

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SUBSURFACE SOIL SAMPLE AND EXCAVATION LOCATIONS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 0189
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(USEPA methods SW6010, SW7471, SW7470, SW9010, and SW9065). Quality control samples were collected where applicable. Subsurface soil sampling logs are found in Appendix A.

Each soil boring was then converted into a permanent monitoring well (PEN-43-01S through PEN-43-05S). The monitoring wells were installed to approximately 20 feet bls, except for monitoring well PEN-43-04S, which was installed to a depth of 15 feet bls. One-inch inner diameter (ID) pre-packed Schedule 40 PVC monitoring wells with 10 foot of 0.010-slot screen were introduced into each boring. A 20/30 sand pack was installed to at least 0.5 ft. above the top of the screen. A bentonite seal was then completed to the surface, with a quickrete pad and stainless steel manhole cover. Soil boring and monitoring well locations are provided in Figure 3-3. Boring logs are provided in Appendix B. Monitoring well construction sheets are found in Appendix C.

3.2.7 Monitoring Well Development

Each monitoring well was developed no sooner than 24 hours after installation. The wells were developed using the surge and pump method with a peristaltic pump. The wells were developed until all the following criteria were achieved:

- Turbidity remained within a 10 nephelometric turbidity unit (NTU) range for 2 consecutive readings;
- Stabilization of the following parameters occurred:
  - -temperature - plus or minus 1° C
  - -pH - plus or minus 1 unit, and
  - -specific conductivity - plus or minus 5 percent of scale; and
- Accumulated sediment was removed from the well.

Monitoring well development sheets are located in Appendix D.

3.2.8 Groundwater Sampling

Subsequent to monitoring well installation and no sooner than 24 hours after development, groundwater samples were collected from each well using low-flow quiescent purge techniques. The samples were collected and sent to a fixed base laboratory analysis of CLP-TCL VOCs (USEPA method 8260), SVOCs (USEPA method 8270), pesticides and PCBs (USEPA methods 8081), and TAL metals and cyanide (USEPA methods SW6010, SW7471, SW7470, SW9010, and SW9065). Groundwater sample sheets are presented in Appendix E.

Three of the groundwater samples were analyzed in the field for the following natural attenuation parameters: dissolved oxygen, alkalinity, carbon dioxide, sulfide, ferrous iron, nitrite, manganese, and

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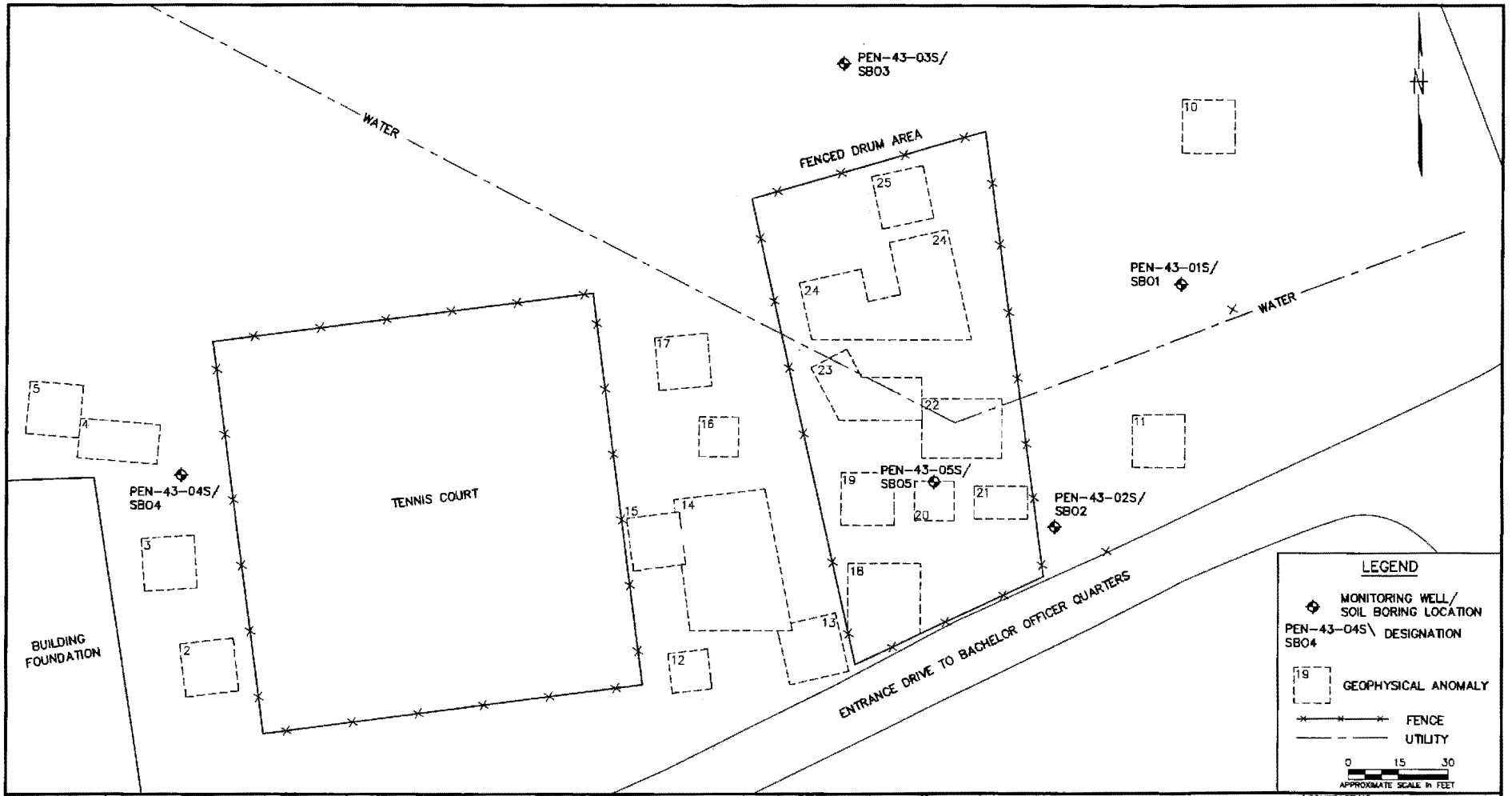

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MONITORING WELL\SOIL BORING
LOCATION MAP
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 0189
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hydrogen sulfide. These analyses were performed to provide data in the event that natural attenuation parameters would be evaluated. Natural attenuation field sheets are included in Appendix E.

3.2.9 Water Table Elevation Measurements

One complete round of water level measurements was obtained from the five shallow monitoring wells on October 27, 1999. The measurements were collected within a 48-hour period of consistent weather conditions to minimize atmospheric/precipitation effects on groundwater conditions. Each measurement was taken to a permanent reference point on the top of each well casing. Water level measurements were recorded in the field logbook to the nearest 0.01 foot.

3.2.10 Location Survey

The location survey was completed on December 2, 1999. During this survey, the newly installed monitoring wells and site landmarks were surveyed in for ground elevation and top of casing elevation where applicable. The horizontal and vertical surveys were performed by a Florida registered surveyor and mapper to determine the locations and elevations of groundwater monitoring wells. The horizontal locations were referenced to the Florida State Plane Coordinate System, North Zone, North American Datum (NAD) of 1983, 1990 Adjustment (NAD 83,90), by ties to the existing published monuments in the vicinity. Elevations were referenced to Mean Sea Level, North American Vertical Datum, 1988 Adjustment (NAVD 88) by ties to existing survey benchmarks in the vicinity. Control points were established at each existing monument and benchmark by Global Positioning Systems (GPS) Surveys. Conventional surveys were performed to locate other site features.

4.0 NATURE OF CONTAMINATION

This chapter presents analytical data from surface soil, subsurface soil, and groundwater samples collected during the Site Characterization Investigations at Site 43. The laboratory analytical reports are provided in Appendix F. At the end of this chapter, a conceptual site model (CSM) is developed that incorporates the data collected during this effort to summarize the types of contaminants known or potential routes of migration, and to identify potential environmental or human receptors.

4.1 SOIL AND VADOSE ZONE

4.1.1 Soil Vapor Assessment

No soil vapor concentrations were detected from the surface soil samples. Two out of seven of the subsurface soil samples collected from the excavations contained organic vapor concentrations ranging from non-detect to 7.9 parts per million (ppm) total organic vapors. No soil vapor concentrations were detected from the subsurface soil samples collected from DPT borings. Table 4-1 summarizes the screening results.

4.1.2 Surface Soil

Seventeen surface soil samples (PEN-43SS01 through PEN-43SS17) were collected at Site 43, one at each magnetic anomaly location. VOCs, pesticides, and PCBs were reported below laboratory method detection limits in the surface soil samples. Benzo (a) pyrene was the only SVOC detected in surface soils. Seven of the seventeen samples contained concentrations of benzo(a)pyrene above the FDEP residential Direct Exposure Limit (DEL) of 0.1 mg/kg, but below the industrial DEL of 0.5 mg/kg (Chapter 62-777, FAC).

Eight metals were detected in concentrations above their residential DELs: antimony, arsenic, barium, copper, lead, iron, nickel, and vanadium. Barium concentrations exceeded the residential DEL (110 mg/kg) in eleven samples, ranging from 136 mg/kg to 1,130 mg/kg. Copper concentrations exceeded the residential DEL (110 mg/kg) in thirteen of the seventeen samples, ranging from 160 mg/kg to 20,000 mg/kg. Iron concentrations exceeded the residential DEL (23,000 mg/kg) in four samples, ranging from 25,700 mg/kg to 73,700 mg/kg. Nickel concentrations exceeded the residential DEL (110 mg/kg) in one sample, PEN-43SS07 (144 mg/kg). Vanadium concentrations exceeded the residential DEL (15 mg/kg) in seven samples, ranging from 19.2 mg/kg to 185 mg/kg.

The industrial DEL for antimony (240 mg/kg) was exceeded in two samples, PEN-43SS14 (48,600 mg/kg) and PEN-43SS15 (25,000 mg/kg). The FDEP leachability concentration based on groundwater criteria for

TABLE 4-1
SUMMARY OF ORGANIC VAPOR ANALYZER (OVA) SCREENING RESULTS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
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Sample Location	Sample ID	Sample Depth (feet bls)	Headspace Readings (ppm)		
			Total Organic Reading	Carbon Filtered Reading	Net Reading
Anomaly # 25	PEN-43SS01	0.5	ND	ND	ND
Anomaly # 23	PEN-43SS02	0.5	ND	ND	ND
Anomaly # 24	PEN-43SS03	0.5	ND	ND	ND
Anomaly # 19	PEN-43SS04	0.5	ND	ND	ND
Anomaly # 22	PEN-43SS05	0.5	ND	ND	ND
Anomaly # 18	PEN-43SS06	0.5	ND	ND	ND
Anomaly # 20	PEN-43SS07	0.5	ND	ND	ND
Anomaly # 21	PEN-43SS08	0.5	ND	ND	ND
Anomaly # 13	PEN-43SS09	0.5	ND	ND	ND
Anomaly # 14	PEN-43SS10	0.5	ND	ND	ND
Anomaly # 17	PEN-43SS11	0.5	ND	ND	ND
Anomaly # 15	PEN-43SS12	0.5	ND	ND	ND
Anomaly # 12	PEN-43SS13	0.5	ND	ND	ND
Anomaly # 16	PEN-43SS14	0.5	ND	ND	ND
Anomaly # 04	PEN-43SS15	0.5	ND	ND	ND
Anomaly # 11	PEN-43SS16	0.5	ND	ND	ND
Anomaly # 10	PEN-43SS17	0.5	ND	ND	ND
Anomaly # 15	PEN-43SV01	2	ND	ND	ND
Anomaly # 20	PEN-43SV02	3	ND	ND	ND
Anomaly # 20	PEN-43SV03	3	ND	ND	ND
Anomaly # 20	PEN-43SV04	3	ND	ND	ND
Anomaly # 20	PEN-43SV05	3	ND	ND	ND
Anomaly # 20	PEN-43SV06	3.5	5.2	NM	NA
Anomaly # 20	PEN-43SV07	3.5	7.9	NM	NA
PEN-43SB01	PEN-43SB011415	15	ND	ND	ND
PEN-43SB02	PEN-43SB021415	15	ND	ND	ND
PEN-43SB03	PEN-43SB031415	15	ND	ND	ND
PEN-43SB04	PEN-43SB040708	8	ND	ND	ND
PEN-43SB05	PEN-43SB051415	15	ND	ND	ND

Notes:
NM = sample collected with photoionization detector
NA = not applicable

antimony (5.0 mg/kg) was also exceeded in five of the seventeen samples. Arsenic was detected in concentrations above the residential DEL but below the industrial DEL in three samples, ranging from 1.0 mg/kg to 3.3 mg/kg. Arsenic was detected in concentrations exceeding the industrial DEL (3.7 mg/kg) in nine of the seventeen samples, ranging from 4.1 mg/kg to 9.8 mg/kg. Lead concentrations exceeded the industrial DEL (920 mg/kg) in ten of the seventeen samples, ranging from 1420 mg/kg to 10,800 mg/kg. Nickel concentrations exceeded the leachability concentration (130 mg/kg) in one sample, PEN-43SS07 (144 mg/kg).

Background reference concentrations for soil were previously determined for NAS Pensacola by EnSafe Inc. All of the background values for metals detected at Site 43 fall below residential DELs, except for arsenic which has a background value of 1.0 mg/kg and a residential DEL of 0.87 mg/kg. All of the metal exceedences in surface soil at Site 43 were therefore found to be above background concentrations. The analytical results are summarized in Table 4-2. Contaminant concentrations are depicted on Figure 4-1.

4.1.3 Subsurface Soil from Excavations

Seven subsurface soil samples (PEN-43SV01 through PEN-43SV07) were collected from the two excavations containing drums (anomalies 15 and 20). VOCs, pesticides, and PCBs were reported below the laboratory method detection limits in the subsurface soil samples. Benzo(a)pyrene was detected in six of the seven samples at concentrations ranging from 0.10 mg/kg to 0.57 mg/kg. Two of the six samples exceeded the benzo(a)pyrene industrial DEL of 0.5 mg/kg.

Dibenzo(a,h)anthracene was detected in five of the seven samples at concentrations ranging from 0.150 mg/kg to 0.44 mg/kg. These concentrations all exceed the residential DEL of 0.10 mg/kg but fall below the industrial DEL of 0.50 mg/kg.

Nine metals were detected in concentrations exceeding their residential DELs: antimony, arsenic, barium, copper, iron, zinc, lead, nickel, and vanadium. The industrial DEL for arsenic (3.7 mg/kg) was exceeded in all seven samples, ranging from 6.6 mg/kg to 57.3 mg/kg. The leachability value for arsenic was exceeded in one sample, PEN-43SV03 (57.3 mg/kg). The residential DEL for antimony (26 mg/kg) was exceeded in three of the seven samples, ranging from 26 mg/kg to 226 mg/kg. The industrial DEL for antimony was not exceeded in any sample, but the leachability value for antimony (5.0 mg/kg) was exceeded in all seven samples. The residential DEL for barium (110 mg/kg) was exceeded in all seven samples, ranging from 438

TABLE 4-2
SUMMARY OF ANALYTES DETECTED IN SURFACE SOIL AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
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Sample No.		PEN-43SS01	PEN-43SS02	PEN-43SS03	PEN-43SS04	PEN-43SS05	PEN-43SS06	PEN-43SS07
Anomaly		25	23	24	19	22	18	20
Collect Date	DE1[1]/DE2[2]/LE[3]/BG[9] (mg/kg)	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999
Sample Depth (ft bls)		0.5	0.5	0.5	0.5	0.5	0.5	0.5
Volatile[4] (mg/kg)								
None Detected								
Semi-Volatile[5] (mg/kg)								
Benzo (A) Pyrene	0.1/0.5/8.0		0.110[J]	--	--	0.140[J]	0.130[J]	--
Pesticides[6] (mg/kg)								
None Detected								
PCBs[7] (mg/kg)								
None Detected								
Metals[8] (mg/kg)								
Antimony	26 / 240 / 5.0 / 9.48			--	--	34.7[J]	--	59.9[J]
Arsenic	0.8 / 3.7 / 29 / 1.0	--	4.1	1.4	5.2	9.7	8.2	16.9
Barium	110** / 87000 / 1600 / 4.63	--	344	--	479	644	557	1,050
Copper	110** / 76000 / *** / 5.72	--	707	160	681	2860	1040	20,000
Iron	23000 / 480000 / *** / 2745			--	--	37,300	35,100	73,700
Lead	400 / 920 / *** / 7.35	--	3,860	550	2700	3130	3060	10,800
Nickel	110** / 28000 / 130 / 6.38			--	--	--	--	144
Vanadium	15** / 7400 / 980 / 5.83	--	26.6	--	--	52.5	--	185.0

See notes at end of table

TABLE 4-2
SUMMARY OF ANALYTES DETECTED IN SURFACE SOIL AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 2 OF 3

Sample No.		PEN-43SS08	PEN-43SS09	PEN-43SS10	PEN-43SS11	PEN-43SS12	PEN-43SS13	PEN-43SS14
Anomaly		21	13	14	17	15	12	16
Collect Date	DE1[1]/DE2[2]/LE[3]/BG[9] (mg/kg)	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999
Sample Depth (ft bls)		0.5	0.5	0.5	0.5	0.5	0.5	0.5
Volatile[4] (mg/kg)								
None Detected								
Semi-Volatile[5] (mg/kg)								
Benzo (A) Pyrene	0.1/0.5/8.0	0.110[J]	0.36	0.300[J]	--	--	0.120[J]	--
Pesticides[6] (mg/kg)								
None Detected								
PCBs[7] (mg/kg)								
None Detected								
Metals[8] (mg/kg)								
Antimony	26 / 240 / 5.0 / 9.48	--	--	53.5[J]	--	--	--	48600[J]
Arsenic	0.8 / 3.7 / 29 / 1.0	3.3	1.0	8.8	--	7.7	11.2	9.8
Barium	110** / 87000 / 1600 / 4.63	209.0	--	907.0	--	369.0	275.0	1130.0
Copper	110** / 76000 / *** / 5.72	305	--	1270	286	840	876	753
Iron	23000 / 480000 / *** / 2745	--	--	--	--	25700[J]	--	--
Lead	400 / 920 / *** / 7.35	1420	--	3,370	--	1,910	1820	4050
Nickel	110** / 28000 / 130 / 6.38	--	--	--	--	--	--	--
Vanadium	15** / 7400 / 980 / 5.83	--	--	80.1	--	99.1	19.2	30

See notes at end of table

TABLE 4-2
SUMMARY OF ANALYTES DETECTED IN SURFACE SOIL AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
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Sample No.		PEN-43SS15	PEN-43SS16	PEN-43SS17	PEN-43SSDD01	PEN-43SSDD02	PEN-43TB100599
Anomaly		4	11	10	17	10	
Collect Date	DE1[1]/DE2[2]/LE[3]/BG[9] (mg/kg)	10/5/1999	10/5/1999	10/5/1999	10/5/1999	10/5/1999	
Sample Depth (ft bls)		0.5	0.5	0.5	0.5	0.5	
Volatile[4] (mg/kg)							
None Detected							
Semi-Volatile[5] (mg/kg)							
Benzo (A) Pyrene	0.1/0.5/8.0	--	--	--			NA
Pesticides[6] (mg/kg)							
None Detected							NA
PCBs[7] (mg/kg)							
None Detected							NA
Metals[8] (mg/kg)							
Antimony	26 / 240 / 5.0 / 9.48	25000[J]	--	--			
Arsenic	0.8 / 3.7 / 29 / 1.0	1.1	2.6	--			
Barium	110** / 87000 / 1600 / 4.63	--	136	--			
Copper	110** / 76000 / *** / 5.72	--	195	--			
Iron	23000 / 460000 / *** / 2745	--	--	--			NA
Lead	400 / 920 / *** / 7.35	--	817	--			
Nickel	110** / 28000 / 130 / 6.38	--	--	--			
Vanadium	15** / 7400 / 980 / 5.83	--	--	--			

[1] DE1= Direct Exposure limit for residential area from Chapter 62-777, F.A.C.
[2] DE2= Direct Exposure limit for industrial area from Chapter 62-777, F.A.C.
[3] LE= Leachability for groundwater limit from Chapter 62-777, F.A.C.
[4] SW-846 8260B, [5] SW-846 8270C, [6] SW-846 8081A, [7] SW-846 8082, [8] SW-846 6010B
[9] BG = Background values for soils at NAS Pensacola, EnSafe, 1999
[J] Indicates the presence of a chemical at a concentration less than the reporting limit and greater than the method detection limit.
* Contaminant is not a health concern for this default exposure scenario.
** Direct exposure value based on acute toxicity considerations.
*** Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.
NA Not Analyzed

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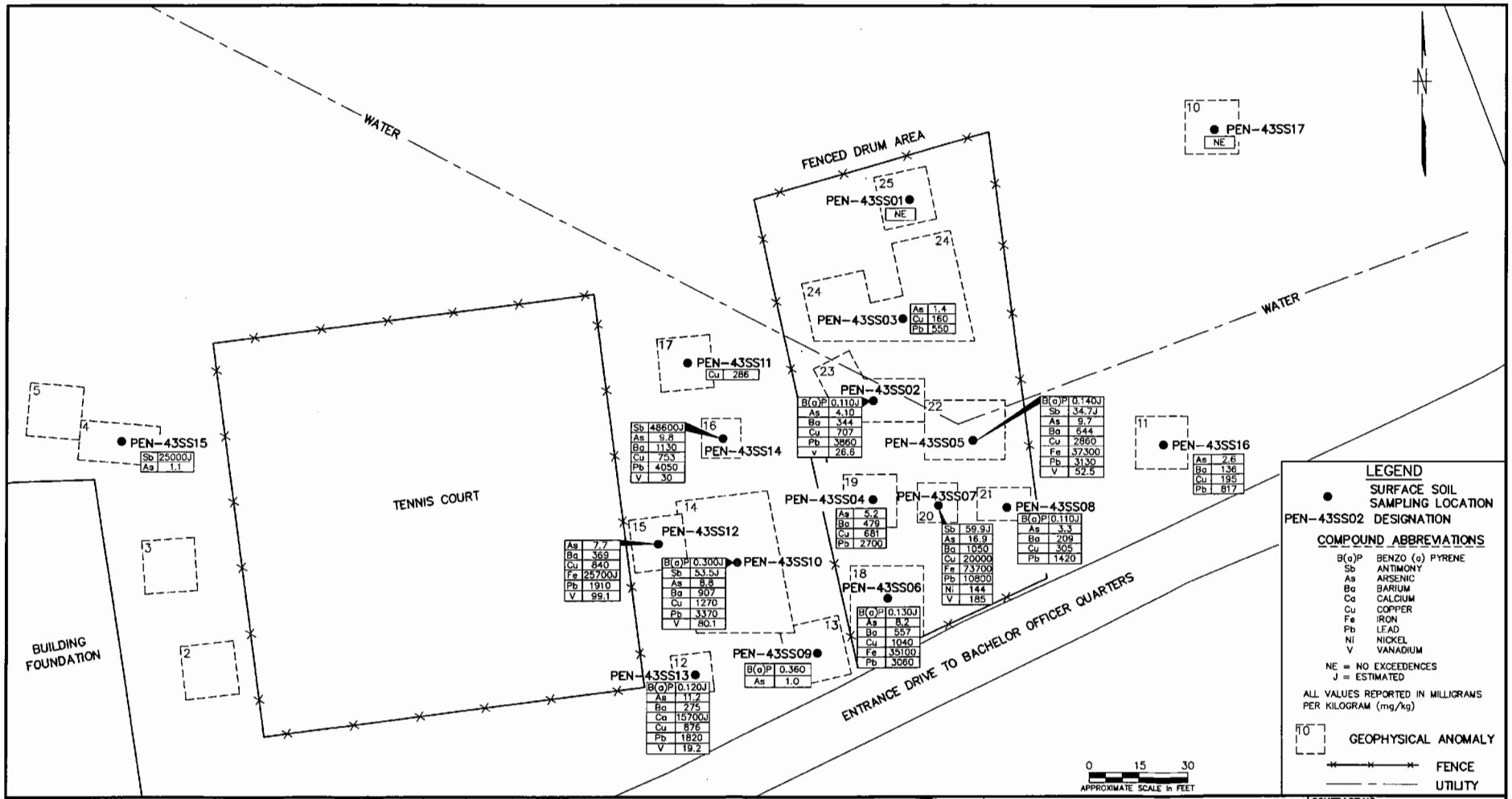

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COST/SCHED-AREA
SCALE AS NOTED

SUMMARY OF SURFACE SOIL SAMPLES EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

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DRAWING NO. FIGURE 4-1 REV. 0

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mg/kg to 6820 mg/kg. The industrial DEL for barium was not exceeded in any sample, but the leachability value for barium (1600 mg/kg) was exceeded in one sample, PEN-43SV03 (6820 mg/kg).

Copper concentrations exceeded the residential DEL (110 mg/kg) in all seven samples, ranging from 529 mg/kg to 15,900 mg/kg. Iron concentrations also exceeded the residential DEL (23,000 mg/kg) in all seven samples, ranging from 23,800 mg/kg to 236,000 mg/kg. Lead concentrations exceeded the residential DEL (400 mg/kg) in all seven samples, ranging from 2080 mg/kg to 20,700 mg/kg. Vanadium concentrations exceeded the residential DEL (15 mg/kg) in all seven samples, ranging from 21.6 mg/kg to 596 mg/kg.

The residential DEL for zinc (23,000 mg/kg) was only exceeded in one sample, PEN-43SV03 (71,700 mg/kg). The industrial DEL for zinc was not exceeded in any sample, but the leachability value for zinc (6000 mg/kg) was exceeded in four samples, ranging from 6260 mg/kg to 71,700 mg/kg. The residential DEL concentration and leachability concentrations for nickel (110 mg/kg and 130 mg/kg respectively) were exceeded in two samples, PEN-43SV01 (149 mg/kg) and PEN-43SV05 (163 mg/kg). The industrial DEL for nickel was not exceeded in any sample.

All the metal exceedences in subsurface soil at Site 43 were also above background values. The analytical results are summarized in Table 4-3. Contaminant concentrations are depicted on Figure 4-2.

4.1.4 Soil Borings

Five soil samples were collected from five soil borings (PEN-43SB011415 through PEN-43SB021415). No VOCs, SVOCs, pesticides, PCBs, or metals were detected in these samples above residential DELs. The soil boring sampling results are summarized in Table 4-4.

4.2 CONTAMINANTS IN GROUNDWATER

Five groundwater samples were collected from five monitoring wells at Site 43 (PEN-43-1S-01 through PEN-43-5S-01). SVOCs, pesticides, and PCBs were reported below the laboratory method detection limits in these samples. Methylene chloride, a common laboratory contaminant, was detected in three of the five groundwater samples at concentrations exceeding the FDEP criterion of 5 µg/L (Chapter 62-777, F.A.C.).

Two metals were detected in groundwater at concentrations exceeding FDEP guidance criteria: aluminum, and iron. Aluminum concentrations exceeded the FDEP criterion of 200 µg /L in three of the five samples,

TABLE 4-3
SUMMARY OF ANALYTES DETECTED IN SUBSURFACE SOIL AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
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PAGE 1 OF 1

Sample No.		PEN-43SV01	PEN-43SV02	PEN-43SV03	PEN-43SV04	PEN-43SV05	PEN-43SV06	PEN-43SV07	PEN-43TB10699
Anomaly		15	20	20	20	20	20	20	
Collect Date	DE1[1]/DE2[2]/LE[3]/BG[9] (mg/kg)	10/6/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999	10/6/1999	
Sample Depth (ft bls)		2.0	3.0	3.0	3.0	3.0	3-3.5	3-3.5	
Volatile[4] (mg/kg)									
None Detected									
Semi-Volatile[5] (mg/kg)									
Benzo (A) Pyrene	0.1/0.5/8.0	0.190[J]	0.50	0.270[J]	0.57	0.49	0.100[J]	--	NA
Dibenzo (A,H) Anthracene	0.1/0.5/30	0.150[J]	0.34	0.170[J]	0.44	0.190[J]			NA
Pesticides[6] (mg/kg)									
None Detected									NA
PCBs[7] (mg/kg)									
None Detected									NA
Metals[8] (mg/kg)									
Antimony	26 / 240 / 5.0 / 9.48	40.4[J]	25.1[J]	226[J]	62.6[J]	26	13.8[J]	20.4[J]	
Arsenic	0.8 / 3.7 / 29 / 1.0	15	13.3	57.3	17.5	16	6.6	22.9	
Barium	110** / 87000 / 1600 / 4.63	1210	1570	6820	1530	1510	620	438	
Copper	110** / 76000 / *** / 5.72	4010	1400	3470	15900	1720[J]	1310[J]	529[J]	
Iron	23000 / 480000 / *** / 2745	60900	37900	36700	51400	75600	23800[J]	236000[J]	NA
Zinc	23000 / 560000 / 6000 / 16.86	--	6860	71700	10300	6260	--	--	
Lead	400 / 920 / *** / 7.35	4820	8160	16400	4880	20700	2560[J]	2080[J]	
Nickel	110** / 28000 / 130 / 6.38	149[J]	--	--	--	163	--	--	
Vanadium	15** / 7400 / 980 / 5.83	321	70.5	53.9	106	57.8	21.6	596	

Notes:
[1] DE1 = Direct Exposure limit for residential area from Chapter 62-777, F.A.C.
[2] DE2 = Direct Exposure limit for industrial area from Chapter 62-777, F.A.C.
[3] LE = Leachability for groundwater limit from Chapter 62-777, F.A.C.
[4] SW-846 8260B, [5] SW-846 8270C, [6] SW-846 8081A, [7] SW-846 8082, [8] SW-846 6010B
[9] BG = Background values for soils at NAS Pensacola, EnSafe, 1999
[J] Indicates the presence of a chemical at a concentration less than the reporting limit and greater than the method detection limit.
* Contaminant is not a health concern for this default exposure scenario.
** Direct exposure value based on acute toxicity considerations.
*** Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.
NA = not analyzed

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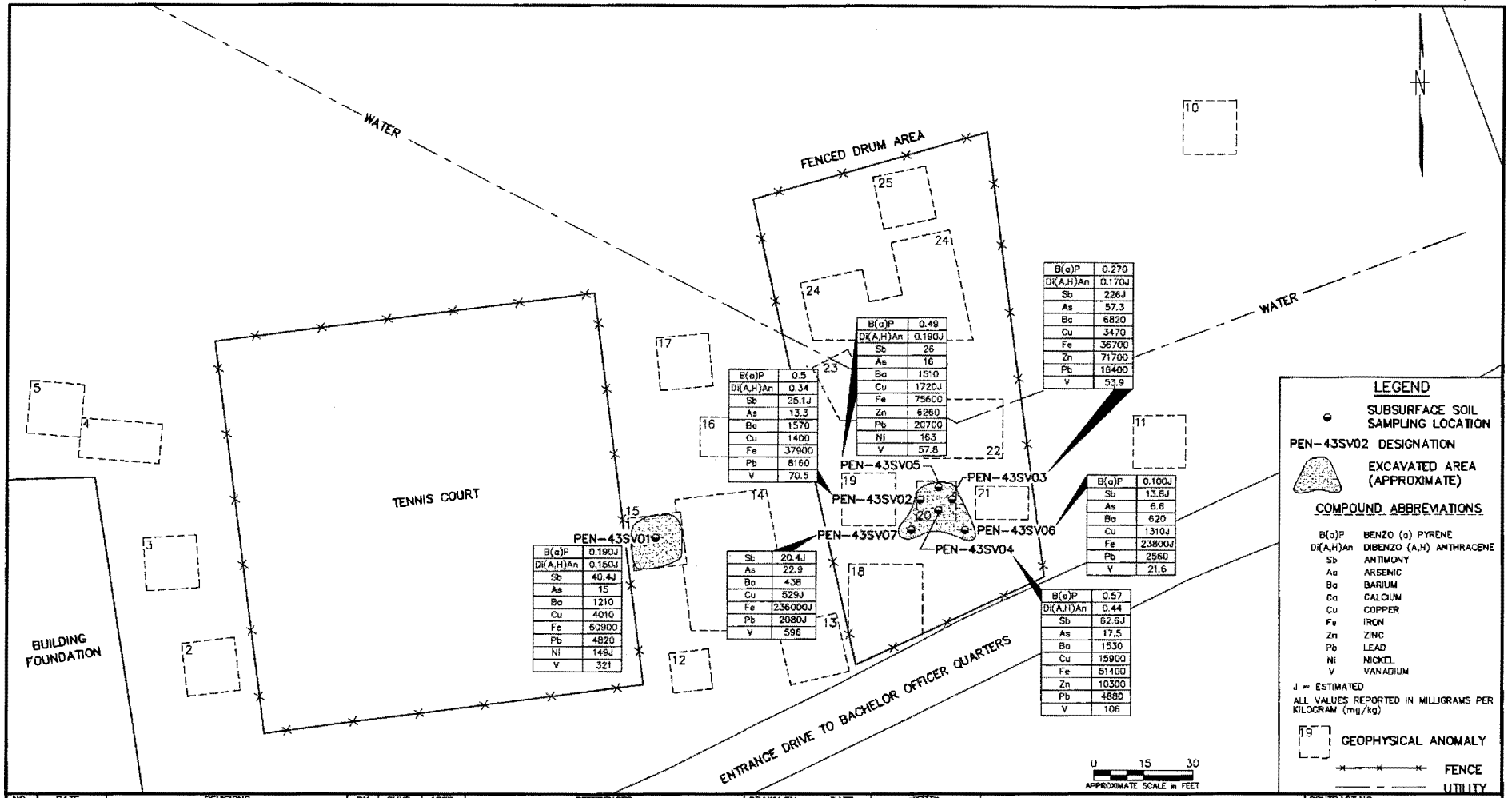

PEN-43SV01	
B(a)P	0.190J
Di(A,H)An	0.150J
Sb	40.4J
As	15
Ba	1210
Cu	4010
Fe	60900
Pb	4820
Ni	149J
V	321

PEN-43SV02	
B(a)P	0.5
Di(A,H)An	0.34
Sb	25.1J
As	13.3
Ba	1570
Cu	1400
Fe	37900
Pb	8160
V	70.5

PEN-43SV03	
B(a)P	0.270
Di(A,H)An	0.170J
Sb	226J
As	57.3
Ba	6820
Cu	3470
Fe	36700
Zn	71700
Pb	16400
V	53.9

PEN-43SV04	
B(a)P	0.57
Di(A,H)An	0.44
Sb	62.6J
As	17.5
Ba	1530
Cu	15900
Fe	51400
Zn	10300
Pb	4880
V	106

PEN-43SV05	
B(a)P	0.49
Di(A,H)An	0.190J
Sb	26
As	16
Ba	1510
Cu	1720J
Fe	75600
Zn	6260
Pb	20700
Ni	163
V	57.8

PEN-43SV06	
B(a)P	0.100J
Sb	13.8J
As	6.6
Ba	620
Cu	1310J
Fe	23800J
Pb	2560
V	21.6

PEN-43SV07	
Sb	20.4J
As	22.9
Ba	438
Cu	529J
Fe	236000J
Pb	2080J
V	596

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SUMMARY OF SUBSURFACE SOIL SAMPLES EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

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TABLE 4-4
SUMMARY OF ANALYTES DETECTED IN SOIL BORINGS AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 1 OF 1

Sample No.		PEN-43SB011415	PEN-43SB021415	PEN-43-SB031415	PEN-43SB040708	PEN-43SB051415	PEN-43SBDD03	TB101999-01
Sample Location		PEN-43SB01	PEN-43SB02	PEN-43SB03	PEN-43SB04	PEN-43SB05	PEN-43SB05	
Collect Date	DE1[1]/DE2[2]/LE[3]/BG[9] (mg/kg)	10/19/1999	10/19/1999	10/19/1999	10/19/1999	10/19/1999	10/19/1999	
Sample Depth (ft bls)		14-15	14-15	7/8/2000	7/8/2000	14-15	14-15	
Volatile[4] (mg/kg)								
None Detected								
Semi-Volatile[5] (mg/kg)								
Benzo (A) Pyrene	0.1/0.5/8.0	--	--	--	--	--	--	NA
Pesticides[6] (mg/kg)								
None Detected								NA
PCBs[7] (mg/kg)								
None Detected								NA
Metals[8] (mg/kg)								
Arsenic	0.8 / 3.7 / 29 / 1.0	--	--	--	--	--	--	
Barium	110** / 87000 / 1600 / 4.63	--	--	--	--	--	--	
Copper	110** / 76000 / *** / 5.72	--	--	--	--	--	--	
Iron	23000 / 480000 / *** / 2745	--	--	--				NA
Zinc	23000 / 560000 / 6000 / 16.86	--	--	--				
Lead	400 / 920 / *** / 7.35	--	--	--	--	--	--	
Nickel	110** / 28000 / 130 / 6.38	--	--	--				
Vanadium	15** / 7400 / 980 / 5.83	--	--	--	--	--	--	

Notes:
[1] DE1 = Direct Exposure limit for residential area from Chapter 62-777, F.A.C.
[2] DE2 = Direct Exposure limit for industrial area from Chapter 62-777, F.A.C.
[3] LE = Leachability for groundwater limit from Chapter 62-777, F.A.C.
[4] SW-846 8260B, [5] SW-846 8270C, [6] SW-846 8081A, [7] SW-846 8082, [8] SW-846 6010B
[9] BG = Background values for soils at NAS Pensacola, EnSafe, 1999
[J] Indicates the presence of a chemical at a concentration less than the reporting limit and greater than the method detection limit.
* Contaminant is not a health concern for this default exposure scenario.
** Direct exposure value based on acute toxicity considerations.
*** Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

PEN-43-2S-01 (970 µg/L), PEN-43-4S-01 (310 µg/L), and PEN-43-5S-01 (316 µg/L). The NAS Pensacola background concentration for aluminum, 3882 µg/L, is above the FDEP groundwater standard of 200 µg/L. Aluminum concentrations in groundwater at Site 43 did not exceed the background concentration.

Iron was detected in all five samples at concentrations ranging from 364 µg/L to 2980 µg/L, exceeding the FDEP criterion of 300 µg/L. The reference background concentrations of 1707 µg/L was exceeded in three of the five samples. Groundwater analytical results are summarized in Table 4-5. Contaminant concentrations are shown on Figure 4-3.

Field data collected from three monitoring wells were analyzed for the following natural attenuation parameters: dissolved oxygen, alkalinity, carbon dioxide, sulfide, ferrous iron, nitrite, manganese, and hydrogen sulfide. These results are summarized in Table 4-6.

4.2.1 Groundwater Flow Direction

On October 27, 1999, groundwater elevations were measured in the five newly installed monitoring wells (PEN-43-0S through PEN-43-05S). Groundwater elevation ranged from 3.78 to 5.46 feet above msl. Groundwater flow at the site is generally toward the south-southwest. A summary of the water table elevations is provided in Table 4-7. A potentiometric surface map is shown in Figure 4-4.

4.3 DRUMS

Fourteen drums were removed from two excavations at Site 43. One drum was recovered from anomaly 15 and thirteen drums were removed from anomaly 20. None of the drums were opened, but they were characterized based on chemical and physical observations. Each drum was characterized based on type, volume, condition, contents, etc. Once characterized, the drums were placed in DOT approved overpak containers. A summary of the drum characteristics is given in Table 4-8. The drum characterization sheets are found in Appenidx G.

The drum removed from anomaly 15 was a 30-gallon capacity steel drum with a central bung and reinforced rings for structural support. The drum was crushed and filled with rocks, dirt, and several cockroaches. The OVA reading collected from the drum was 11.3 parts per million (ppm). Photographs of this excavation are found in Appendix H.

TABLE 4-5
SUMMARY OF ANALYTES DETECTED IN GROUNDWATER AT CONCENTRATIONS EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 1 OF 1

Sample No. Sample Location Collect Date	FDEP GW Criteria (ug/L)* / BG[6]	PEN-43-1S-01 PEN-43-1S 10/27/99	PEN-43-2S-01 PEN-43-2S 10/27/99	PEN-43-3S-01 PEN-43-3S 10/27/99	PEN-43-4S-01 PEN-43-4S 10/27/99	PEN-43-5S-01 PEN-43-5S 10/27/99	PEN-43-DD-01 PEN-43-3S 10/27/99	TB102799-01
Volatile[1] (ug/L)								
Methylene Chloride	5	19	6	--	6	--	--	
Semi-Volatile[2] (ug/L)								
None Detected		--	--	--	--	--	--	NA
Pesticides[3] (ug/L)								
None Detected		--	--	--	--	--	--	NA
PCBs[4] (ug/L)								
None Detected		--	--	--	--	--	--	NA
Metals[5] (ug/L)								
Aluminum	200 / 3882	--	970	--	310	316	--	
Iron	300 / 1707	2980	1390	422	--	2430	364	NA

Notes:
[1] SW-846 8260B, [2] SW-846 8270C, [3] SW-846 8081A, [4] SW-846 8082, [5] SW-846 6010B
* As provided by Chapter 62-777, F.A.C.
[6] BG = Background values for groundwater at NAS Pensacola, EnSafe, 2000
NA = not analyzed

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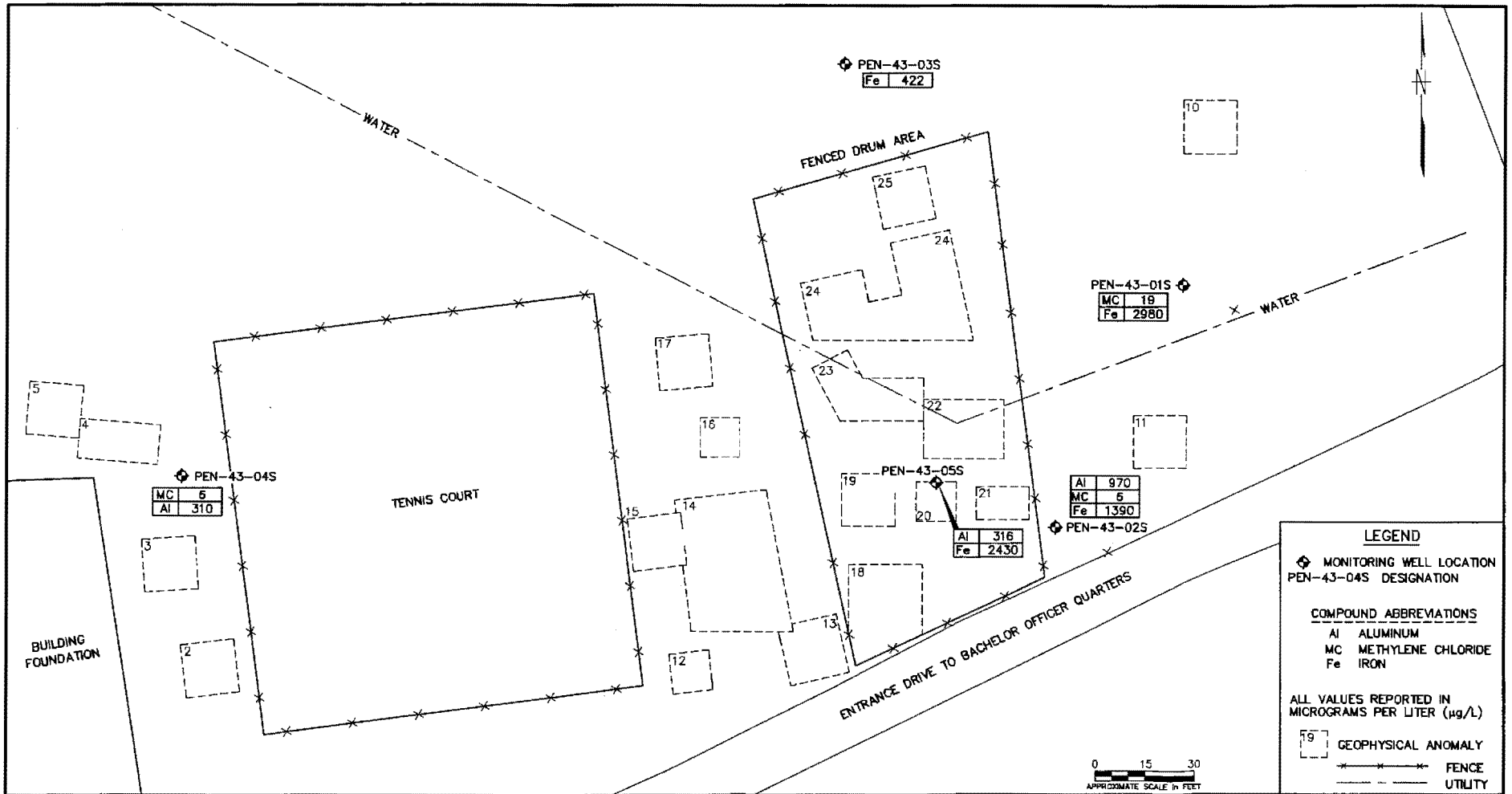

NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

DRAWN BY LLK DATE 1/25/00
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

SUMMARY OF GROUNDWATER SAMPLES
EXCEEDING FDEP CRITERIA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 0189
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 4-3 REV. 0

FORM CADD NO. SDIV_BH.DWG – REV 0 – 1/20/98

TABLE 4-6
GROUNDWATER NATURAL ATTENUATION FIELD MEASUREMENTS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 1 OF 1

Well I.D.	Date Sampled	Dissolved Oxygen (mg/L)	Alkalinity (mg/L)	Carbon Dioxide (mg/L)	Sulfide (mg/L)	Ferrous Iron (mg/L)	Nitrite (mg/L)	Manganese (mg/L)	Hydrogen Sulfide (mg/L)
PEN-43-01S	10/27/1999	4.00	9.2	26	0.00	1.11	0.016	0.0	0.00
PEN-43-04S	10/27/1999	3.00	11.0	29	0.02	0.07	0.017	0.2	0.00
PEN-43-05S	10/27/1999	3.00	9.5	26	0.05	1.21	0.003	1.1	0.00

Notes:

mg/L = milligrams per liter
NA = not Analyzed

TABLE 4-7
WATER TABLE ELEVATION AND MONITORING WELL CONSTRUCTION DATA
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 1 OF 1

Well Number	Top of Casing Elevation (msl)	Screened Interval Depth (feet, bls)	October 27, 1999	
			Depth to Water Below Top of Casing (feet)	Water Elevation (msl)
PEN-43-01S	19.95	9.5-19.5	15.36	4.59
PEN-43-02S	21.07	9.4-19.4	16.33	4.74
PEN-43-03S	21.50	9.5-19.5	16.59	4.91
PEN-43-04S	14.46	5-15	9.00	5.46
PEN-43-05S	20.57	9-19	16.79	3.78

Notes:
NM = not measured
msl = mean sea level

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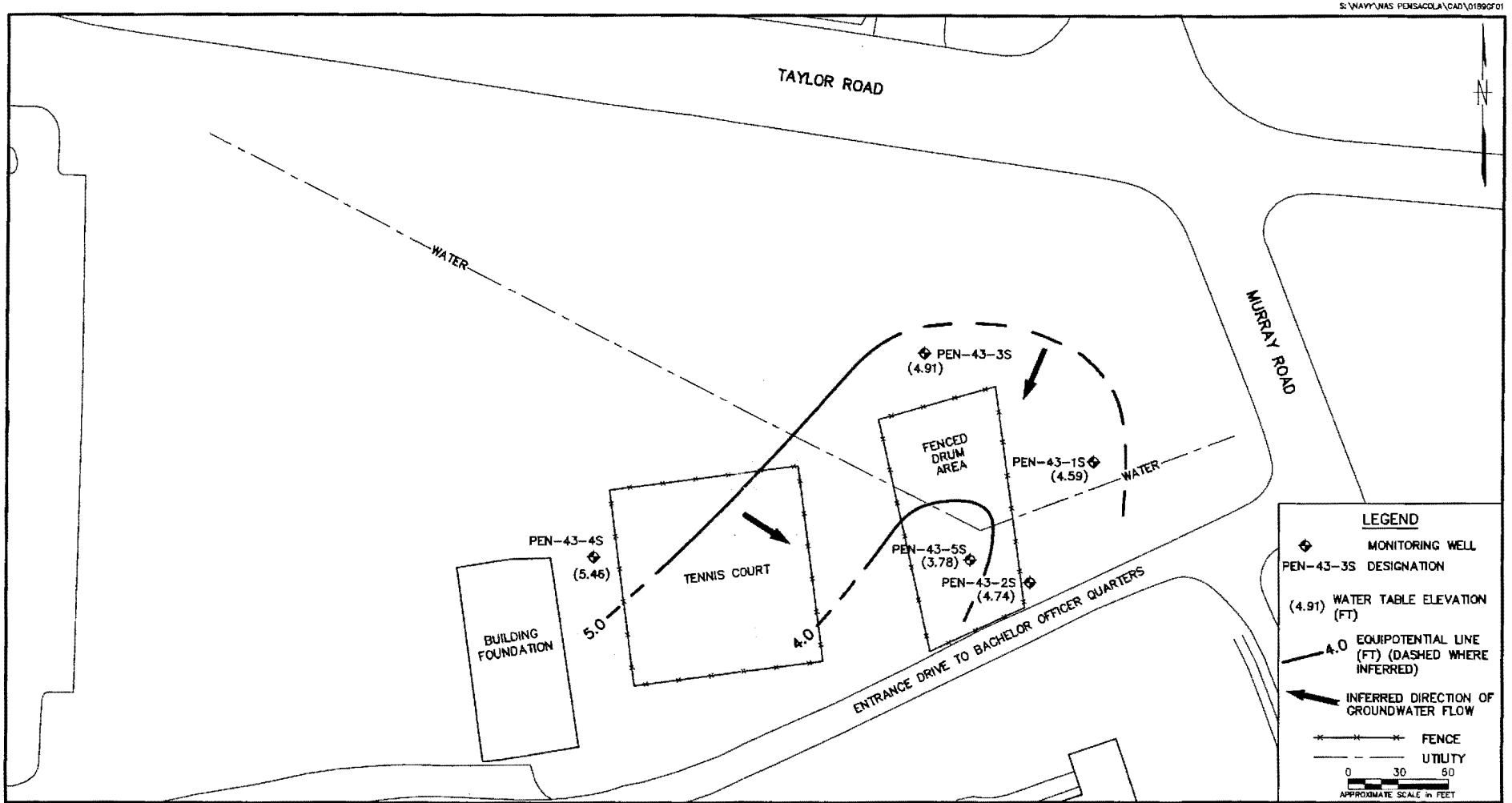


NO.	DATE	REVISIONS	BY	CHKD	APPD	REFERENCES

DRAWN BY LLK DATE 1/20/00
CHECKED BY DATE
COST/SCHED-AREA
SCALE AS NOTED

POTENTIOMETRIC SURFACE
OCTOBER 27,1999
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA

CONTRACT NO. 0189
APPROVED BY DATE
APPROVED BY DATE
DRAWING NO. FIGURE 4-4 REV. 0

FORM CADD NO. SURV_BHLDWG - REV 0 - 1/20/99

TABLE 4-8
SUMMARY OF DRUM CHARACTERISTICS
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA
PAGE 1 OF 1

Drum Number	Drum Type	Condition	Contents	Estimated Volume	Date	PID (ppm)	Comments
1	55 Gallon Steel	Fair	tar like liquid	<1 gallon	10/6/1999	0	reinforced rings
2	55 Gallon Steel	Fair	-	empty	10/6/1999	30	
3	55 Gallon Steel	Fair, rusted	liquid based on drum type	~18 gallons	10/6/1999	2	reinforced rings, labeled "use only for lubricating oil"
4	55 Gallon Steel	Fair, rusted	liquid based on drum type	~18 gallons	10/6/1999	0	reinforced rings, labeled "use only for lubricating oil"
5	55 Gallon Steel	Fair, rusted	liquid based on drum type	~18 gallons	10/6/1999	0	reinforced rings, labeled "use only for lubricating oil"
6	55 Gallon Steel	Fair, rusted	-	empty	10/6/1999	0	
7	55 Gallon Steel	Poor, 12-in. gash in top	rainwater	~27 gallons	10/7/1999	NM	reinforced rings, frogs living inside
8	55 Gallon Steel	Fair	-	empty	10/7/1999	NM	
9	55 Gallon Steel	Fair	black/brown liquid leaking at small opening.	~3 - 5 gallons	10/7/1999	NM	reinforced rings, residual oil leak,
10	55 Gallon Steel	Fair to Poor	liquid based on drum type, however no sloshing so possibly sediment	~13 - 18 gallons	10/7/1999	NM	label marked "use only for lubricating oil"
11	55 Gallon Steel	Fair, rusted	-	empty	10/7/1999	NM	
12	55 Gallon Steel	Fair, rusted	-	empty	10/7/1999	NM	reinforced rings
13	30 Gallon Steel	Poor, crushed	solids/soils	~30 gallons	10/7/1999	14.6	reinforced rings, cockroaches living inside
14	55 Gallon Steel	Fair, rusted	rusty water	<1 gallon	10/7/1999	NM	reinforced rings

All thirteen drums removed from the excavation at anomaly 20 were 55-gallon capacity steel drums. Of these, nine drums had reinforced rings around them. Four of the drums were labeled "use only for lubricating oil." Twelve of the drums were found to be in fair but rusted condition, while two of the drums were found to be in poor structural condition (dents, holes, etc.).

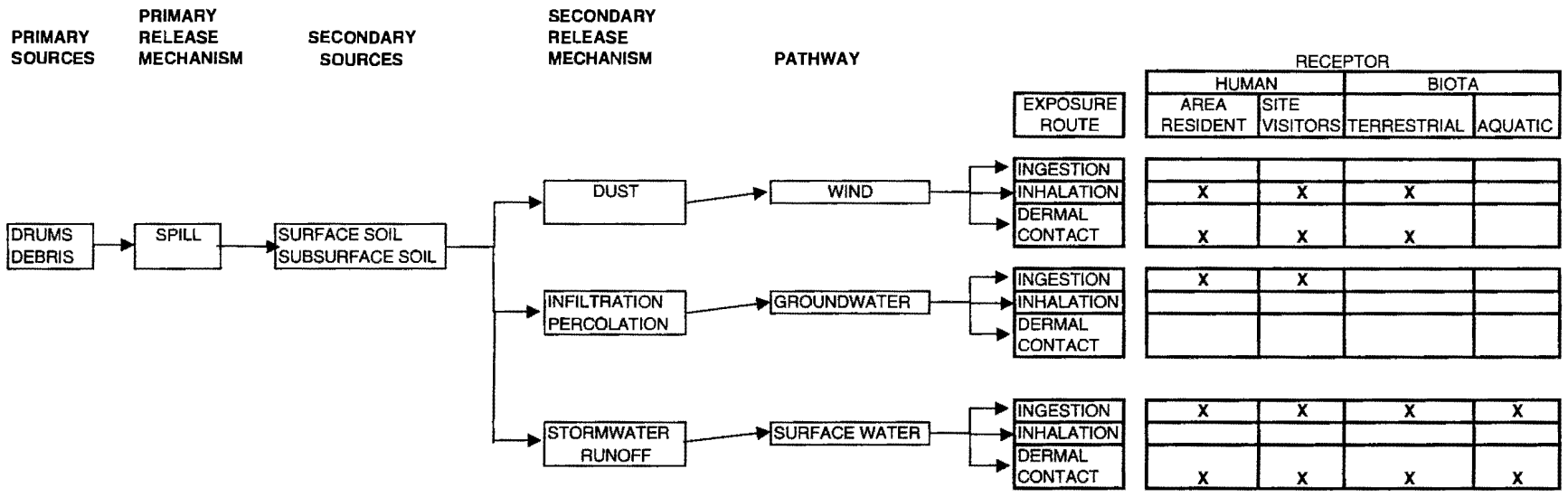
Five of the drums recovered from anomaly 20 were empty. The others ranged from approximately one third full to completely full. Two of the drums were observed to have a dark colored, tar like liquid leaking at the openings. The others were classified as liquid containers simply based on the drum type. OVA readings from the drums ranged from 0 ppm to 30 ppm. Photos of this excavation are found in Appendix H.

4.4 CONCEPTUAL SITE MODEL

The Conceptual Site Model plots sources, pathways and possible receptors on a flow diagram (Figure 4-5). The flow diagram provides a framework to assess the potential risks a remedial action associated with the site will need to take into consideration.

The primary sources at Site 43 are the buried drums discovered during the Site Characterization Investigation. The primary release mechanism from this source is leaking or spilling of the drums' contents into the soil at the site. This primary release could result in the secondary release mechanisms of dust, infiltration/percolation, and stormwater runoff. A secondary release of dust would be transported from the site by wind resulting in humans and terrestrial biota becoming potential receptors via inhalation and dermal contact. A secondary release by infiltration/percolation of the material would affect the groundwater at the site resulting in humans becoming potential receptors via ingestion. A secondary release by stormwater runoff would affect the surface water in the surrounding area resulting in humans and both terrestrial and aquatic biota becoming potential receptors via ingestion and dermal contact.

FIGURE 4-5
CONCEPTUAL SITE MODEL
SITE 43
NAS PENSACOLA
PENSACOLA, FLORIDA



5.0 SUMMARY AND CONCLUSIONS

The results of the Site Characterization Investigation reveal the following:

- Surface soil samples at the site contains benzo(a)pyrene and eight metals (antimony, arsenic, barium, copper, iron, zinc, lead, nickel, and vanadium) at concentrations exceeding the FDEP residential direct exposure limits (DELs) and NAS Pensacola background concentrations. Antimony and nickel concentrations exceeded their respective leachability concentrations.
- Subsurface soil samples collected from underneath drums in excavations contain concentrations of benzo(a)pyrene, dibenzo(a,h)anthracene, and nine metals (antimony, arsenic, barium, copper, iron, lead, nickel, zinc, and vanadium) at concentrations exceeding the FDEP residential DELs and NAS Pensacola background concentrations. Antimony, arsenic, barium, nickel and zinc concentrations exceeded their respective leachability concentrations.
- Subsurface soil samples collected from soil borings at the site were not impacted by VOCs, SVOCs, pesticides, PCBs, metals or cyanide.
- Groundwater at the site contains concentrations of methylene chloride, a common laboratory contaminant, and two metals (aluminum and iron) at concentrations exceeding FDEP groundwater criteria. Aluminum concentrations at the site did not exceed background values, while iron concentrations exceeded background values in three out of the five samples.
- Fourteen drums were removed from excavations at Site 43.

Results from the Site Characterization Investigation indicate that surface soil, subsurface soil to a depth of 3.5 feet, and groundwater at Site 43 have been impacted by the historical use of the site as a drum storage area. Four of the six metals detected in groundwater at concentrations above the FDEP criteria were also found in soils at concentrations exceeding residential DELs. While the inorganic concentrations may reflect turbidity of the water samples, it is likely that inorganic soil contamination has impacted groundwater at the site.

The Chapter 62-777, FAC groundwater criteria are based on a 10^{-6} human health risk, therefore the above exceedences pose a human health risk-based concern for residential land use at the site. The conceptual site model presented in Section 4.3 indicates that there are both human and ecological receptors at risk at Site 43. The primary exposure pathways at this site include inhalation and dermal contact of dust and ingestion of groundwater. The loose metal debris found in the surface soil at the site also present a physical hazard to humans in the area. TtNUS recommends an Interim Remedial Action (IRA) be taken at Site 43 to minimize human health and ecological risk. This IRA should consist of, at a minimum, fencing the entire site to limit exposure to humans and biota.

Continuous soil sampling should be performed to a depth of 15 feet at various locations throughout the site to determine the vertical extent of soil contamination. FDEP leachabilities were exceeded in surface and subsurface soil at Site 43, therefore additional surface and subsurface soil samples should be collected and sent for laboratory analysis of synthetic precipitate leaching properties (SPLP) for inorganics and SVOCs. TtNUS also proposes additional groundwater sampling be conducted for inorganic analyses only. These proposed sampling activities will provide additional data to further evaluate the inorganics concentrations detected in the groundwater at Site 43 during the Site Characterization Investigation and to assist in developing remedial action alternatives.

6.0 PROFESSIONAL CERTIFICATION

Site Characterization Report
Site 43
Pensacola NAS

This Site Characterization Report was prepared under the direct supervision of the undersigned geologist using geologic and hydrogeologic principles standard to the profession at the time the report was prepared. If conditions are determined to exist that differ from those described, the undersigned geologist should be notified to evaluate the effects of additional information on the assessment described in this report. This report was developed specifically for the referenced site and should not be construed to apply to any other site.

_____
Terry Hansen, P.G.
Florida License No. 234

_____
Date

REFERENCES

Chapter 62-770, Petroleum Contamination Site Cleanup Criteria, September 23, 1998

Chapter 62-777, Contaminant Cleanup Target Levels, August 5, 1999

Ensafe/Allen & Hoshall, 1994, *Geophysical Investigation of Buried Drum Area Site 10 (West), Naval Air Station Pensacola,* September.

Naval Energy and Environmental Support Activity, 1983, *Initial Assessment Study of Naval Air Station Pensacola,* June.

Tetra Tech NUS, Inc., 1999, *Florida Department of Environmental Protection Comprehensive Quality Assurance Plan #980038, Revision 1*, August.

Tetra Tech NUS, Inc., 1989, *Sampling and Analysis Plan for Preliminary Site Characterization Study, Site 43, Naval Air Station Pensacola*, August.

USEPA (United States Environmental Protection Agency) 1996b. *Environmental Investigations Standard Operating Procedures Quality Assurance Manual (EISOPQAM)*, Environmental Compliance Branch, Region IV, Science and Ecosystems Support Division, Athens, Georgia.

APPENDIX A

SOIL SAMPLE SHEETS

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SU01
Sample Location: Anomaly #13
Sampled By: E. Parker
C.O.C. No.:

[X] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/99 Time: 0830 Method: SS Spoon Monitor Reading (ppm): 0.0 ppm	0'	Brown	Sand (medium grained)

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) by Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL Metal	4 oz G		

OBSERVATIONS / NOTES:

FID = 0.0 ppm

MAP:

~~See Fieldbook pg~~

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: PEN-43SU02
Sample Location: Anomaly #20 (NW)
Sampled By: J. Elliott/A. Wilcox
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

Date: 10/6/99	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 1100	3'	Grey/ Brown	Medium Grained Sand
Method: SS Spoon			
Monitor Reading (ppm): <10 ppm			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(2) 5g Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL metal	4 oz G		

OBSERVATIONS / NOTES:

FID=0.0 ppm

MAP:

see logbook pg 13

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola Site 43
Project No.: CTO 96

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: PEN-43SU03
Sample Location: Anomaly #20 (SE)
Sampled By: J. Elliott / A. Wilcox
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/99 Time: 1115 Method: SS Spoon Monitor Reading (ppm): 0.0 ppm	3'	Grey/ Brown	medium Grained Sand

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) 5g Encore 2oz	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL Metal	4 oz G		

OBSERVATIONS / NOTES:

FID = 0.0 ppm

MAP:

See logbook pg 13

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 960

Sample ID No.: PEN-43SV04
Sample Location: Anomaly #20 (Sh)
Sampled By: J. Elliott / A. Wilcox
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/6/99 Time: 1130 Method: SS spoon Monitor Reading (ppm): <10 ppm	3'	Grey/ Brown	Medium Grained Sand,

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) 5g Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G	↓	
CN, TAL Metals	4 oz G	↓	

OBSERVATIONS / NOTES:

FID = 0 ppm

MAP:

see logbook pg 13

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS ~~Pensacola~~ Pensacola Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SUD5
Sample Location: Anomaly #200 (NE)
Sampled By: J. Elliott / A. Wilcox
C.O.C. No.:

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/16/99 Time: 1140 Method: SS Spoon Monitor Reading (ppm): <10 ppm	3'	Grey/ Brown	Medium Grained Sand

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) 5g Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL Metals	8 oz G		

OBSERVATIONS / NOTES:

FID = 0.0 ppm

MAP:

See logbook p13

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola Site 43
Project No.: CTO 96

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: PEN43SH06
Sample Location: Anomaly #20
Sampled By: J. Elliott / A. Wilcox
C.O.C. No.:

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 17-Co-99	3'	→ Grey/Brown	medium Grained Sand w/ debris (metal & concrete
Time: 1730	3.5'	→ White	
Method: SS Spoon			
Monitor Reading (ppm): <10 ppm			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) 5g Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL Metal	4 oz G		

OBSERVATIONS / NOTES:

~~FID = 0.0 ppm~~
PID = 5-2 ppm

MAP:

See Fieldbook pg

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: PEN43SU07
Sample Location: Anomaly #20
Sampled By: J. Elliott / A. Wilcox
C.O.C. No.:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10-6-99	3' →	Grey/Brown	Medium Grained Sand
Time: 1715	3.5' →	w/ White below	w/ rusted debris
Method: SS Spoon			
Monitor Reading (ppm): 5/10ppm			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	(4) 5g Encore 2oz G	yes	
Pest, PCB, Semivol	8 oz G		
CN, TAL Metal	4 oz G		

OBSERVATIONS / NOTES:

PID = 7.9 ppm

MAP:

See fieldbook pg

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NASP site 43
Project No.: CTO 096

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: Pen 43SB04Ø708
Sample Location: 43 SB04
Sampled By: JA, RF
C.O.C. No.: 0462
0463

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10 ~~15~~ 13 04	7-8'	lt. tan-white	Sand, moist
Time: 1540 1600 JA			
Method: DPT			
Monitor Reading (ppm): Ø			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4 encore		
	2oz G		
SVOC, Pest, CB	8 oz G		
	4oz G		
TAL, metals	+		

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASP - site 43
Project No.: CTO 096

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: Penf-43SB05141S
Sample Location: 43 SB05
Sampled By: JA, RE
C.O.C. No.: 0463

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10 15 99	14-15'	White	Moist, Fine Sand
Time: 1500 ~~1635~~			
Method: DPT			
Monitor Reading (ppm): Ø			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4 encores 2 oz g		
SVOC, Pest, PCB	4 oz		
TAL Metals, cyanide	8 oz		

OBSERVATIONS / NOTES:

duplicate taken
↓

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.: Penf-43SB DD03

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASP/ Site 43
Project No.: CTO 046

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: Pend-43SB01(14-15)
Sample Location: Soil Boring 01
Sampled By: L. Franklin
C.O.C. No.: 0462
0463

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: ~~10/15/99~~ 10/19 Time: ~~1250~~ 1440 Method: DPT Monitor Reading (ppm):	14-15'	White	Moist Fine Sand

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOA	4x5ml encore		
	2 oz G		
SVOC, Pest, PCB	8 oz G		
TAL Metals, Cn	4 oz G		

OBSERVATIONS / NOTES:

Downgradient

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASP/Site 43
Project No.: CTO 096

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: Penn-435B02141
Sample Location: Borehole #2
Sampled By: J. Franklin
C.O.C. No.: 0462
0463

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/19/99 Time: 1420 Method: DPT Monitor Reading (ppm): –	14-15'	White	Moist, Fine Sand

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4x5g Encore	✓	
	2 oz G		
SVOC, Pest. PCB	8 oz G	✓	
TAL Metal, CN	4 oz G	✓	

OBSERVATIONS / NOTES:

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): J. Franklin

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NASP/Site 43
Project No.: CTO 96

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Sample ID No.: Penn-435B0314 15
Sample Location: Borehole #3
Sampled By: R. Franklin
C.O.C. No.: 0462
0463

Type of Sample:
[X] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/15/99 ~~04~~	14-15'	White	Moist, Fine Sand
Time: ~~1450~~ 1520			
Method: DPT			
Monitor Reading (ppm):			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TAL VOC	4454 Encore	✓	
	2 oz G	✓	
SVOC, Pest, PCB	8 oz G	✓	
TAL Metals, CN	4 oz G	✓	

OBSERVATIONS / NOTES:

Side gradient

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: C40 96

Sample ID No.: PEN-435541
Sample Location: Anomoly #25
Sampled By: R. Franklin
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99	0-6"	Brown	Sand
Time: 0905			
Method: SS Spoon			
Monitor Reading (ppm): 0.00			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4x5g Encore, 2 oz G	✓	
Pest PCB, SemiVol	8 oz G	✓	
CN, TAL Metal	4 oz G	✓	

OBSERVATIONS / NOTES:

FID: 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 47
Project No.: CTO 96

Sample ID No.: PGS-4355ØZ
Sample Location: Anomoly #23
Sampled By: A. Franklin
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 0920 Method: SS Spoon Monitor Reading (ppm): 0.00	0-6"	DK BRN	F SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4x5g Encore, 1x20z G	✓	
SVOC, Pest, PCB	8 oz G	✓	
TAL Metals, CN	4 oz G	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CT096

Sample ID No.: PEN-4355Ø3
Sample Location: Anomaly #24
Sampled By: Kilmarkin
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [ ] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

Date: 10/5/99	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Time: 0907	0-6"	DK BRN.	F. SAND
Method: SS Spoon			
Monitor Reading (ppm): 0.00			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4 x 5g Encore, 2 oz G	—	
Pest, PCB, Semi, VOC	8 oz G	—	
TAL Metals, CN	4 oz G	—	

OBSERVATIONS / NOTES:

PID: 0.00ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola
Project No.: CTO 96

Sample ID No.: PGN-4355p4
Sample Location: Hangar #19
Sampled By: Franklin
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 0930 Method: SS Spoon Monitor Reading (ppm): 0.00	0-6"	DK BRN	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4x5 Encore, 2 oz G	—	
Pest, PCB, Semi VOC	8 oz G	—	
TAL Metal, RN	4 oz G	—	

OBSERVATIONS / NOTES:

FID=0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PGN-43 55 05
Sample Location: Anomaly #22
Sampled By: Franklin
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 0940 Method: SS Spoon Monitor Reading (ppm): 0.00	0-6"	DK BRN	F SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4x5g Encore, 2 oz G	✓	
Pest, PCB, Semi VOC	8 oz G	✓	
TAL metals, CN	4 oz G	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN4355 06
Sample Location: Anomaly #18
Sampled By: N. Franklin
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 0950 Method: SS Spoon Monitor Reading (ppm): 0.00	0-6"	DK. BRN	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOC	4x5y Encore, 2 oz	—	
Pest. PCB, SemiVOC	4 oz G	—	
CN, TAL Metals	4 oz G	—	

OBSERVATIONS / NOTES:

FID=0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [signature]

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SS07
Sample Location: Anomaly # 20
Sampled By: S. Franklin
C.O.C. No.:

- [] Surface Soil
- [] Subsurface Soil
- [] Sediment
- [] Other:
- [] QA Sample Type:

Type of Sample:
- [] Low Concentration
- [] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99	0-6"	DkBrn	F. SAND
Time: 0945			
Method: SS SPOON			
Monitor Reading (ppm): 0.00			

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4x5g. Encore, 1x2oz G	✓	
SVOCs, Pest, PCB	8 oz G.	✓	
TAL Metals, CN	4 oz G.	✓	

OBSERVATIONS / NOTES:

FID=0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola #43
Project No.: CTO 96

Sample ID No.: PEN-43SS08
Sample Location: Anomaly #21
Sampled By: R. Franklin
C.O.C. No.:

[] Surface Soil
[] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[] Low Concentration
[] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1000 Method: SS SPOON Monitor Reading (ppm): 0.00	0-6"	DKBRN.	F.S AND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4x5g. Enviro, 1x2oz.	✓	
SVOC, Pest, PCB	1x 8oz.	✓	
TAL Metals, CN	1x 4oz.	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Abby Bhllas

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SS09
Sample Location: Anomaly # 13
Sampled By: Hurlare
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/95 1400 Time: 1400 Method: SSSpoon Monitor Reading (ppm): 0.00ppm	0-6"	LT. BRN	FSAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4 x 5g. Encore, 1 x 2oz G	✓	
SVOC, Pest, PCB	1 x 8oz G	✓	
TAL metals	1 x 4oz. G	✓	

OBSERVATIONS / NOTES:

FID: 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Abby Bruton

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SS10
Sample Location: Anomaly #14
Sampled By: R. Franklin
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: ~~1420~~ 1420 AW Method: SS spoon Monitor Reading (ppm): ~~0.00~~	0-6"	DK BRN	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4 x 5g. Encore, 1 x 2oz. G	✓	
SVOCs, Pest, PCB	1 x 8oz G	✓	
TAL Metals, CN	1 x 4oz G	✓	

OBSERVATIONS / NOTES:

FID = ~~0.00~~ ppm(AW)
0.00

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Abby Blue

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN-435511
Sample Location: Anomaly #17
Sampled By: [illegible]
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1445 Method: SS Spoon Monitor Reading (ppm): 0.00	0-6"	LT BRN/ DK GREY	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SVOC, Pest, PCB	1 x 8 oz. G	✓	
TAL Metals, CN	1 x 4 oz. G	✓	
TCL VOCs	4 x 5g. Encore, 1 x 2 oz. G	✓	

OBSERVATIONS / NOTES:

FID = ~~0.00~~ ppm
0.00 PPM
DUPLICATE COLLECTED

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:
	PEN-435500001

Signature(s): [illegible]

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, SI643
Project No.: CTO 96

Sample ID No.: PEN-43SS12
Sample Location: Anomaly #15
Sampled By: Auxilcore
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1505 Method: SSPOON Monitor Reading (ppm): 0.00	0-6"	DK. GREY	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SVOC, Pest, PCB	4x5g. Encore / 1x8oz. G	✓	
TAL Metals, CN	1x8oz. G	✓	
TCL VOCs	1x2oz G, 4x5g Encore	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Abby Bullard

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN-43SS13
Sample Location: Anomaly #12
Sampled By:
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1455 Method: SS spoon Monitor Reading (ppm): 0.00	0-6"	DK BRN.	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
SVOC, Pest, PCB	1 x 8 oz. G	✓	
TAL metals, CN	1 x 4 oz. G	✓	
TCL VOCs	4 x 5g. Encore, 1 x 2 oz. G	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola site 43
Project No.: CTO 96

Sample ID No.: PEN-43SS14
Sample Location: Anomaly #16
Sampled By: AWilcox
C.O.C. No.:

[X] Surface Soil
[X] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1530 Method: SS spoon Monitor Reading (ppm): 0.00	0-6"	DKBRN	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4 x 5g. Encore, 1 x 2 oz. G	✓	
SVOC, Pest, PCB	1 x 8 oz. G	✓	
TAL Metals, CN	1 x 4 oz. G	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): Abby Bullard

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola, Site 43
Project No.: CTO 96

Sample ID No.: PEN43SS15
Sample Location: Anomaly #4
Sampled By: A. Wilcox
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1545 Method: SS50000 Monitor Reading (ppm): 0.0	0-6"	MED. BRN.	F. SAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4 x 5g Encore, 1 x 2 oz. G	✓	
SVOC, Pest, PCB	1 x 8 oz G	✓	
TAL Metals	1 x 4 oz. G	✓	

OBSERVATIONS / NOTES:

FID = 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD

Duplicate ID No.:

Signature(s): Abby B Wilcox

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola Site 43
Project No.: CD96

Sample ID No.: PEN-435516
Sample Location: Anomaly #11
Sampled By: A. Wilcox
C.O.C. No.:

- [x] Surface Soil
- [ ] Subsurface Soil
- [ ] Sediment
- [ ] Other:
- [ ] QA Sample Type:

Type of Sample:
- [x] Low Concentration
- [ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/95 Time: 1640 Method: SSpoon Monitor Reading (ppm): 0.00	0-6"	DK BRN	FSAND

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4x5g. Encore, 1x2oz G	✓	
SVOC, Pest, PCB	1x8 oz G	✓	
TAL metals Cn	1x4 oz G	✓	

OBSERVATIONS / NOTES:

MS/MSD COLLECTED - ~~DUPLICATE~~ VOLUME SUBMITTED DOUBLED
FID = 0.00

MAP:

Circle if Applicable:

MS/MSD PEN-435516

Duplicate ID No.:

Signature(s): Abby Bulay

SOIL & SEDIMENT SAMPLE LOG SHEET

Project Site Name: NAS Pensacola Site 43
Project No.: CTO 96

Sample ID No.: PEN-435517
Sample Location: Anomaly #10
Sampled By: A. Wilcox
C.O.C. No.:

[X] Surface Soil
[ ] Subsurface Soil
[ ] Sediment
[ ] Other:
[ ] QA Sample Type:

Type of Sample:
[X] Low Concentration
[ ] High Concentration

GRAB SAMPLE DATA:

	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Date: 10/5/99 Time: 1608 Method: SS spoon Monitor Reading (ppm): 0.00	0-6"		

COMPOSITE SAMPLE DATA:

Date:	Time	Depth	Color	Description (Sand, Silt, Clay, Moisture, etc.)
Method:				
Monitor Readings (Range in ppm):				

SAMPLE COLLECTION INFORMATION:

Analysis	Container Requirements	Collected	Other
TCL VOCs	4x5g. Encore, 1x2oz G	✓	
SVOC, Pest, PCB	1x8oz G	✓	
TAL Metals	1x4oz G	✓	

OBSERVATIONS / NOTES:

DUPLICATE COLLECTED
FID= 0.00 ppm

MAP:

Circle if Applicable:

MS/MSD	Duplicate ID No.: PEN-435500D02

Signature(s): Abby Bhilcox

APPENDIX B

BORING LOGS

BORING LOG

PROJECT NAME: NASP/ Site 43
BORING NUMBER: 43 SB01
PROJECT NUMBER: CTO 96
DATE: 10/15/99
DRILLING COMPANY: TEG
GEOLOGIST:
DRILLING RIG: DPT
DRILLER: J. Stevenson

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					Brn	Fine Sand		Dry				
	2												
	3												
	4		4/4										
	5					Tan			Damp				
	6												
	7												
	8		4/4										
	9												
	10												
	11												
	12		4/4										
	13						—						
	14					White							
	15												
	16		3/4						Saturated				
	17												
	18												
	19												
	20		4/4										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks: V-FID Screening Depth

Converted to Well: Yes _____ No _____ Well I.D. #: _____

BORING LOG

PROJECT NAME: NASP / Site 43
PROJECT NUMBER: CTO ~~889~~ 96
DRILLING COMPANY: TEG
DRILLING RIG: DPT

BORING NUMBER: 43SB02
DATE: 10/15/99
GEOLOGIST:
DRILLER: J. Stevenson

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					Brn	Fine Sand		Dry				
	2												
	3												
	4		4/4										
	5						–						
	6					Tan			Damp				
	7												
	8		3/4										
	9												
	10												
	11						–						
	12		2/4				–						
	13												
	14					White							
	15												
	16		3/4						Saturation				
	17												
	18												
	19												
	20		4/4										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes ____ No ____ Well I.D. #: ____

BORING LOG

ROJECT NAME: NASP/ Site 43
BORING NUMBER: 43 SB03
PROJECT NUMBER: CTO 96
DATE: 10/15/99
DRILLING COMPANY: TEC
GEOLOGIST:
DRILLING RIG: DPT
DRILLER: J. Stanmier

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					Brown	Fine Sand		Dry				
	2												
	3												
	4		4/4										
	5						—						
	6												
	7					Tan			Moist				
	8		3/4										
	9						—						
	10												
	11												
	12		3/4										
	13						—						
	14					White	—						
	15												
	16		2/4				Sand		Saturated				
	17						—						
	18						—						
	19												
	20		2/4										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

BORING LOG

PROJECT NAME: NASP/ Site 43
PROJECT NUMBER: CTO 96
DRILLING COMPANY: TEG
DRILLING RIG: DPT

BORING NUMBER: 43 SB04
DATE: 10/15/99
GEOLOGIST:
DRILLER: J. Stevenson

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					Brown	Fine Sand		Dry				
	2												
	3					Tan							
	4		4/4										
	5												
	6								Moist				
	7												
	8		4/4										
	9					White	—		Saturated				
	10						—						
	11												
	12		2/4										
	13						—						
	14						-						
	15		1/3										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes _____ No _____ Well I.D. #: _____

BORING LOG

PROJECT NAME: NASP/Site 43
BORING NUMBER: 43SB05
PROJECT NUMBER: CTO 96
DATE: 10/15/99
DRILLING COMPANY: TEG
GEOLOGIST:
DRILLING RIG: DPT
DRILLER: J. Stevens

Sample No. and Type or RQD	Depth (Ft.) or Run No.	Blows / 6" or RQD (%)	Sample Recovery / Sample Length	Lithology Change (Depth/Ft.) or Screened Interval	MATERIAL DESCRIPTION: Soil Density/ Consistency or Rock Hardness	Color	Material Classification	USCS *	Remarks	PID/FID Reading (ppm): Sample	Sampler BZ	Borehole**	Driller BZ**
	1					Brn	Fine Sand		Dry				
	2												
	3												
	4		4/4										
	5					Tan							
	6												
	7												
	8		4/4										
	9						—						
	10												
	11												
	12		3/4			White			Moist				
	13						—						
	14						—						
	15												
	16		2/4						Saturated				
	17						—						
	18												
	19												
	20		3/4										

* When rock coring, enter rock brokeness.

** Include monitor reading in 6 foot intervals @ borehole. Increase reading frequency if elevated reponse read.

Drilling Area Background (ppm): 0

Remarks:

Converted to Well: Yes No Well I.D. #:

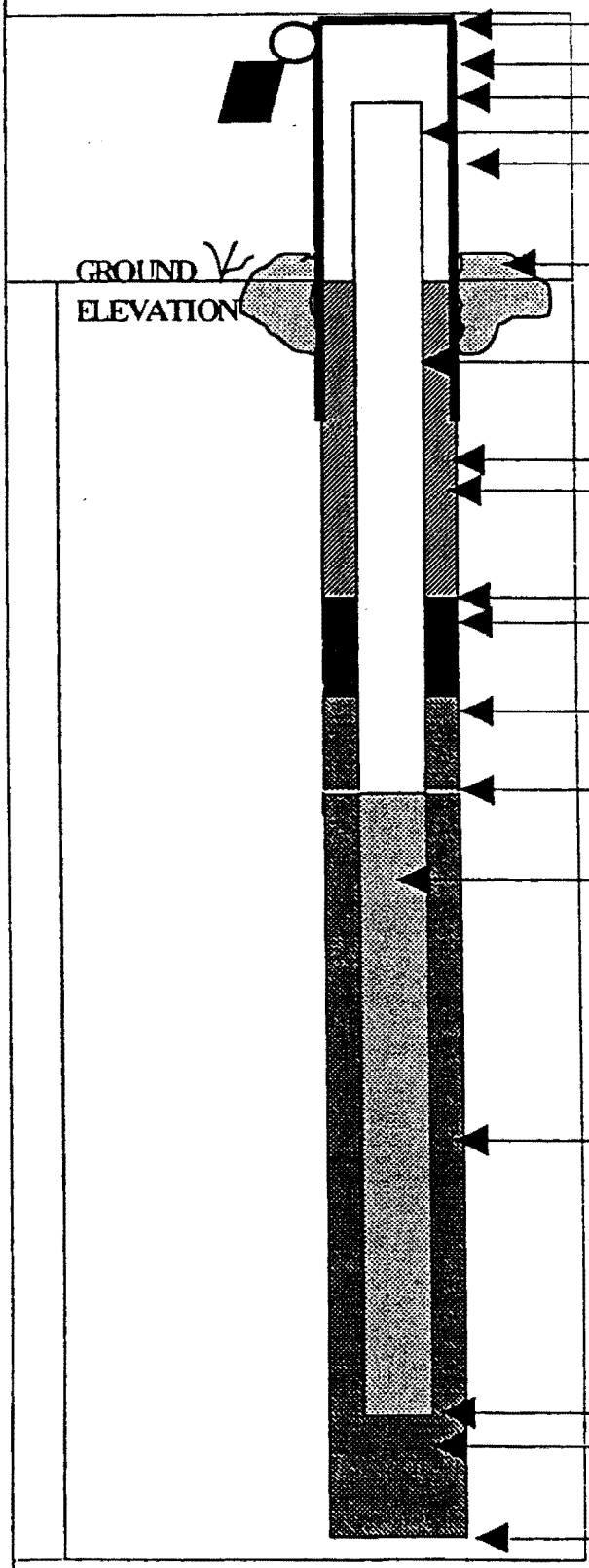
APPENDIX C

MONITORING WELL CONSTRUCTION SHEETS

BORING NO.: 43-15

OVERBURDEN MONITORING WELL SHEET

PROJECT	IR Site 43	LOCATION:	NASP	DRILLER	D. Anthony
PROJECT NO.	CTO 96	BORING	NAS-43-15	METHOD:	DPT
ELEVATION		DATE	10/17/94	DRILLING	
FIELD GEOLOGIST				DEVELOPMENT:	NA



ELEVATION OF TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

STICK-UP TOP OF SURFACE CASING:

STICK-UP RISER PIPE:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING:

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 1"

TYPE OF RISER PIPE: 40 PVC

BOREHOLE DIAMETER: 3"

TYPE OF SEAL: Bentonite 0-0.5'

ELEVATION / DEPTH OF SEAL: /

TYPE OS SEAL:

DEPTH TOP OF SAND PACK: 0.5'

ELEVATION / DEPTH TOP OF SCREEN: 19.5'

TYPE OF SCREEN: 40 PVC

SLOT SIZE X LENGTH: 0.01" X 10'

I.D. OF SCREEN: 1"

TYPE OF SAND PACK: Medium (PrePack)

ELEVATION / DEPTHBOTTOM OF SCREEN: 19.5'

ELEVATION / DEPTH BOTTOM OF SAND PACK: /

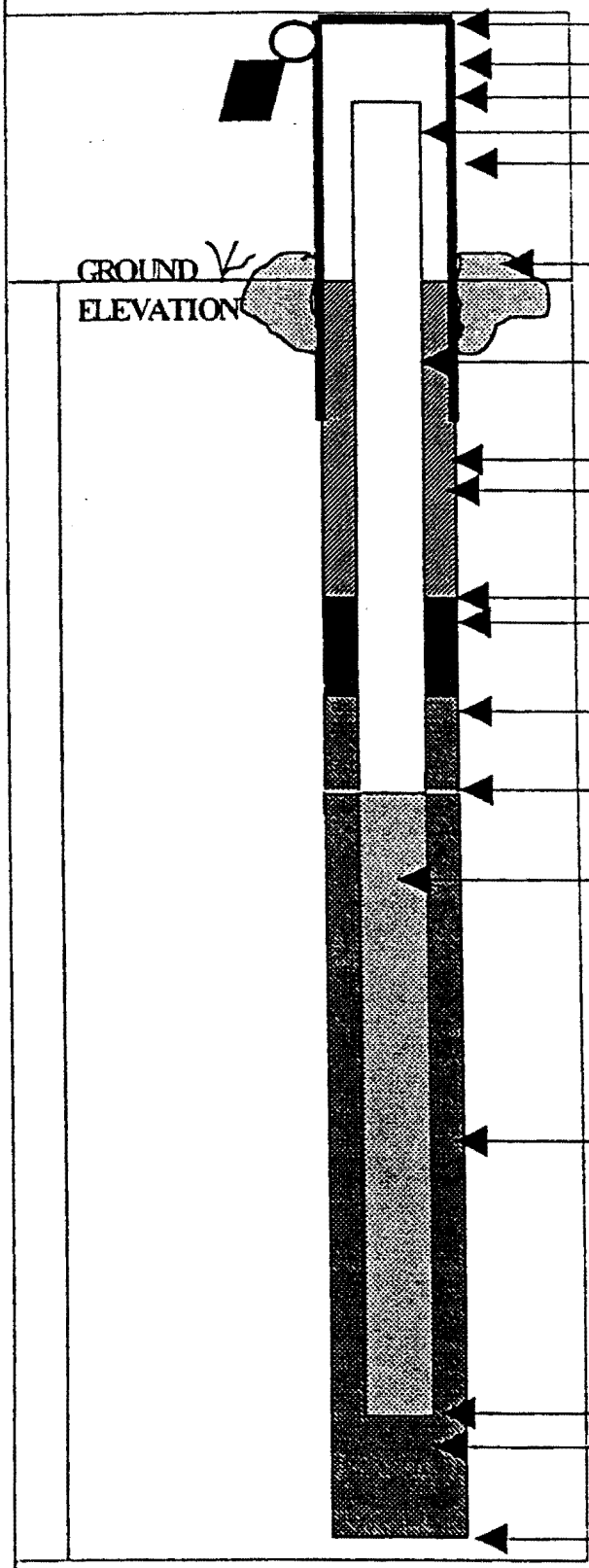
TYPE OF BACKFILL BELOW OBSERVATION WELL:

ELEVATION / DEPTH OF HOLE: /

BORING NO.: 43-2S

OVERBURDEN MONITORING WELL SHEET

PROJECT	IR Site 43	LOCATION:	NASP	DRILLER	D. Anthony
PROJECT NO.	CTO 96	BORING	NAS-43-2S	METHOD:	DPT
ELEVATION		DATE	10/17/99	DRILLING	
FIELD GEOLOGIST				DEVELOPMENT:	NA



ELEVATION OF TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

STICK-UP TOP OF SURFACE CASING:

STICK-UP RISER PIPE:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING:

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 1"

TYPE OF RISER PIPE: 40 PVC

BOREHOLE DIAMETER: 3"

TYPE OF SEAL: Bentonite 0-0.5'

ELEVATION / DEPTH OF SEAL: 1

TYPE OS SEAL:

DEPTH TOP OF SAND PACK: 0.5'

ELEVATION / DEPTH TOP OF SCREEN: 19.4'

TYPE OF SCREEN: 40 PVC

SLOT SIZE X LENGTH: 0.01" X 10'

I.D. OF SCREEN: 1"

TYPE OF SAND PACK: Medium (Pure Pack)

ELEVATION / DEPTHBOTTOM OF SCREEN: 119.4

ELEVATION / DEPTH BOTTOM OF SAND PACK: 1

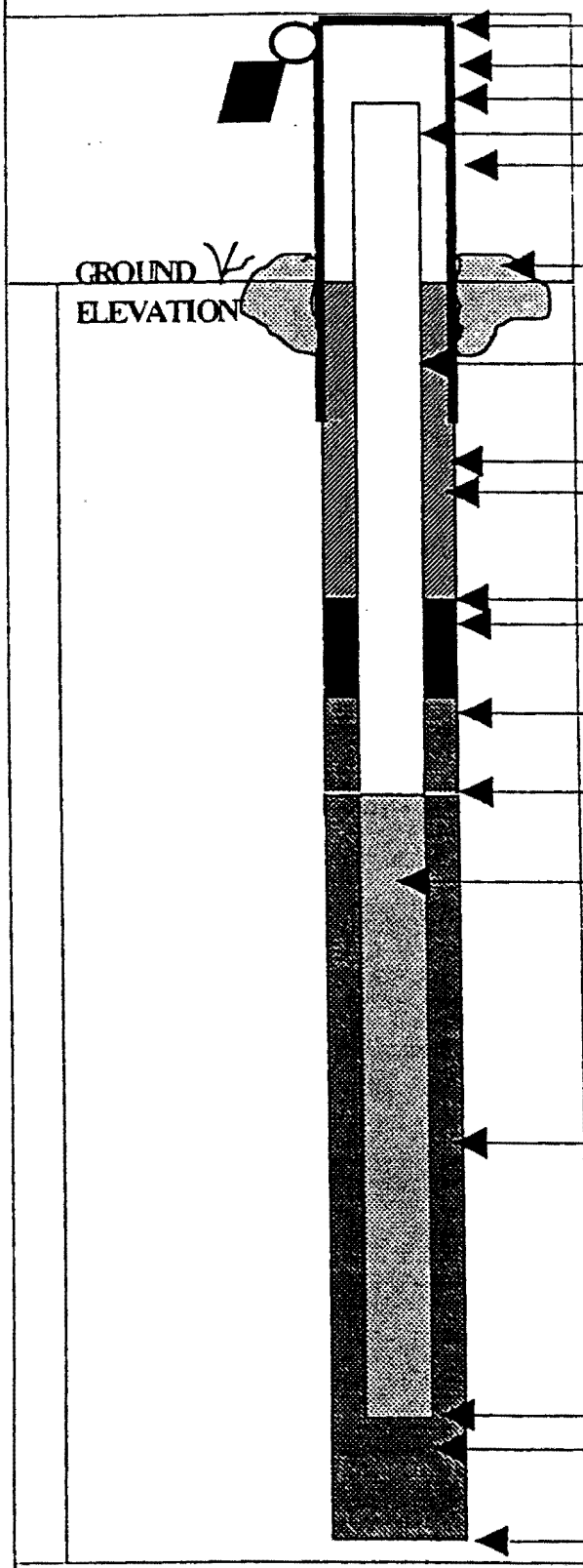
TYPE OF BACKFILL BELOW OBSERVATION WELL:

ELEVATION / DEPTH OF HOLE: 1

BORING NO.: NAS-43 -3S

OVERBURDEN MONITORING WELL SHEET

PROJECT IR Site 43	LOCATION: NASP	DRILLER D. Authoy
PROJECT NO. CTO 96	BORING NAS-43-3S	METHOD: DPT
ELEVATION	DATE 10/17/99	DRILLING
FIELD GEOLOGIST		DEVELOPMENT: NA



ELEVATION OF TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

STICK-UP TOP OF SURFACE CASING:

STICK-UP RISER PIPE:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING:

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 1"

TYPE OF RISER PIPE: 40 PVC

BOREHOLE DIAMETER: 3"

TYPE OF SEAL: Bentonite 0-0.5'

ELEVATION / DEPTH OF SEAL: 1.05'

TYPE OS SEAL: Medium Sand

DEPTH TOP OF SAND PACK:

ELEVATION / DEPTH TOP OF SCREEN: 19.5

TYPE OF SCREEN: 40 PVC

SLOT SIZE X LENGTH: 0.01" X10'

I.D. OF SCREEN: 1"

TYPE OF SAND PACK: Medium (Pure Pack)

ELEVATION / DEPTHBOTTOM OF SCREEN: 119.5'

ELEVATION / DEPTH BOTTOM OF SAND PACK: 1

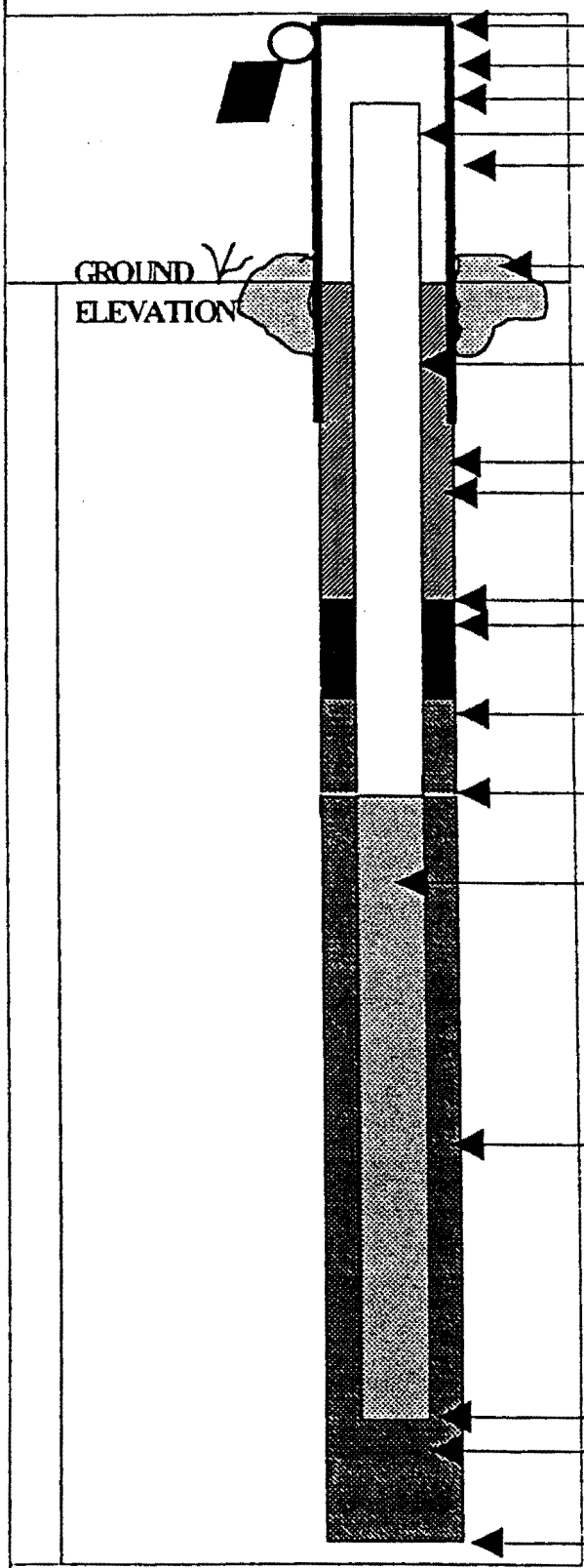
TYPE OF BACKFILL BELOW OBSERVATION WELL:

ELEVATION / DEPTH OF HOLE: 1

BORING NO.: NAS-43-45

OVERBURDEN MONITORING WELL SHEET

PROJECT	IR Site 43	LOCATION:	NASP	DRILLER	D Anthony
PROJECT NO.	CTO 46	BORING	NAS-43 45	METHOD:	DPT
ELEVATION		DATE	10/17/99	DRILLING	
FIELD GEOLOGIST				DEVELOPMENT: NA	



ELEVATION OF TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

STICK-UP TOP OF SURFACE CASING:

STICK-UP RISER PIPE:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING:

TYPE OF SURFACE SEAL: Concrete

RISER PIPE I.D.: 1"

TYPE OF RISER PIPE: 40 PVC

BOREHOLE DIAMETER: 6"

TYPE OF SEAL: Bentonite 0-0.5'

ELEVATION / DEPTH OF SEAL: 10.5

TYPE OS SEAL: Fine Sand

DEPTH TOP OF SAND PACK: 14.5'

ELEVATION / DEPTH TOP OF SCREEN: 15'

TYPE OF SCREEN: 40 PVC

SLOT SIZE X LENGTH: 0.01" X 10'

I.D. OF SCREEN: 1"

TYPE OF SAND PACK: Medium (Pre Pack)

ELEVATION / DEPTHBOTTOM OF SCREEN: 15'

ELEVATION / DEPTH BOTTOM OF SAND PACK: 1

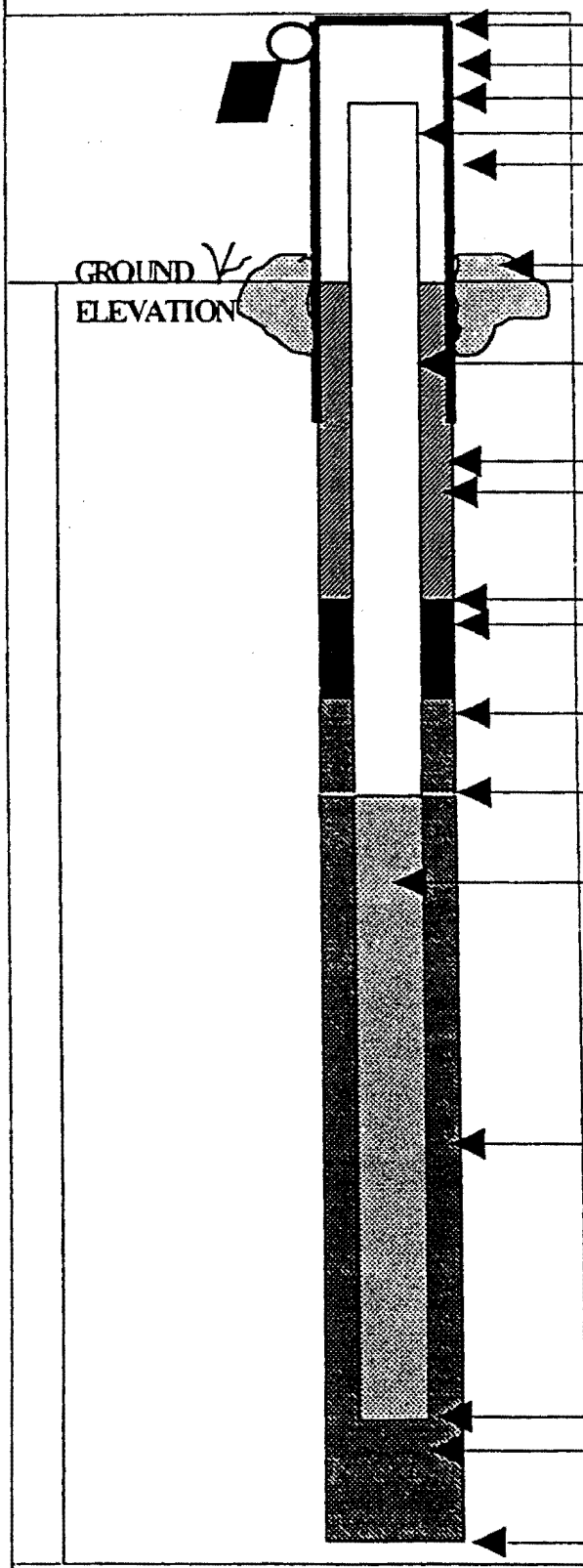
TYPE OF BACKFILL BELOW OBSERVATION WELL:

ELEVATION / DEPTH OF HOLE: 1

BORING NO.: 43-5S

OVERBURDEN MONITORING WELL SHEET

PROJECT IR Site 43	LOCATION: NASP	DRILLER D. Anthony
PROJECT NO. 0T046	BORING NAS-43-5S	METHOD: DPT
ELEVATION	DATE 10/17/99	DRILLING
FIELD GEOLOGIST		DEVELOPMENT: NA



ELEVATION OF TOP OF SURFACE CASING:

ELEVATION OF TOP OF RISER PIPE:

STICK -UP TOP OF SURFACE CASING:

STICK-UP RISER PIPE:

I.D. OF SURFACE CASING:

TYPE OF SURFACE CASING: NA

TYPE OF SURFACE SEAL:

RISER PIPE I.D.: ~~40 PVC~~ 1"

TYPE OF RISER PIPE: 40 PVC

BOREHOLE DIAMETER: 3"

TYPE OF SEAL:

ELEVATION / DEPTH OF SEAL: 10-0.5'

TYPE OS SEAL: Bentonite

DEPTH TOP OF SAND PACK: 0.5'

ELEVATION / DEPTH TOP OF SCREEN: 19'

TYPE OF SCREEN: 40 PVC

SLOT SIZE X LENGTH: 0.01" X 10'

I.D. OF SCREEN: 1"

TYPE OF SAND PACK: Medium (Pure Pack)

ELEVATION / DEPTHBOTTOM OF SCREEN: 119'

ELEVATION / DEPTH BOTTOM OF SAND PACK: 1

TYPE OF BACKFILL BELOW OBSERVATION WELL:

ELEVATION / DEPTH OF HOLE: 1

APPENDIX D

MONITORING WELL DEVELOPMENT SHEETS

MONITORING WELL DEVELOPMENT RECORD

l: 43-15
: 43
e Installed: 10 17 95
e Developed: 10 18 99
. Method: surge & pump
np Type: peristaltic

Depth to Bottom (ft.): 19.47 To
Static Water Level Before (ft.): 15.60
Static Water Level After (ft.):
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 1"

Responsible Personnel: Jeff Alexander
Drilling Co.: TEG
Project Name:
Project Number: 40189

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.) DO
110		.5		23.5	6.28	.111	999	0.28
117		1		23.5	6.20	.102	999	0.30
25		2		23.5	6.17	.100	197	0.27
130		2.5		23.5	6.16	.098	492	0.36
135		3.5		23.5	6.14	.098	445	0.31
144		4		23.5	6.13	.098	142	0.57
149		5		23.6	6.12	.098	102	2.69

MONITORING WELL DEVELOPMENT RECORD

Page ___ of ___

l: 43 - 25
: 43
e Installed: 10.17.95
e Developed: 10.18.95
. Method: surge + pump
np Type: peristaltic

Depth to Bottom (ft.): 19.35 bls
Static Water Level Before (ft.): 16.85 bls
Static Water Level After (ft.): ___
Screen Length (ft.): 10'
Specific Capacity: ___
Casing ID (in.): 1"

Responsible Personnel: Jeff Alexander
Drilling Co.: Teg
Project Name: ___
Project Number: N0189

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.) DO
200		.5		24.1	6.22	.115	830	0.30
208		1		24.2	6.21	.107	359	0.30
215		1.5		24.3	6.20	.105	109	0.30
220		2		24.3	6.18	.102	37	0.37

MONITORING WELL DEVELOPMENT RECORD

l: 43 - 3s
: NASP - 43
e Installed: 10 17 95
e Developed: 10 18 99
/. Method: surge + pump
np Type: peristaltic

Depth to Bottom (ft.): 19.61 bls
Static Water Level Before (ft.): 16.64 bls
Static Water Level After (ft.):
Screen Length (ft.): 10'
Specific Capacity:
Casing ID (in.): 1"

Responsible Personnel: Jeff Alyson
Drilling Co.: TEG
Project Name:
Project Number:

Time	Estimated Sediment Thickness (Ft.)	Cumulative Water Volume (Gal.)	Water Level Readings (Ft. below TOC)	Temperature (Degrees C)	pH	Specific Conductance (Units ____)	Turbidity (NTU)	Remarks (odor, color, etc.) DO
555		.5		25.5	6.11	.232	779	1.00
600		1		25.4	6.06	.223	9	1.32
605		1.5		25.5	6.09	.220	82	1.67
610		2.5		25.6	6.08	.219	Ø	1.64

APPENDIX E

GROUNDWATER SAMPLE SHEETS

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola
Project No.: CTO 96

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Pen-43-15-01
Sample Location: 43-15
Sampled By: R. Franklin
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10/27/99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1025	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: PERISTALTIC								

PURGE DATA:

Date: 10/27/99	Time	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other WL
Method: PERISTALTIC	0851	6.01	0.074	22.8	328	1.86	0.0	15.36
Monitor Reading (ppm):	0859	6.15	0.072	22.7	73	2.66	0.0	15.36
Well Casing Diameter & Material	0909	6.17	0.072	22.3	60	2.39	0.0	15.38
Type: 2" PVC		SEE LOW FLOW PURGE DATA SHEET						
Total Well Depth (TD): 19.5'	0920	6.16	0.072	22.7	40	2.19	0.0	15.38
Static Water Level (WL): ~~15~~ 15.36'	0941	6.11	0.073	22.8	24	2.07	0.0	15.36
One Casing Volume (gal/L): ~~0.128~~ 0.169	1007	6.16	0.072	22.8	25	2.06	0.0	15.36
Start Purge (hrs): 0844	1019	6.14	0.073	23.2	~~3~~ 425	1.89	0.0	15.36
End Purge (hrs): 1023								
Total Purge Time (min): 99								
Total Vol. Purged (gal/L): 5.5								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOCs		2 x 40 ml	
SVOC		2 x 1 ltr amb	
pest		"	
PCB		"	
metals		1 ltr poly	
Cyanide		1 .5 ltr poly	
anions		1 500 ml poly	
Sulfide		1 500 ml poly	
TOC		1 250 ml poly	
methane		2 x 40 ml	

OBSERVATIONS / NOTES:

19.5
15.36
~~3.14~~
4.14

4.14 x 0.04~~8~~ 04 = ~~0.128~~ 0.169 gal

Tubing set @ 18.0'

Circle If Applicable:

MS/MSD	Duplicate ID No.:

Signature(s): [illegible]

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola
Project No.: FLORN0189

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Pen-43-25-01
Sample Location: 25
Sampled By: JA
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10 27 99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 0935	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: PERISTALTIC	—	6.28	.078	23.6	24	1.71		

PURGE DATA:

Date: 10 27 99	Time	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	~~Other~~ wl
Method: PERISTALTIC	0847	5.60	.091	22.6	499	1.90	—	—
Monitor Reading (ppm): Ø	0854	6.33	.078	23.1	121	3.44	—	16.35'
Well Casing Diameter & Material	0911	6.30	.078	23.4	48	2.09	—	—
Type: 2" PVC	SEE LOW FLOW PURGE DATA SHEET							
Total Well Depth (TD): 18.75	0914	6.30	.078	23.4	29	3.00	—	—
Static Water Level (WL): 16.33	0929	6.28	.078	23.6	24	1.71	—	—
One Casing Volume(gal/L): 0.1								
Start Purge (hrs): 0840								
End Purge (hrs): 0930								
Total Purge Time (min): 50								
Total Vol. Purged (gal/L): 3								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
SVOC	—	2 x 1L g	yes
pesticides	—	2 x 1L g	yes
PCB's	—	2 x 1L g	yes
VOC's	HCl	2 x 40ml g	yes
methane	—	2 x 40ml g	
TOC	H_2SO_4	1 x 250ml g	
Anions	—	1 x 500ml poly.	
Sulfide	Zn + NaOH	1 x 250ml poly.	
cyanide	NaOH	1 x 1L poly	
metals	HNO_3	1 x 500ml poly	

OBSERVATIONS / NOTES:

18.75
16.33
.041
.099

Circle if Applicable:

MS/MSD | Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Page___ of ___

Project Site Name: NAS Pensacola
Project No.: N0189

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: Pen-43-3s-01
Sample Location: NAS-43-3s
Sampled By: JA, HE
C.O.C. No.:
Type of Sample:
[] Low Concentration
[] High Concentration

SAMPLING DATA:

Date: 10 27 99	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Time: 1530	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Method: PERISTALTIC	Clear	6.19	.205	25.0	3	1.69	0.0	—

PURGE DATA:

Date: 10 27 99	Time	pH	S.C.	Temp. (C)	Turbidity	DO	Salinity	Other
Method: PERISTALTIC 1530	1453	6.30	.206	25.0	678	2.11	0.0	16.59
Monitor Reading (ppm): ϕ	1500	6.21	.206	25.0	58	1.56	0.0	16.59
Well Casing Diameter & Material	1509	6.22	.204	25.0	74	1.99	0.0	—
Type: 2" PVC	SEE LOW FLOW PURGE DATA SHEET							
Total Well Depth (TD): 19.30	1515	6.17	.205	24.9	17	1.58	0.0	—
Static Water Level (WL): 16.59	1519	6.17	.205	25.0	8	1.40	0.0	—
One Casing Volume(gal/L): .11	1525	6.19	.205	25.0	3	1.61	0.0	
Start Purge (hrs): 1450								
End Purge (hrs): 1525								
Total Purge Time (min): 35								
Total Vol. Purged (gal/L): 2								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
VOA	HCl	2 x 40ml g	
SVOC	—	2 x 1L amber	
Pesticides	—	2 x 1L amber	
PCB	—	2 x 1L amber	
Metals	HNO_3	1 x 1L poly	
Cyanide	NaOH	1 x 500ml poly	
Anions	—	1 x 500ml poly	
TOC	H_2SO_4	1 x 250ml amber	
methane	—	2 x 40ml g	
Sulfide	Zn + NaOH	1 x 250ml	

OBSERVATIONS / NOTES:

MS/MSD - Pen - 43 - 35 - 01MS

Circle if Applicable:

MS/MSD	Duplicate ID No.: Pen-43-DD-01	Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola
Project No.: ~~0078~~ 0096 (15)

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.: PEN-43-45-01
Sample Location: Site 43
Sampled By: JE
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color	pH	S.C.	Temp.	Turbidity	DO	Salinity	Other
Date: 10-27-99	Visual	Standard	mS/cm	Degrees C	NTU	mg/l	%	NA
Time: 0930								
Method: PERISTALTIC	clear	5.53	0.119	25.3	8	1.54	~~9~~ JE	—

PURGE DATA:

	Time	pH	S.C.	Temp. (C)	Turbidity	DO	Water Level ~~Salinity~~ JE	Flow Rate ~~Other~~ JE
Date: 10-27-99								
Method: PERISTALTIC	0900	5.19	0.180	24.1	113	2.17	9.00	~400 mL/min
Monitor Reading (ppm): —	0907	5.45	0.119	25.0	37	0.33	9.00	~400 mL/min
Well Casing Diameter & Material	0914	5.63	0.120	24.9	20	2.26	9.01	~350 mL/min
Type: ~~2" PVC~~ 1" PVC	SEE LOW FLOW PURGE DATA SHEET							
Total Well Depth (TD): 15.05	0917	5.50	0.120	25.1	18	2.48	9.01	~350 mL/min
Static Water Level (WL): 9.00	0922	5.47	0.119	25.1	10	1.50	9.00	~275 mL/min
One Casing Volume(gal/L): 0.25 gal	—							
Start Purge (hrs): 0900	0926	5.53	0.119	25.3	8	1.54	9.00	~275 mL/min
End Purge (hrs): 0926								
Total Purge Time (min): 26 min								
Total Vol. Purged (gal/L): 2.3 gal								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
SVOC	—	(2) 1L glass	
Pesticides	—	(2) 1L glass	
PCB's	—	(2) 1L glass	
VOC's	HCl	(2) 40mL ~~JE~~ vials	
Methane	—	(2) 40mL vials	
TOC	H_2SO_4	(1) 250mL glass	
Anions	—	(1) 500mL poly	
Sulfide	Zn-NaOH	(1) 250mL poly	
Cyanide	NaOH	(1) 1L poly	
Metals	HNO_3	(1) 500mL poly	

OBSERVATIONS / NOTES:

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

GROUNDWATER SAMPLE LOG SHEET

Project Site Name: NAS Pensacola
Project No.: ~~0098~~ 0096 (RE)

[] Domestic Well Data
[X] Monitoring Well Data
[] Other Well Type:
[] QA Sample Type:

Sample ID No.:
Sample Location: PEN-43-5s-01
Sampled By: H.E.
C.O.C. No.:
Type of Sample:
[X] Low Concentration
[] High Concentration

SAMPLING DATA:

	Color Visual	pH Standard	S.C. mS/cm	Temp. Degrees C	Turbidity NTU	DO mg/l	~~Salinity~~ %	~~Other~~ NA
Date: 10-27-99							H_2O Level	Flow Rate
Time: 1030								
Method: PERISTALTIC		6.09	0.096	24.7	36	1.56	15.82	300 ml/min

PURGE DATA:

	Time	pH	S.C.	Temp. (C)	Turbidity	DO	~~Salinity~~	~~Other~~
Date: 10-27-99					999		H_2O Level	FLOW RATE
Method: PERISTALTIC	0852	6.24	0.092	23.4	~~999~~	2.13	16.79	150 ml/min
Monitor Reading (ppm): —	0910	6.10	0.094	23.9	116	1.59	15.82	300 ml/min
Well Casing Diameter & Material	0933	6.10	0.095	24.1	63	1.61	15.82	"
Type: ~~2" PVC~~ 1" PVC		SEE LOW FLOW PURGE DATA SHEET						
Total Well Depth (TD): 19.57	0947	6.06	0.095	24.0	59	1.57	15.82	"
Static Water Level (WL): 16.79	0954	6.06	0.095	24.3	40	1.90	"	"
One Casing Volume(gal/L): .11	1022	6.04	0.096	24.5	32	1.49	"	"
Start Purge (hrs): 0850	1030	6.09	0.096	24.7	36	1.56	"	"
End Purge (hrs): 1030								
Total Purge Time (min): 100								
Total Vol. Purged (gal/L): 8								

SAMPLE COLLECTION INFORMATION:

Analysis	Preservative	Container Requirements	Collected
Volatiles	HCL / 4°C	(2) 40mL Vials	Yes
PCBs	4°C	(2) 1L Amber	
Pesticides	4°C	(2) 1L Amber	
TOC	H_2SO_4 / 4°C	(1) 250mL	
METALS	HNO_3 / 4°C	(1) 500mL Poly	
Cyanide	NaOH / 4°C	(1) 1L Poly	
Methane	4°C	(2) 40mL Vials	
Sulfide	Zinc Acetate / 4°C	(1) 500mL Poly	
Anions	4°C	(1) 500mL Poly	
SVOC	4°C	(2) 1L Ambers	

OBSERVATIONS / NOTES:

.041

Circle if Applicable:

MS/MSD	Duplicate ID No.:

Signature(s):

APPENDIX F

LABORATORY ANALYTICAL DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.01

Sample wt/vol: 3.8 (g/mL) G Lab File ID: R35045.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	13	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.01

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 09102608.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/26/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	bis(2-Chloroisopropyl)ether	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
111-91-1	bis(2-Chloroethoxy)methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	31	JB
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	920	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	920	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	920	U
83-32-9	Acenaphthene	370	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV01

) Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.01

Sample wt/vol: 30.3 (g/mL) G Lab File ID: 09102608.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/26/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	370	U
51-28-5	2,4-Dinitrophenol	920	U
100-02-7	4-Nitrophenol	920	U
132-64-9	Dibenzofuran	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	920	U
534-52-1	4,6-Dinitro-2-methylphenol	920	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenylphenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	920	U
86-74-8	Carbazole	370	U
85-01-8	Phenanthrene	55	J
120-12-7	Anthracene	370	U
84-74-2	Di-n-butylphthalate	31	JB
206-44-0	Fluoranthene	150	J
129-00-0	Pyrene	180	J
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	100	J
218-01-9	Chrysene	160	J
117-81-7	bis(2-Ethylhexyl)phthalate	100	JB
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	250	J
207-08-9	Benzo(k)fluoranthene	140	J
50-32-8	Benzo(a)pyrene	190	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	J
53-70-3	Dibenz(a,h)anthracene	150	J
191-24-2	Benzo(g,h,i)perylene	320	J

(1) - Cannot be separated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV01

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.01

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.7	P
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	2.7	U
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	2.7	U
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	91	U
	Surrogate amount spiked	7.31	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV01

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.01

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	37	U
11104-28-2	Aroclor-1221	37	U
11141-16-5	Aroclor-1232	37	U
53469-21-9	Aroclor-1242	37	U
12672-29-6	Aroclor-1248	37	U
11097-69-1	Aroclor-1254	37	U
11096-82-5	Aroclor-1260	37	U
Surrogate amount spiked		7.41	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.01
Level (low/med): LOW Date Received: 10/07/99
% Solids: 90.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5220			P
7440-36-0	Antimony	40.4		N	P
7440-38-2	Arsenic	15.0			P
7440-39-3	Barium	1210			P
7440-41-7	Beryllium	0.18	B		P
7440-43-9	Cadmium	7.5			P
7440-70-2	Calcium	2520		N	P
7440-47-3	Chromium	24.0		N*	P
7440-48-4	Cobalt	5.7			P
7440-50-8	Copper	4010		E*	P
7439-89-6	Iron	60900		*	P
7439-92-1	Lead	4820		*	P
7439-95-4	Magnesium	663		N*	P
7439-96-5	Manganese	506		*	P
7439-97-6	Mercury	0.06			AV
7440-02-0	Nickel	149		N*	P
7440-09-7	Potassium	167	B		P
7782-49-2	Selenium	2.3			P
7440-22-4	Silver	5.9			P
7440-23-5	Sodium	246	B		P
7440-28-0	Thallium	1.5			P
7440-62-2	Vanadium	321			P
7440-66-6	Zinc	4760			P
	Cyanide	0.22	B		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV02

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.02

Sample wt/vol: 3.6 (g/mL) G Lab File ID: R35046.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	14	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV02

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.02

Sample wt/vol: 33.4 (g/mL) G Lab File ID: 09102227.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-di-n-propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	31	JB
106-47-8	4-Chloroaniline	320	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	800	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	800	U
131-11-3	Dimethylphthalate	320	U
208-96-8	Acenaphthylene	320	U
606-20-2	2,6-Dinitrotoluene	320	U
99-09-2	3-Nitroaniline	800	U
83-32-9	Acenaphthene	320	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV02

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.02

Sample wt/vol: 33.4 (g/mL) G Lab File ID: 09102227.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	320	U
51-28-5	2,4-Dinitrophenol	800	U
100-02-7	4-Nitrophenol	800	U
132-64-9	Dibenzofuran	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	800	U
534-52-1	4,6-Dinitro-2-methylphenol	800	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenylphenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	800	U
86-74-8	Carbazole	320	U
85-01-8	Phenanthrene	55	J
120-12-7	Anthracene	320	U
84-74-2	Di-n-butylphthalate	20	JB
206-44-0	Fluoranthene	140	J
129-00-0	Pyrene	190	J
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	320	U
56-55-3	Benzo(a)anthracene	170	J
218-01-9	Chrysene	230	J
117-81-7	bis(2-Ethylhexyl)phthalate	96	JB
117-84-0	Di-n-octylphthalate	320	U
205-99-2	Benzo(b)fluoranthene	420	
207-08-9	Benzo(k)fluoranthene	250	J
50-32-8	Benzo(a)pyrene	500	
193-39-5	Indeno(1,2,3-cd)pyrene	510	
53-70-3	Dibenz(a,h)anthracene	340	
191-24-2	Benzo(g,h,i)perylene	980	

(1) - Cannot be separated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV02

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.02

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) ___ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	3.5	P
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	2.7	U
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	4.2	P
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	89	U
	Surrogate amount spiked	7.17	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV02

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.02

Sample wt/vol: 32.0 (g/mL) G Lab File ID: _____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.72	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV02

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.02
Level (low/med): LOW Date Received: 10/07/99
% Solids: 92.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5080			P
7440-36-0	Antimony	25.1		N	P
7440-38-2	Arsenic	13.3			P
7440-39-3	Barium	1570			P
7440-41-7	Beryllium	0.17	B		P
7440-43-9	Cadmium	22.5			P
7440-70-2	Calcium	9610		N	P
7440-47-3	Chromium	31.6		N*	P
7440-48-4	Cobalt	4.0			P
7440-50-8	Copper	1400		E*	P
7439-89-6	Iron	37900		*	P
7439-92-1	Lead	8160		*	P
7439-95-4	Magnesium	1240		N*	P
7439-96-5	Manganese	382		*	P
7439-97-6	Mercury	1.3			AV
7440-02-0	Nickel	48.5		N*	P
7440-09-7	Potassium	213	B		P
7782-49-2	Selenium	1.5			P
7440-22-4	Silver	3.4			P
7440-23-5	Sodium	429			P
7440-28-0	Thallium	1.1			P
7440-62-2	Vanadium	70.5			P
7440-66-6	Zinc	6860			P
	Cyanide	0.66			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03

Sample wt/vol: 4.5 (g/mL) G Lab File ID: N36894.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 24 Date Analyzed: 10/19/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	7	U
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	5	J
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV03RE

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03RA

Sample wt/vol: 4.5 (g/mL) G Lab File ID: R35047.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 24 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	22	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV03

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03

Sample wt/vol: 30.2 (g/mL) G Lab File ID: O9102228.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 24 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440	U
111-44-4	bis(2-Chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
95-50-1	1,2-Dichlorobenzene	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	bis(2-Chloroisopropyl)ether	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
111-91-1	bis(2-Chloroethoxy)methane	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	42	JB
106-47-8	4-Chloroaniline	440	U
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	440	U
208-96-8	Acenaphthylene	440	U
606-20-2	2,6-Dinitrotoluene	440	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	440	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03

Sample wt/vol: 30.2 (g/mL) G Lab File ID: 09102228.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 24 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	440	U
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	440	U
84-66-2	Diethylphthalate	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
86-73-7	Fluorene	440	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine (1)	440	U
101-55-3	4-Bromophenylphenylether	440	U
118-74-1	Hexachlorobenzene	440	U
87-86-5	Pentachlorophenol	1100	U
86-74-8	Carbazole	440	U
85-01-8	Phenanthrene	140	J
120-12-7	Anthracene	29	J
84-74-2	Di-n-butylphthalate	32	JB
206-44-0	Fluoranthene	280	J
129-00-0	Pyrene	260	J
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3'-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	160	J
218-01-9	Chrysene	200	J
117-81-7	bis(2-Ethylhexyl)phthalate	160	JB
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	240	J
207-08-9	Benzo(k)fluoranthene	210	J
50-32-8	Benzo(a)pyrene	270	J
193-39-5	Indeno(1,2,3-cd)pyrene	220	J
53-70-3	Dibenz(a,h)anthracene	170	J
191-24-2	Benzo(g,h,i)perylene	420	J

(1) - Cannot be separated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV03

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03

Sample wt/vol: 31.5 (g/mL) G Lab File ID:_____

% Moisture: 24 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.6	U
319-85-7	beta-BHC	1.6	U
319-86-8	delta-BHC	1.6	U
58-89-9	gamma-BHC (Lindane)	1.6	U
76-44-8	Heptachlor	1.6	U
309-00-2	Aldrin	1.6	U
1024-57-3	Heptachlor epoxide	1.6	U
959-98-8	Endosulfan I	1.6	U
60-57-1	Dieldrin	3.1	U
72-55-9	4,4'-DDE	3.1	U
72-20-8	Endrin	3.1	U
33213-65-9	Endosulfan II	3.1	U
72-54-8	4,4'-DDD	3.1	U
1031-07-8	Endosulfan sulfate	3.1	U
50-29-3	4,4'-DDT	5.3	P
72-43-5	Methoxychlor	16	U
53494-70-5	Endrin ketone	3.1	U
7421-93-4	Endrin aldehyde	3.1	U
5103-71-9	alpha-Chlordane	1.6	U
5103-74-2	gamma-Chlordane	1.6	U
8001-35-2	Toxaphene	100	U
Surrogate amount spiked		8.35	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV03

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.03

Sample wt/vol: 32.8 (g/mL) G Lab File ID:_____

% Moisture: 24 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	40	U
11104-28-2------	Aroclor-1221	40	U
11141-16-5------	Aroclor-1232	40	U
53469-21-9------	Aroclor-1242	40	U
12672-29-6------	Aroclor-1248	40	U
11097-69-1------	Aroclor-1254	40	U
11096-82-5------	Aroclor-1260	40	U
Surrogate amount spiked		8.02	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV03

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.03
Level (low/med): LOW Date Received: 10/07/99
% Solids: 76.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7330			P
7440-36-0	Antimony	226		N	P
7440-38-2	Arsenic	57.3			P
7440-39-3	Barium	6820			P
7440-41-7	Beryllium	0.26	B		P
7440-43-9	Cadmium	22.6			P
7440-70-2	Calcium	10600		N	P
7440-47-3	Chromium	63.5		N*	P
7440-48-4	Cobalt	5.6			P
7440-50-8	Copper	3470		E*	P
7439-89-6	Iron	36700		*	P
7439-92-1	Lead	16400		*	P
7439-95-4	Magnesium	2780		N*	P
7439-96-5	Manganese	504		*	P
7439-97-6	Mercury	0.37			AV
7440-02-0	Nickel	99.4		N*	P
7440-09-7	Potassium	482			P
7782-49-2	Selenium	0.43	U		P
7440-22-4	Silver	4.7			P
7440-23-5	Sodium	366	B		P
7440-28-0	Thallium	1.2	B		P
7440-62-2	Vanadium	53.9			P
7440-66-6	Zinc	71700			P
	Cyanide	0.51			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV04

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.04

Sample wt/vol: 3.9 (g/mL) G Lab File ID: R35048.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 8 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	27	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV04

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.04

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 09102229.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 8 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	37	JB
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV04

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.04

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 09102229.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 8 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenylphenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
86-74-8	Carbazole	360	U
85-01-8	Phenanthrene	110	J
120-12-7	Anthracene	26	J
84-74-2	Di-n-butylphthalate	25	JB
206-44-0	Fluoranthene	350	J
129-00-0	Pyrene	460	
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	330	J
218-01-9	Chrysene	450	
117-81-7	bis(2-Ethylhexyl)phthalate	120	JB
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	570	
207-08-9	Benzo(k)fluoranthene	310	J
50-32-8	Benzo(a)pyrene	570	
193-39-5	Indeno(1,2,3-cd)pyrene	500	
53-70-3	Dibenz(a,h)anthracene	440	
191-24-2	Benzo(g,h,i)perylene	850	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV04

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.04

Sample wt/vol: 34.1 (g/mL) G Lab File ID:

% Moisture: 8 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.2	U
319-85-7	beta-BHC	1.2	U
319-86-8	delta-BHC	1.2	U
58-89-9	gamma-BHC (Lindane)	1.2	U
76-44-8	Heptachlor	2.9	P
309-00-2	Aldrin	1.2	U
1024-57-3	Heptachlor epoxide	1.2	U
959-98-8	Endosulfan I	1.2	U
60-57-1	Dieldrin	2.4	U
72-55-9	4,4'-DDE	2.4	U
72-20-8	Endrin	2.4	U
33213-65-9	Endosulfan II	2.4	U
72-54-8	4,4'-DDD	2.4	U
1031-07-8	Endosulfan sulfate	2.4	U
50-29-3	4,4'-DDT	5.5	P
72-43-5	Methoxychlor	12	U
53494-70-5	Endrin ketone	2.4	U
7421-93-4	Endrin aldehyde	2.4	U
5103-71-9	alpha-Chlordane	1.2	U
5103-74-2	gamma-Chlordane	1.2	U
8001-35-2	Toxaphene	79	U
	Surrogate amount spiked	6.38	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV04

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.04

Sample wt/vol: 31.4 (g/mL) G Lab File ID:_____

% Moisture: 8 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	34	U
11104-28-2------	Aroclor-1221	34	U
11141-16-5------	Aroclor-1232	34	U
53469-21-9------	Aroclor-1242	34	U
12672-29-6------	Aroclor-1248	34	U
11097-69-1------	Aroclor-1254	34	U
11096-82-5------	Aroclor-1260	34	U
Surrogate amount spiked		6.92	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV04

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.04
Level (low/med): LOW Date Received: 10/07/99
% Solids: 92.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6410			P
7440-36-0	Antimony	62.6		N	P
7440-38-2	Arsenic	17.5			P
7440-39-3	Barium	1530			P
7440-41-7	Beryllium	0.17	B		P
7440-43-9	Cadmium	11.8			P
7440-70-2	Calcium	4660		N	P
7440-47-3	Chromium	31.7		N*	P
7440-48-4	Cobalt	5.9			P
7440-50-8	Copper	15900		E*	P
7439-89-6	Iron	51400		*	P
7439-92-1	Lead	4880		*	P
7439-95-4	Magnesium	1120		N*	P
7439-96-5	Manganese	559		*	P
7439-97-6	Mercury	1.1			AV
7440-02-0	Nickel	71.8		N*	P
7440-09-7	Potassium	244	B		P
7782-49-2	Selenium	2.1			P
7440-22-4	Silver	5.0			P
7440-23-5	Sodium	276	B		P
7440-28-0	Thallium	1.7			P
7440-62-2	Vanadium	106			P
7440-66-6	Zinc	10300			P
	Cyanide	0.41			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV05

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.05

Sample wt/vol: 4.5 (g/mL) G Lab File ID: R35049.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	10	B
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV05

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.05

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 09102230.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	29	JB
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	870	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	870	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	35	J
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	870	U
83-32-9	Acenaphthene	22	J

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV05

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.05

Sample wt/vol: 30.8 (g/mL) G Lab File ID: 09102230.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.8 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
51-28-5	2,4-Dinitrophenol	870	U
100-02-7	4-Nitrophenol	870	U
132-64-9	Dibenzofuran	24	J
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	23	J
100-01-6	4-Nitroaniline	870	U
534-52-1	4,6-Dinitro-2-methylphenol	870	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenylphenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	870	U
85-01-8	Phenanthrene	590	
86-74-8	Carbazole	58	J
120-12-7	Anthracene	130	J
84-74-2	Di-n-butylphthalate	22	JB
206-44-0	Fluoranthene	750	
129-00-0	Pyrene	860	
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	430	
218-01-9	Chrysene	480	
117-81-7	bis(2-Ethylhexyl)phthalate	130	JB
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	420	
207-08-9	Benzo(k)fluoranthene	390	
50-32-8	Benzo(a)pyrene	490	
193-39-5	Indeno(1,2,3-cd)pyrene	350	
53-70-3	Dibenz(a,h)anthracene	190	J
191-24-2	Benzo(g,h,i)perylene	560	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV05

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.05

Sample wt/vol: 33.1 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.4	U
72-55-9	4,4'-DDE	2.4	U
72-20-8	Endrin	2.4	U
33213-65-9	Endosulfan II	2.4	U
72-54-8	4,4'-DDD	2.4	U
1031-07-8	Endosulfan sulfate	2.4	U
50-29-3	4,4'-DDT	7.3	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.4	U
7421-93-4	Endrin aldehyde	2.4	U
5103-71-9	alpha-Chlordane	1.6	P
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	81	U
	Surrogate amount spiked	6.50	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV05

ıb Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.05

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/12/99

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	35	U
11104-28-2	Aroclor-1221	35	U
11141-16-5	Aroclor-1232	35	U
53469-21-9	Aroclor-1242	35	U
12672-29-6	Aroclor-1248	35	U
11097-69-1	Aroclor-1254	35	U
11096-82-5	Aroclor-1260	35	U
Surrogate amount spiked		7.12	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV05

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600

Matrix (soil/water): SOIL Lab Sample ID: 40600-05

Level (low/med): LOW Date Received: 10/07/99

% Solids: 93.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3920			P
7440-36-0	Antimony	26.0		N	P
7440-38-2	Arsenic	16.0			P
7440-39-3	Barium	1510			P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	9.3			P
7440-70-2	Calcium	3380		N	P
7440-47-3	Chromium	93.7		N*	P
7440-48-4	Cobalt	5.9			P
7440-50-8	Copper	1720		E*	P
7439-89-6	Iron	75600		*	P
7439-92-1	Lead	20700		*	P
7439-95-4	Magnesium	954		N*	P
7439-96-5	Manganese	440		*	P
7439-97-6	Mercury	0.58			AV
7440-02-0	Nickel	163		N*	P
7440-09-7	Potassium	154	B		P
7782-49-2	Selenium	2.8			P
7440-22-4	Silver	2.9			P
7440-23-5	Sodium	256	B		P
7440-28-0	Thallium	1.9			P
7440-62-2	Vanadium	57.8			P
7440-66-6	Zinc	6260			P
	Cyanide	0.33			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV06

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: R35050.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	10	B
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV06

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.06

Sample wt/vol: 31.2 (g/mL) G Lab File ID: 09102609.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/26/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	31	JB
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	340	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV06

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.06

Sample wt/vol: 31.2 (g/mL) G Lab File ID: 09102609.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 7 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/26/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	340	U
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenylphenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	860	U
86-74-8	Carbazole	340	U
85-01-8	Phenanthrene	47	J
120-12-7	Anthracene	340	U
84-74-2	Di-n-butylphthalate	20	JB
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	84	J
218-01-9	Chrysene	100	J
117-81-7	bis(2-Ethylhexyl)phthalate	92	JB
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	110	J
207-08-9	Benzo(k)fluoranthene	100	J
50-32-8	Benzo(a)pyrene	100	J
193-39-5	Indeno(1,2,3-cd)pyrene	86	J
53-70-3	Dibenz(a,h)anthracene	33	J
191-24-2	Benzo(g,h,i)perylene	110	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV06

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.06

Sample wt/vol: 31.6 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/20/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	2.6	U
72-20-8	Endrin	2.6	U
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	2.6	U
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	4.2	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.5	P
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	85	U
Surrogate amount spiked		6.81	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV06

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.06

Sample wt/vol: 30.7 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	35	U
11104-28-2------	Aroclor-1221	35	U
11141-16-5------	Aroclor-1232	35	U
53469-21-9------	Aroclor-1242	35	U
12672-29-6------	Aroclor-1248	35	U
11097-69-1------	Aroclor-1254	35	U
11096-82-5------	Aroclor-1260	35	U
Surrogate amount spiked		7.01	

FORM I PEST

1

CLIENT SAMPLE ID

PEN-43SV06

INORGANIC ANALYSES DATA SHEET

Lab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.06
Level (low/med): LOW Date Received: 10/07/99
% Solids: 92.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4060			P
7440-36-0	Antimony	13.8		N	P
7440-38-2	Arsenic	6.6			P
7440-39-3	Barium	620			P
7440-41-7	Beryllium	0.10	B		P
7440-43-9	Cadmium	3.4	B		P
7440-70-2	Calcium	1340		N	P
7440-47-3	Chromium	13.2		N*	P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	1310		E*	P
7439-89-6	Iron	23800		*	P
7439-92-1	Lead	2560		*	P
7439-95-4	Magnesium	422		N*	P
7439-96-5	Manganese	610		*	P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	25.9		N*	P
7440-09-7	Potassium	123	B		P
7782-49-2	Selenium	1.1			P
7440-22-4	Silver	2.0			P
7440-23-5	Sodium	194	B		P
7440-28-0	Thallium	1.2			P
7440-62-2	Vanadium	21.6			P
7440-66-6	Zinc	2610			P
	Cyanide	0.35			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SV07

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.07

Sample wt/vol: 4.2 (g/mL) G Lab File ID: R35051.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 Date Analyzed: 10/20/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	8	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV07

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.07

Sample wt/vol: 30.9 (g/mL) G Lab File ID: 09102232.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SV07

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.07

Sample wt/vol: 30.9 (g/mL) G Lab File ID: 09102232.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. 10 dec. Date Extracted: 10/08/99

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/22/99

Concentrated Extract Volume: 500(uL)

GPC Cleanup: (Y/N) Y pH: 7.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenylphenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
86-74-8	Carbazole	360	U
85-01-8	Phenanthrene	30	J
120-12-7	Anthracene	360	U
84-74-2	Di-n-butylphthalate	23	JB
206-44-0	Fluoranthene	44	J
129-00-0	Pyrene	59	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	48	J
218-01-9	Chrysene	97	J
117-81-7	bis(2-Ethylhexyl)phthalate	79	JB
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	65	J
207-08-9	Benzo(k)fluoranthene	47	J
50-32-8	Benzo(a)pyrene	67	J
193-39-5	Indeno(1,2,3-cd)pyrene	61	J
53-70-3	Dibenz(a,h)anthracene	43	J
191-24-2	Benzo(g,h,i)perylene	110	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV07

ame: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.07

Sample wt/vol: 32.1 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/20/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	2.6	U
72-20-8	Endrin	2.6	U
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	2.6	U
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	2.6	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	86	U
	Surrogate amount spiked	6.92	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SV07

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40600

Matrix: (soil/water) SOIL Lab Sample ID: 40600.07

Sample wt/vol: 31.2 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/07/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/08/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	35	U
11104-28-2------	Aroclor-1221	35	U
11141-16-5------	Aroclor-1232	35	U
53469-21-9------	Aroclor-1242	35	U
12672-29-6------	Aroclor-1248	35	U
11097-69-1------	Aroclor-1254	35	U
11096-82-5------	Aroclor-1260	35	U
Surrogate amount spiked		7.12	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SV07

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40600 SAS No.: SDG No.: 40600
Matrix (soil/water): SOIL Lab Sample ID: 40600.07
Level (low/med): LOW Date Received: 10/07/99
% Solids: 90.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7970			P
7440-36-0	Antimony	20.4		N	P
7440-38-2	Arsenic	22.9			P
7440-39-3	Barium	438			P
7440-41-7	Beryllium	0.09	U		P
7440-43-9	Cadmium	9.6			P
7440-70-2	Calcium	3470		N	P
7440-47-3	Chromium	19.2		N*	P
7440-48-4	Cobalt	12.0			P
7440-50-8	Copper	529		E*	P
7439-89-6	Iron	236000		*	P
7439-92-1	Lead	2080		*	P
7439-95-4	Magnesium	392		N*	P
7439-96-5	Manganese	1170		*	P
7439-97-6	Mercury	1.2			AV
7440-02-0	Nickel	77.6		N*	P
7440-09-7	Potassium	115	B		P
7782-49-2	Selenium	9.1			P
7440-22-4	Silver	0.66	B		P
7440-23-5	Sodium	218	B		P
7440-28-0	Thallium	6.9			P
7440-62-2	Vanadium	596			P
7440-66-6	Zinc	3130			P
	Cyanide	0.47			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43TB10699

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40600

Matrix: (soil/water) WATER Lab Sample ID: 40600.08

Sample wt/vol: 5 (g/mL) ML Lab File ID: K29710.D

Level: (low/med) LOW Date Received: 10/07/99

% Moisture: not dec. _____ Date Analyzed: 10/15/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	8	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.01

Sample wt/vol: 4.9 (g/mL) G Lab File ID: R34909.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 5 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	2	JB
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.01

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101819.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	350	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.01

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101819.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	68	J
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS01

ıb Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.01

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 5 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	3.6	P
72-20-8	Endrin	2.6	U
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	2.6	U
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	2.6	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	86	U
	Surrogate amount spiked	6.88	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS01

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.01

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 5 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/07/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/11/99

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U
Surrogate amount spiked		6.90	

FORM I PEST

1
INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS01

ab Name: SOUTHWEST_LAB_OF_OK_____ Contract:TETPITT___
ab Code: SWOK__ Case No.: 40581 SAS No.: _____ SDG No.: 40581_
latrix (soil/water): SOIL_ Lab Sample ID: 40581.01
evel (low/med): LOW__ Date Received: 10/06/99
Solids: _95.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1000			P
7440-36-0	Antimony_	0.28	U	N	P
7440-38-2	Arsenic__	0.47	B		P
7440-39-3	Barium___	9.3			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium__	0.16	B		P
7440-70-2	Calcium__	352	B	N	P
7440-47-3	Chromium_	1.2			P
7440-48-4	Cobalt___	0.11	B		P
7440-50-8	Copper___	1.7	B		P
7439-89-6	Iron_____	1120		*	P
7439-92-1	Lead_____	16.6			P
7439-95-4	Magnesium	61.7			P
7439-96-5	Manganese	13.2		N	P
7439-97-6	Mercury__	0.02	U		AV
7440-02-0	Nickel___	0.57	B		P
7440-09-7	Potassium	31.6	B		P
7782-49-2	Selenium_	0.35	U		P
7440-22-4	Silver___	0.13	U		P
7440-23-5	Sodium___	221	B		P
7440-28-0	Thallium_	0.36	U		P
7440-62-2	Vanadium_	2.0	B		P
7440-66-6	Zinc_____	17.1			P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: YELLOW___ Clarity After: CLOUDY Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS02

L Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: R34911.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 8 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	4	JB
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS02

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.03

Sample wt/vol: 31.4 (g/mL) G Lab File ID: V9101821.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	350	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS02

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.03

Sample wt/vol: 31.4 (g/mL) G Lab File ID: V9101821.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	80	J
218-01-9	Chrysene	96	J
117-81-7	bis(2-Ethylhexyl)phthalate	48	J
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	160	J
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	110	J
193-39-5	Indeno(1,2,3-cd)pyrene	88	J
53-70-3	Dibenz(a,h)anthracene	45	J
191-24-2	Benzo(g,h,i)perylene	140	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS02

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.03

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 8 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	2.7	U
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	2.7	U
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	90	U
	Surrogate amount spiked	7.22	

FORM I PEST

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS15

ıme: SWL-TULSA Contract: PENSACOLA

..ıb Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.15

Sample wt/vol: 5.3 (g/mL) G Lab File ID: R34923.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 9 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	4	JB
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS02

ame: SWL-TULSA

ab Code: SWOK Case No.: TETPI SDG No.: 40581

atrix: (soil/water) SOIL Lab Sample ID: 40581.03

ample wt/vol: 30.3 (g/mL) G Lab File ID: _____

Moisture: 8 decanted: (Y/N) __ Date Received: 10/06/99

xtraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/07/99

oncentrated Extract Volume: 10000(uL) Date Analyzed: 10/11/99

njection Volume: 0.5(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.17	

FORM I PEST

1
INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SSDD02

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581
Matrix (soil/water): SOIL Lab Sample ID: 40581.21
Level (low/med): LOW Date Received: 10/06/99
% Solids: 96.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	632			P
7440-36-0	Antimony	0.28	U	N	P
7440-38-2	Arsenic	0.24	B		P
7440-39-3	Barium	2.6			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.09	B		P
7440-70-2	Calcium	156	B	N	P
7440-47-3	Chromium	1.5			P
7440-48-4	Cobalt	0.09	B		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	604		*	P
7439-92-1	Lead	24.4			P
7439-95-4	Magnesium	41.8			P
7439-96-5	Manganese	10.1		N	P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.46	B		P
7440-09-7	Potassium	32.9	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	196	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	8.5			P

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS02

ab Name: SOUTHWEST_LAB_OF_OK_____ Contract:TETPITT___

ab Code: SWOK__ Case No.: 40581 SAS No.: _____ SDG No.: 40581_

atrix (soil/water): SOIL_ Lab Sample ID: 40581.03

evel (low/med): LOW__ Date Received: 10/06/99

Solids: _91.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1920	_		P_
7440-36-0	Antimony_	16.5	_	N	P_
7440-38-2	Arsenic__	4.1	B		P_
7440-39-3	Barium___	344	_		P_
7440-41-7	Beryllium	0.13	B		P_
7440-43-9	Cadmium__	2.2	B		P_
7440-70-2	Calcium__	1120	_	N	P_
7440-47-3	Chromium_	10.3	_		P_
7440-48-4	Cobalt___	1.9	B		P_
7440-50-8	Copper___	707	_		P_
7439-89-6	Iron____	16300	_	*	P_
7439-92-1	Lead____	3860	_		P_
7439-95-4	Magnesium	357	_		P_
7439-96-5	Manganese	256	_	N	P_
7439-97-6	Mercury__	0.33	_		AV
7440-02-0	Nickel___	52.6	_		P_
7440-09-7	Potassium	107	B		P_
7782-49-2	Selenium_	0.36	U		P_
7440-22-4	Silver___	3.1	_		P_
7440-23-5	Sodium___	245	_		P_
7440-28-0	Thallium_	0.77	B		P_
7440-62-2	Vanadium_	26.6	_		P_
7440-66-6	Zinc____	1290	_		P_

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM

Color After: YELLOW___ Clarity After: CLOUDY Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: R34910.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 15 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	4	JB
67-64-1	ACETONE	59	
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.02

Sample wt/vol: 30.6 (g/mL) G Lab File ID: V9101820.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	bis(2-Chloroisopropyl)ether	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	960	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	960	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	380	U
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	960	U
83-32-9	Acenaphthene	380	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.02

Sample wt/vol: 30.6 (g/mL) G Lab File ID: V9101820.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 15 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 5.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	960	U
100-02-7	4-Nitrophenol	960	U
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	380	U
100-01-6	4-Nitroaniline	960	U
534-52-1	4,6-Dinitro-2-methylphenol	960	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	960	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	76	J
129-00-0	Pyrene	75	J
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	45	J
218-01-9	Chrysene	59	J
117-81-7	bis(2-Ethylhexyl)phthalate	81	J
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	100	J
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	60	J
193-39-5	Indeno(1,2,3-cd)pyrene	52	J
53-70-3	Dibenz(a,h)anthracene	380	U
191-24-2	Benzo(g,h,i)perylene	60	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS03

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.02

Sample wt/vol: 31.5 (g/mL) G Lab File ID:_____

% Moisture: 15 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.8	U
72-55-9	4,4'-DDE	4.6	
72-20-8	Endrin	2.8	U
33213-65-9	Endosulfan II	2.8	U
72-54-8	4,4'-DDD	2.8	U
1031-07-8	Endosulfan sulfate	2.8	U
50-29-3	4,4'-DDT	7.2	
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.8	U
7421-93-4	Endrin aldehyde	2.8	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	93	U
Surrogate amount spiked		7.47	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS03

Ia. Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.02

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 15 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/11/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 5.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	38	U
11104-28-2------	Aroclor-1221	38	U
11141-16-5------	Aroclor-1232	38	U
53469-21-9------	Aroclor-1242	38	U
12672-29-6------	Aroclor-1248	38	U
11097-69-1------	Aroclor-1254	38	U
11096-82-5------	Aroclor-1260	38	U
Surrogate amount spiked		7.74	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS03

ab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.02

evel (low/med): LOW Date Received: 10/06/99

Solids: 84.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	2.1	B	N	P
7440-38-2	Arsenic	1.4	B		P
7440-39-3	Barium	87.0			P
7440-41-7	Beryllium	0.09	B		P
7440-43-9	Cadmium	0.80	B		P
7440-70-2	Calcium	383		N	P
7440-47-3	Chromium	6.9			P
7440-48-4	Cobalt	0.41	B		P
7440-50-8	Copper	160			P
7439-89-6	Iron	3170		*	P
7439-92-1	Lead	550			P
7439-95-4	Magnesium	81.2			P
7439-96-5	Manganese	75.0		N	P
7439-97-6	Mercury	0.24			AV
7440-02-0	Nickel	5.1			P
7440-09-7	Potassium	50.7	B		P
7782-49-2	Selenium	0.39	U		P
7440-22-4	Silver	0.38	B		P
7440-23-5	Sodium	230			P
7440-28-0	Thallium	0.40	U		P
7440-62-2	Vanadium	8.4			P
7440-66-6	Zinc	427			P

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: YELLOW Clarity After: CLOUDY Artifacts:

omments:

FORM I - IN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS04

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.04

Sample wt/vol: 5.0 (g/mL) G Lab File ID: R34912.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 8 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	3	JB
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS04

ab Name: SWL-TULSA Contract: PENSACOLA

ab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.04

Sample wt/vol: 30.6 (g/mL) G Lab File ID: V9101822.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	890	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	890	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	890	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS04

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.04

Sample wt/vol: 30.6 (g/mL) G Lab File ID: V9101822.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 8 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	890	U
100-02-7	4-Nitrophenol	890	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	890	U
534-52-1	4,6-Dinitro-2-methylphenol	890	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	890	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	75	J
129-00-0	Pyrene	80	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	53	J
218-01-9	Chrysene	69	J
117-81-7	bis(2-Ethylhexyl)phthalate	54	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	130	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	76	J
193-39-5	Indeno(1,2,3-cd)pyrene	70	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	70	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS04

ıb Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.04

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 8 decanted: (Y/N) __ . Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	2.7	U
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	2.7	U
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	88	U
	Surrogate amount spiked	7.10	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS04

a. Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.04

Sample wt/vol: 31.7 (g/mL) G Lab File ID:_____

% Moisture: 8 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/07/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/12/99

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	34	U
11104-28-2	Aroclor-1221	34	U
11141-16-5	Aroclor-1232	34	U
53469-21-9	Aroclor-1242	34	U
12672-29-6	Aroclor-1248	34	U
11097-69-1	Aroclor-1254	34	U
11096-82-5	Aroclor-1260	34	U
Surrogate amount spiked		6.86	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS04

ab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.04

evel (low/med): LOW Date Received: 10/06/99

Solids: 92.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2150			P
7440-36-0	Antimony	8.3		N	P
7440-38-2	Arsenic	5.2	B		P
7440-39-3	Barium	479			P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	2.9			P
7440-70-2	Calcium	1470		N	P
7440-47-3	Chromium	10			P
7440-48-4	Cobalt	1.8	B		P
7440-50-8	Copper	681			P
7439-89-6	Iron	17200		*	P
7439-92-1	Lead	2700			P
7439-95-4	Magnesium	287			P
7439-96-5	Manganese	345		N	P
7439-97-6	Mercury	0.52			AV
7440-02-0	Nickel	26.7			P
7440-09-7	Potassium	63.2	B		P
7782-49-2	Selenium	0.43	B		P
7440-22-4	Silver	1.3			P
7440-23-5	Sodium	238			P
7440-28-0	Thallium	0.79	B		P
7440-62-2	Vanadium	14.5			P
7440-66-6	Zinc	2090			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS05

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: R34913.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 9 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	3	JB
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	2	J
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	19	

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS05

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101823.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	35	J
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS05

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101823.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	89	J
120-12-7	Anthracene	39	J
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	230	J
129-00-0	Pyrene	220	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	140	J
218-01-9	Chrysene	160	J
117-81-7	bis(2-Ethylhexyl)phthalate	46	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	250	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	140	J
193-39-5	Indeno(1,2,3-cd)pyrene	120	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	110	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS05

ab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	4.7	
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	4.9	P
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	90	U
	Surrogate amount spiked	7.23	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS05

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.05

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/12/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/13/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.30	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS05

ab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.05

evel (low/med): LOW Date Received: 10/06/99

Solids: 90.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2500			P
7440-36-0	Antimony	34.7		N	P
7440-38-2	Arsenic	9.7	B		P
7440-39-3	Barium	644			P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	3.5			P
7440-70-2	Calcium	1490		N	P
7440-47-3	Chromium	15.4			P
7440-48-4	Cobalt	2.8			P
7440-50-8	Copper	2860			P
7439-89-6	Iron	37300		*	P
7439-92-1	Lead	3130			P
7439-95-4	Magnesium	476			P
7439-96-5	Manganese	379		N	P
7439-97-6	Mercury	0.65			AV
7440-02-0	Nickel	33.8			P
7440-09-7	Potassium	109	B		P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	3.3			P
7440-23-5	Sodium	247			P
7440-28-0	Thallium	2.2	B		P
7440-62-2	Vanadium	52.5			P
7440-66-6	Zinc	2780			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS06

L Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.07

Sample wt/vol: 5.1 (g/mL) G Lab File ID: R34934.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 10 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	7	B
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	3	J
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS06

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.07

Sample wt/vol: 30.8 (g/mL) G Lab File ID: V9101825.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS06

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.07

Sample wt/vol: 30.8 (g/mL) G Lab File ID: V9101825.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	38	J
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	150	J
129-00-0	Pyrene	150	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	92	J
218-01-9	Chrysene	130	J
117-81-7	bis(2-Ethylhexyl)phthalate	65	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	240	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	130	J
193-39-5	Indeno(1,2,3-cd)pyrene	130	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	130	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS06

ıb Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.07

Sample wt/vol: 31.3 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	13	P
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	7.2	
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	88	U
	Surrogate amount spiked	7.10	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS06

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.07

Sample wt/vol: 30.3 (g/mL) G Lab File ID: _____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/07/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/12/99

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.6 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U
Surrogate amount spiked		7.33	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS06

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

Matrix (soil/water): SOIL Lab Sample ID: 40581.07

Level (low/med): LOW Date Received: 10/06/99

% Solids: 90.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2650			P
7440-36-0	Antimony	15.8		N	P
7440-38-2	Arsenic	8.2	B		P
7440-39-3	Barium	557			P
7440-41-7	Beryllium	0.15	B		P
7440-43-9	Cadmium	2.9			P
7440-70-2	Calcium	962		N	P
7440-47-3	Chromium	13.8			P
7440-48-4	Cobalt	3.2			P
7440-50-8	Copper	1040			P
7439-89-6	Iron	35100		*	P
7439-92-1	Lead	3060			P
7439-95-4	Magnesium	387			P
7439-96-5	Manganese	312		N	P
7439-97-6	Mercury	0.50			AV
7440-02-0	Nickel	54.5			P
7440-09-7	Potassium	82.9	B		P
7782-49-2	Selenium	0.66	B		P
7440-22-4	Silver	1.8			P
7440-23-5	Sodium	211			P
7440-28-0	Thallium	1.5	B		P
7440-62-2	Vanadium	11.9			P
7440-66-6	Zinc	2500			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS07

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.06

Sample wt/vol: 3.9 (g/mL) G Lab File ID: R34914.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 17 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	8	U
74-83-9	BROMOMETHANE	8	U
75-01-4	VINYL CHLORIDE	8	U
75-00-3	CHLOROETHANE	8	U
75-09-2	METHYLENE CHLORIDE	4	JB
67-64-1	ACETONE	8	U
75-15-0	CARBON DISULFIDE	8	U
75-35-4	1 1-DICHLOROETHENE	8	U
75-34-3	1 1-DICHLOROETHANE	8	U
540-59-0	1,2-Dichloroethene (total)	8	U
67-66-3	CHLOROFORM	8	U
107-06-2	1 2-DICHLOROETHANE	8	U
78-93-3	2-BUTANONE	8	U
71-55-6	1 1 1-TRICHLOROETHANE	8	U
56-23-5	CARBON TETRACHLORIDE	8	U
75-27-4	BROMODICHLOROMETHANE	8	U
78-87-5	1 2-DICHLOROPROPANE	8	U
10061-01-5	cis-1,3-Dichloropropene	8	U
79-01-6	TRICHLOROETHENE	8	U
124-48-1	DIBROMOCHLOROMETHANE	8	U
79-00-5	1 1 2-TRICHLOROETHANE	8	U
71-43-2	BENZENE	8	U
10061-02-6	trans-1,3-Dichloropropene	8	U
75-25-2	BROMOFORM	8	U
108-10-1	4-METHYL-2-PENTANONE	8	U
591-78-6	2-HEXANONE	8	U
127-18-4	TETRACHLOROETHENE	8	U
108-88-3	TOLUENE	8	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	8	U
108-90-7	CHLOROBENZENE	8	U
100-41-4	ETHYL BENZENE	8	U
100-42-5	STYRENE	8	U
1330-20-7	Xylene (Total)	8	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS07

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.06

Sample wt/vol: 30.2 (g/mL) G Lab File ID: V9101824.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 17 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	bis(2-Chloroisopropyl)ether	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	1000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	1000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	1000	U
83-32-9	Acenaphthene	400	U

FORM I SV

CJ 10-29-99
74 765

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS07

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.06

Sample wt/vol: 30.2 (g/mL) G Lab File ID: V9101824.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 17 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1000	U
100-02-7	4-Nitrophenol	1000	U
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	1000	U
534-52-1	4,6-Dinitro-2-methylphenol	1000	U
86-30-6	N-Nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	1000	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	130	J
129-00-0	Pyrene	120	J
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	74	J
218-01-9	Chrysene	97	J
117-81-7	bis(2-Ethylhexyl)phthalate	44	J
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	160	J
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	88	J
193-39-5	Indeno(1,2,3-cd)pyrene	90	J
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	110	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS07

› Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.06

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 17 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.6	U
319-85-7	beta-BHC	1.6	U
319-86-8	delta-BHC	1.6	U
58-89-9	gamma-BHC (Lindane)	1.6	U
76-44-8	Heptachlor	1.6	U
309-00-2	Aldrin	1.6	U
1024-57-3	Heptachlor epoxide	1.6	U
959-98-8	Endosulfan I	1.6	U
60-57-1	Dieldrin	3.0	U
72-55-9	4,4'-DDE	4.4	
72-20-8	Endrin	3.0	U
33213-65-9	Endosulfan II	3.0	U
72-54-8	4,4'-DDD	3.0	U
1031-07-8	Endosulfan sulfate	3.0	U
50-29-3	4,4'-DDT	3.0	U
72-43-5	Methoxychlor	16	U
53494-70-5	Endrin ketone	3.0	U
7421-93-4	Endrin aldehyde	3.0	U
5103-71-9	alpha-Chlordane	1.6	U
5103-74-2	gamma-Chlordane	1.6	U
8001-35-2	Toxaphene	99	U
	Surrogate amount spiked	7.95	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS07

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.06

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 17 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	39	U
11104-28-2------	Aroclor-1221	39	U
11141-16-5------	Aroclor-1232	39	U
53469-21-9------	Aroclor-1242	39	U
12672-29-6------	Aroclor-1248	39	U
11097-69-1------	Aroclor-1254	39	U
11096-82-5------	Aroclor-1260	39	U
Surrogate amount spiked		7.90	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS07

Lab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

Matrix (soil/water): SOIL Lab Sample ID: 40581.06

Level (low/med): LOW Date Received: 10/06/99

% Solids: 83.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6740			P
7440-36-0	Antimony	59.9		N	P
7440-38-2	Arsenic	16.9	B		P
7440-39-3	Barium	1050			P
7440-41-7	Beryllium	0.42	B		P
7440-43-9	Cadmium	10.4			P
7440-70-2	Calcium	1780		N	P
7440-47-3	Chromium	59.2			P
7440-48-4	Cobalt	6.1			P
7440-50-8	Copper	20000			P
7439-89-6	Iron	73700		*	P
7439-92-1	Lead	10800			P
7439-95-4	Magnesium	1270			P
7439-96-5	Manganese	840		N	P
7439-97-6	Mercury	0.71			AV
7440-02-0	Nickel	144			P
7440-09-7	Potassium	162	B		P
7782-49-2	Selenium	1.2	B		P
7440-22-4	Silver	6.7			P
7440-23-5	Sodium	1530			P
7440-28-0	Thallium	2.9	B		P
7440-62-2	Vanadium	185			P
7440-66-6	Zinc	8520			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS08

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.08

Sample wt/vol: 3.9 (g/mL) G Lab File ID: R34916.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 14 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	3	JB
67-64-1	ACETONE	220	
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS08

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.08

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101837.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	bis(2-Chloroisopropyl)ether	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	380	U
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	950	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	950	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	380	U
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	950	U
83-32-9	Acenaphthene	380	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS08

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.08

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101837.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	950	U
100-02-7	4-Nitrophenol	950	U
132-64-9	Dibenzofuran	380	U
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	380	U
100-01-6	4-Nitroaniline	950	U
534-52-1	4,6-Dinitro-2-methylphenol	950	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	950	U
85-01-8	Phenanthrene	46	J
120-12-7	Anthracene	380	U
86-74-8	Carbazole	380	U
84-74-2	Di-n-butylphthalate	380	U
206-44-0	Fluoranthene	120	J
129-00-0	Pyrene	150	J
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	94	J
218-01-9	Chrysene	120	J
117-81-7	bis(2-Ethylhexyl)phthalate	130	J
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	210	J
207-08-9	Benzo(k)fluoranthene	380	U
50-32-8	Benzo(a)pyrene	110	J
193-39-5	Indeno(1,2,3-cd)pyrene	94	J
53-70-3	Dibenz(a,h)anthracene	380	U
191-24-2	Benzo(g,h,i)perylene	96	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS08

ab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.08

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 14 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.5	U
319-85-7	beta-BHC	1.5	U
319-86-8	delta-BHC	1.5	U
58-89-9	gamma-BHC (Lindane)	1.5	U
76-44-8	Heptachlor	1.5	U
309-00-2	Aldrin	1.5	U
1024-57-3	Heptachlor epoxide	1.5	U
959-98-8	Endosulfan I	1.5	U
60-57-1	Dieldrin	4.8	
72-55-9	4,4'-DDE	27	P
72-20-8	Endrin	2.9	U
33213-65-9	Endosulfan II	2.9	U
72-54-8	4,4'-DDD	2.9	U
1031-07-8	Endosulfan sulfate	2.9	U
50-29-3	4,4'-DDT	30	
72-43-5	Methoxychlor	15	U
53494-70-5	Endrin ketone	2.9	U
7421-93-4	Endrin aldehyde	2.9	U
5103-71-9	alpha-Chlordane	1.5	U
5103-74-2	gamma-Chlordane	1.5	U
8001-35-2	Toxaphene	95	U
Surrogate amount spiked		7.65	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS08

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.08

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 14 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	38	U
11104-28-2	Aroclor-1221	38	U
11141-16-5	Aroclor-1232	38	U
53469-21-9	Aroclor-1242	38	U
12672-29-6	Aroclor-1248	38	U
11097-69-1	Aroclor-1254	38	U
11096-82-5	Aroclor-1260	38	U
Surrogate amount spiked		7.60	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS08

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

Matrix (soil/water): SOIL Lab Sample ID: 40581.08

Level (low/med): LOW Date Received: 10/06/99

% Solids: 86.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4100			P
7440-36-0	Antimony	4.6	B	N	P
7440-38-2	Arsenic	3.3	B		P
7440-39-3	Barium	209			P
7440-41-7	Beryllium	0.34	B		P
7440-43-9	Cadmium	1.7	B		P
7440-70-2	Calcium	4660		N	P
7440-47-3	Chromium	9.4			P
7440-48-4	Cobalt	1.2	B		P
7440-50-8	Copper	305			P
7439-89-6	Iron	12500		*	P
7439-92-1	Lead	1420			P
7439-95-4	Magnesium	1130			P
7439-96-5	Manganese	232		N	P
7439-97-6	Mercury	0.20			AV
7440-02-0	Nickel	9.5			P
7440-09-7	Potassium	110	B		P
7782-49-2	Selenium	0.41	B		P
7440-22-4	Silver	0.98	B		P
7440-23-5	Sodium	273			P
7440-28-0	Thallium	0.40	B		P
7440-62-2	Vanadium	11.8			P
7440-66-6	Zinc	850			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS09

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09

Sample wt/vol: 4.0 (g/mL) G Lab File ID: R34917.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 3 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	2	JB
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS09

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09

Sample wt/vol: 31.7 (g/mL) G Lab File ID: V9101826.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320	U
111-44-4	bis(2-Chloroethyl)ether	320	U
95-57-8	2-Chlorophenol	320	U
541-73-1	1,3-Dichlorobenzene	320	U
106-46-7	1,4-Dichlorobenzene	320	U
95-50-1	1,2-Dichlorobenzene	320	U
95-48-7	2-Methylphenol	320	U
108-60-1	bis(2-Chloroisopropyl)ether	320	U
106-44-5	4-Methylphenol	320	U
621-64-7	N-Nitroso-di-n-propylamine	320	U
67-72-1	Hexachloroethane	320	U
98-95-3	Nitrobenzene	320	U
78-59-1	Isophorone	320	U
88-75-5	2-Nitrophenol	320	U
105-67-9	2,4-Dimethylphenol	320	U
111-91-1	bis(2-Chloroethoxy)methane	320	U
120-83-2	2,4-Dichlorophenol	320	U
120-82-1	1,2,4-Trichlorobenzene	320	U
91-20-3	Naphthalene	320	U
106-47-8	4-Chloroaniline	320	U
87-68-3	Hexachlorobutadiene	320	U
59-50-7	4-Chloro-3-methylphenol	320	U
91-57-6	2-Methylnaphthalene	320	U
77-47-4	Hexachlorocyclopentadiene	320	U
88-06-2	2,4,6-Trichlorophenol	320	U
95-95-4	2,4,5-Trichlorophenol	810	U
91-58-7	2-Chloronaphthalene	320	U
88-74-4	2-Nitroaniline	810	U
131-11-3	Dimethylphthalate	320	U
208-96-8	Acenaphthylene	90	J
606-20-2	2,6-Dinitrotoluene	320	U
99-09-2	3-Nitroaniline	810	U
83-32-9	Acenaphthene	320	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS09

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09

Sample wt/vol: 31.7 (g/mL) G Lab File ID: V9101826.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	810	U
100-02-7	4-Nitrophenol	810	U
132-64-9	Dibenzofuran	320	U
121-14-2	2,4-Dinitrotoluene	320	U
84-66-2	Diethylphthalate	320	U
7005-72-3	4-Chlorophenyl-phenylether	320	U
86-73-7	Fluorene	320	U
100-01-6	4-Nitroaniline	810	U
534-52-1	4,6-Dinitro-2-methylphenol	810	U
86-30-6	N-Nitrosodiphenylamine (1)	320	U
101-55-3	4-Bromophenyl-phenylether	320	U
118-74-1	Hexachlorobenzene	320	U
87-86-5	Pentachlorophenol	810	U
85-01-8	Phenanthrene	62	J
120-12-7	Anthracene	90	J
86-74-8	Carbazole	320	U
84-74-2	Di-n-butylphthalate	320	U
206-44-0	Fluoranthene	380	
129-00-0	Pyrene	380	
85-68-7	Butylbenzylphthalate	320	U
91-94-1	3,3'-Dichlorobenzidine	320	U
56-55-3	Benzo(a)anthracene	320	
218-01-9	Chrysene	360	
117-81-7	bis(2-Ethylhexyl)phthalate	78	J
117-84-0	Di-n-octylphthalate	320	U
205-99-2	Benzo(b)fluoranthene	650	
207-08-9	Benzo(k)fluoranthene	320	U
50-32-8	Benzo(a)pyrene	360	
193-39-5	Indeno(1,2,3-cd)pyrene	270	J
53-70-3	Dibenz(a,h)anthracene	49	J
191-24-2	Benzo(g,h,i)perylene	250	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS09

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	84	PE
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	62	PE
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
Surrogate amount spiked		6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS09DL

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09DL

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	13	U
319-85-7	beta-BHC	13	U
319-86-8	delta-BHC	13	U
58-89-9	gamma-BHC (Lindane)	13	U
76-44-8	Heptachlor	13	U
309-00-2	Aldrin	13	U
1024-57-3	Heptachlor epoxide	13	U
959-98-8	Endosulfan I	13	U
60-57-1	Dieldrin	25	U
72-55-9	4,4'-DDE	93	D
72-20-8	Endrin	25	U
33213-65-9	Endosulfan II	25	U
72-54-8	4,4'-DDD	25	U
1031-07-8	Endosulfan sulfate	25	U
50-29-3	4,4'-DDT	71	DP
72-43-5	Methoxychlor	130	U
53494-70-5	Endrin ketone	25	U
7421-93-4	Endrin aldehyde	25	U
5103-71-9	alpha-Chlordane	13	U
5103-74-2	gamma-Chlordane	13	U
8001-35-2	Toxaphene	830	U
Surrogate amount spiked		6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS09

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.09

Sample wt/vol: 35.0 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/12/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/13/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	29	U
11104-28-2------	Aroclor-1221	29	U
11141-16-5------	Aroclor-1232	29	U
53469-21-9------	Aroclor-1242	29	U
12672-29-6------	Aroclor-1248	29	U
11097-69-1------	Aroclor-1254	29	U
11096-82-5------	Aroclor-1260	29	U
Surrogate amount spiked		5.89	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS09

ab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.09

evel (low/med): LOW Date Received: 10/06/99

Solids: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1330			P
7440-36-0	Antimony	0.64	B	N	P
7440-38-2	Arsenic	1.0	B		P
7440-39-3	Barium	20.8			P
7440-41-7	Beryllium	0.08	B		P
7440-43-9	Cadmium	0.23	B		P
7440-70-2	Calcium	469		N	P
7440-47-3	Chromium	3.0			P
7440-48-4	Cobalt	0.26	B		P
7440-50-8	Copper	39.8			P
7439-89-6	Iron	2720		*	P
7439-92-1	Lead	226			P
7439-95-4	Magnesium	64.9			P
7439-96-5	Manganese	35.8		N	P
7439-97-6	Mercury	0.04			AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium	42.5	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.28	B		P
7440-23-5	Sodium	202			P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	4.8			P
7440-66-6	Zinc	145			P

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: YELLOW Clarity After: CLOUDY Artifacts:

omments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS10

ab Name: SWL-TULSA Contract: PENSACOLA

ab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.10

Sample wt/vol: 3.8 (g/mL) G Lab File ID: R34935.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 9 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	17	B
67-64-1	ACETONE	7	U
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS10

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.10

Sample wt/vol: 30.3 (g/mL) G Lab File ID: V9101827.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS10

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.10

Sample wt/vol: 30.3 (g/mL) G Lab File ID: V9101827.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	290	J
120-12-7	Anthracene	66	J
86-74-8	Carbazole	42	J
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	550	
129-00-0	Pyrene	620	
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	270	J
218-01-9	Chrysene	320	J
117-81-7	bis(2-Ethylhexyl)phthalate	60	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	530	
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	300	J
193-39-5	Indeno(1,2,3-cd)pyrene	260	J
53-70-3	Dibenz(a,h)anthracene	80	J
191-24-2	Benzo(g,h,i)perylene	260	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS10

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.10

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	7.5	
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	5.4	P
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	89	U
	Surrogate amount spiked	7.18	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS10

b Name: SWL-TULSA

b Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.10

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.21	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS10

ab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.10

evel (low/med): LOW Date Received: 10/06/99

Solids: 91.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950			P
7440-36-0	Antimony	53.5		N	P
7440-38-2	Arsenic	8.8	B		P
7440-39-3	Barium	907			P
7440-41-7	Beryllium	0.69			P
7440-43-9	Cadmium	4.7			P
7440-70-2	Calcium	10900		N	P
7440-47-3	Chromium	16.9			P
7440-48-4	Cobalt	2.4	B		P
7440-50-8	Copper	1270			P
7439-89-6	Iron	20100		*	P
7439-92-1	Lead	3370			P
7439-95-4	Magnesium	3670			P
7439-96-5	Manganese	1570		N	P
7439-97-6	Mercury	2.2			AV
7440-02-0	Nickel	37.7			P
7440-09-7	Potassium	170	B		P
7782-49-2	Selenium	0.71	B		P
7440-22-4	Silver	9.9			P
7440-23-5	Sodium	294			P
7440-28-0	Thallium	0.37	B		P
7440-62-2	Vanadium	80.1			P
7440-66-6	Zinc	3770			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS11

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.11

Sample wt/vol: 4.3 (g/mL) G Lab File ID: R34936.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 2 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	7	B
67-64-1	ACETONE	170	
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	27	
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS11

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.11

Sample wt/vol: 31.2 (g/mL) G Lab File ID: V9101836.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	820	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	820	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	820	U
83-32-9	Acenaphthene	330	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS11

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.11

Sample wt/vol: 31.2 (g/mL) G Lab File ID: V9101836.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	820	U
100-02-7	4-Nitrophenol	820	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	820	U
534-52-1	4,6-Dinitro-2-methylphenol	820	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	820	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	53	J
129-00-0	Pyrene	60	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	89	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	70	J
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS11

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.11

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	6.5	
72-20-8	Endrin	5.2	P
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	12	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
	Surrogate amount spiked	6.69	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS11

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.11

Sample wt/vol: 31.9 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/12/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	32	U
11104-28-2------	Aroclor-1221	32	U
11141-16-5------	Aroclor-1232	32	U
53469-21-9------	Aroclor-1242	32	U
12672-29-6------	Aroclor-1248	32	U
11097-69-1------	Aroclor-1254	32	U
11096-82-5------	Aroclor-1260	32	U
Surrogate amount spiked		6.40	

FORM I PEST

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS12

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.12

Sample wt/vol: 5.5 (g/mL) G Lab File ID: R34920.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 9 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	14	B
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	5	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS12

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.12

Sample wt/vol: 30.2 (g/mL) G Lab File ID: V9101828.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS12

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.12

Sample wt/vol: 30.2 (g/mL) G Lab File ID: V9101828.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	70	J
129-00-0	Pyrene	88	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	58	J
218-01-9	Chrysene	70	J
117-81-7	bis(2-Ethylhexyl)phthalate	78	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	62	J
207-08-9	Benzo(k)fluoranthene	74	J
50-32-8	Benzo(a)pyrene	75	J
193-39-5	Indeno(1,2,3-cd)pyrene	65	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	78	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS12

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.12

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	6.4	
72-20-8	Endrin	12	
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	11	P
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	89	U
Surrogate amount spiked		7.14	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS12

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.12

Sample wt/vol: 30.6 (g/mL) G Lab File ID:

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/07/99

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/12/99

Injection Volume: 0.5 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	36	U
11104-28-2	Aroclor-1221	36	U
11141-16-5	Aroclor-1232	36	U
53469-21-9	Aroclor-1242	36	U
12672-29-6	Aroclor-1248	36	U
11097-69-1	Aroclor-1254	36	U
11096-82-5	Aroclor-1260	36	U
Surrogate amount spiked		7.18	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS12

ab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.12

evel (low/med): LOW Date Received: 10/06/99

Solids: 90.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2760			P
7440-36-0	Antimony	17.8		N	P
7440-38-2	Arsenic	7.7	B		P
7440-39-3	Barium	369			P
7440-41-7	Beryllium	0.34	B		P
7440-43-9	Cadmium	1.9	B		P
7440-70-2	Calcium	2010		N	P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	840			P
7439-89-6	Iron	25700		*	P
7439-92-1	Lead	1910			P
7439-95-4	Magnesium	525			P
7439-96-5	Manganese	297		N	P
7439-97-6	Mercury	0.39			AV
7440-02-0	Nickel	40.0			P
7440-09-7	Potassium	82.3	B		P
7782-49-2	Selenium	0.61	B		P
7440-22-4	Silver	3.9			P
7440-23-5	Sodium	230			P
7440-28-0	Thallium	1.2	B		P
7440-62-2	Vanadium	99.1			P
7440-66-6	Zinc	1710			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS13

Name: SWL-TULSA Contract: PENSACOLA

ab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.13

Sample wt/vol: 4.7 (g/mL) G Lab File ID: R34921.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 10 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	6	U
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS13

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.13

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101829.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS13

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.13

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101829.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/18/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	150	J
120-12-7	Anthracene	41	J
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	230	J
129-00-0	Pyrene	280	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	130	J
218-01-9	Chrysene	140	J
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	180	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	120	J
193-39-5	Indeno(1,2,3-cd)pyrene	88	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	79	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS13

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.13

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	3.0	P
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	6.1	
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	90	U
	Surrogate amount spiked	7.26	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS13

LD Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.13

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.22	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS13

ıb Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ıb Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

ıtrix (soil/water): SOIL Lab Sample ID: 40581.13

ɜvel (low/med): LOW Date Received: 10/06/99

Solids: 89.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6400			P
7440-36-0	Antimony	7.5		N	P
7440-38-2	Arsenic	11.2	B		P
7440-39-3	Barium	275			P
7440-41-7	Beryllium	0.88			P
7440-43-9	Cadmium	1.6	B		P
7440-70-2	Calcium	15700		N	P
7440-47-3	Chromium	10.6			P
7440-48-4	Cobalt	3.7			P
7440-50-8	Copper	876			P
7439-89-6	Iron	48600		*	P
7439-92-1	Lead	1820			P
7439-95-4	Magnesium	5150			P
7439-96-5	Manganese	540		N	P
7439-97-6	Mercury	0.20			AV
7440-02-0	Nickel	15.5			P
7440-09-7	Potassium	316			P
7782-49-2	Selenium	1.0	B		P
7440-22-4	Silver	4.2			P
7440-23-5	Sodium	353			P
7440-28-0	Thallium	1.3	B		P
7440-62-2	Vanadium	19.2			P
7440-66-6	Zinc	1600			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS14

Name: SWL-TULSA Contract: PENSACOLA

b Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.14

Sample wt/vol: 2.9 (g/mL) G Lab File ID: R34937.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 10 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	10	U
74-83-9	BROMOMETHANE	10	U
75-01-4	VINYL CHLORIDE	10	U
75-00-3	CHLOROETHANE	10	U
75-09-2	METHYLENE CHLORIDE	7	JB
67-64-1	ACETONE	10	U
75-15-0	CARBON DISULFIDE	10	U
75-35-4	1 1-DICHLOROETHENE	10	U
75-34-3	1 1-DICHLOROETHANE	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	CHLOROFORM	10	U
107-06-2	1 2-DICHLOROETHANE	10	U
78-93-3	2-BUTANONE	10	U
71-55-6	1 1 1-TRICHLOROETHANE	10	U
56-23-5	CARBON TETRACHLORIDE	10	U
75-27-4	BROMODICHLOROMETHANE	10	U
78-87-5	1 2-DICHLOROPROPANE	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	TRICHLOROETHENE	2	J
124-48-1	DIBROMOCHLOROMETHANE	10	U
79-00-5	1 1 2-TRICHLOROETHANE	10	U
71-43-2	BENZENE	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	BROMOFORM	10	U
108-10-1	4-METHYL-2-PENTANONE	10	U
591-78-6	2-HEXANONE	10	U
127-18-4	TETRACHLOROETHENE	10	U
108-88-3	TOLUENE	10	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	10	U
108-90-7	CHLOROBENZENE	10	U
100-41-4	ETHYL BENZENE	10	U
100-42-5	STYRENE	10	U
1330-20-7	Xylene (Total)	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS14

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.14

Sample wt/vol: 30.7 (g/mL) G Lab File ID: V9101830.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS14

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.14

Sample wt/vol: 30.7 (g/mL) G Lab File ID: V9101830.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 10 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	37	J
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	110	J
129-00-0	Pyrene	160	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	82	J
218-01-9	Chrysene	90	J
117-81-7	bis(2-Ethylhexyl)phthalate	110	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	160	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	92	J
193-39-5	Indeno(1,2,3-cd)pyrene	78	J
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	89	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS14

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.14

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	3.6	P
72-20-8	Endrin	6.0	
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	8.8	P
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	90	U
	Surrogate amount spiked	7.19	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS14

) Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.14

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 10 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/12/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/19/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.33	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS14

ab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.14

evel (low/med): LOW Date Received: 10/06/99

Solids: 89.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3540			P
7440-36-0	Antimony	10.7		N	P
7440-38-2	Arsenic	9.8	B		P
7440-39-3	Barium	1130			P
7440-41-7	Beryllium	0.33	B		P
7440-43-9	Cadmium	3.1			P
7440-70-2	Calcium	5230		N	P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	2.3	B		P
7440-50-8	Copper	753			P
7439-89-6	Iron	25000		*	P
7439-92-1	Lead	4050			P
7439-95-4	Magnesium	1210			P
7439-96-5	Manganese	692		N	P
7439-97-6	Mercury	0.39			AV
7440-02-0	Nickel	25.9			P
7440-09-7	Potassium	102	B		P
7782-49-2	Selenium	0.56	B		P
7440-22-4	Silver	8.3			P
7440-23-5	Sodium	299			P
7440-28-0	Thallium	0.89	B		P
7440-62-2	Vanadium	30.0			P
7440-66-6	Zinc	3590			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS15

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.15

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101831.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	360	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS15

b Name: ~~SWL-TULSA~~ Contract: ~~PENSACOLA~~

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.15

Sample wt/vol: 30.4 (g/mL) G Lab File ID: V9101831.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 9 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.5

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	140	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenz(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS15

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.15

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.7	U
72-55-9	4,4'-DDE	2.7	U
72-20-8	Endrin	2.7	U
33213-65-9	Endosulfan II	2.7	U
72-54-8	4,4'-DDD	2.7	U
1031-07-8	Endosulfan sulfate	2.7	U
50-29-3	4,4'-DDT	2.7	U
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.7	U
7421-93-4	Endrin aldehyde	2.7	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	89	U
Surrogate amount spiked		7.18	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS15

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.15

Sample wt/vol: 30.1 (g/mL) G Lab File ID:_____

% Moisture: 9 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.5 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	36	U
11104-28-2------	Aroclor-1221	36	U
11141-16-5------	Aroclor-1232	36	U
53469-21-9------	Aroclor-1242	36	U
12672-29-6------	Aroclor-1248	36	U
11097-69-1------	Aroclor-1254	36	U
11096-82-5------	Aroclor-1260	36	U
Surrogate amount spiked		7.30	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS15

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581
Matrix (soil/water): SOIL Lab Sample ID: 40581.15
Level (low/med): LOW Date Received: 10/06/99
% Solids: 90.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1790			P
7440-36-0	Antimony	0.29	U	N	P
7440-38-2	Arsenic	1.1			P
7440-39-3	Barium	5.3			P
7440-41-7	Beryllium	0.09	U		P
7440-43-9	Cadmium	0.07	B		P
7440-70-2	Calcium	253	B	N	P
7440-47-3	Chromium	3.8			P
7440-48-4	Cobalt	0.16	B		P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	3210		*	P
7439-92-1	Lead	18.9			P
7439-95-4	Magnesium	39.5			P
7439-96-5	Manganese	25.6		N	P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.59	B		P
7440-09-7	Potassium	27.9	B		P
7782-49-2	Selenium	0.36	U		P
7440-22-4	Silver	0.13	U		P
7440-23-5	Sodium	190	B		P
7440-28-0	Thallium	0.37	U		P
7440-62-2	Vanadium	8.2			P
7440-66-6	Zinc	17.8			P

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43SS16

ıb Name: SWL-TULSA Contract: PENSACOLA

..b Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17

Sample wt/vol: 4.0 (g/mL) G Lab File ID: R34925.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 7 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	7	U
74-83-9	BROMOMETHANE	7	U
75-01-4	VINYL CHLORIDE	7	U
75-00-3	CHLOROETHANE	7	U
75-09-2	METHYLENE CHLORIDE	10	B
67-64-1	ACETONE	23	
75-15-0	CARBON DISULFIDE	7	U
75-35-4	1 1-DICHLOROETHENE	7	U
75-34-3	1 1-DICHLOROETHANE	7	U
540-59-0	1,2-Dichloroethene (total)	7	U
67-66-3	CHLOROFORM	7	U
107-06-2	1 2-DICHLOROETHANE	7	U
78-93-3	2-BUTANONE	7	U
71-55-6	1 1 1-TRICHLOROETHANE	7	U
56-23-5	CARBON TETRACHLORIDE	7	U
75-27-4	BROMODICHLOROMETHANE	7	U
78-87-5	1 2-DICHLOROPROPANE	7	U
10061-01-5	cis-1,3-Dichloropropene	7	U
79-01-6	TRICHLOROETHENE	7	U
124-48-1	DIBROMOCHLOROMETHANE	7	U
79-00-5	1 1 2-TRICHLOROETHANE	7	U
71-43-2	BENZENE	7	U
10061-02-6	trans-1,3-Dichloropropene	7	U
75-25-2	BROMOFORM	7	U
108-10-1	4-METHYL-2-PENTANONE	7	U
591-78-6	2-HEXANONE	7	U
127-18-4	TETRACHLOROETHENE	7	U
108-88-3	TOLUENE	7	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	7	U
108-90-7	CHLOROBENZENE	7	U
100-41-4	ETHYL BENZENE	7	U
100-42-5	STYRENE	7	U
1330-20-7	Xylene (Total)	7	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS16

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17

Sample wt/vol: 31.4 (g/mL) G Lab File ID: V9101833.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 7 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	340	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS16

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17

Sample wt/vol: 31.4 (g/mL) G Lab File ID: V9101833.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 7 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	110	J
129-00-0	Pyrene	110	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	78	J
218-01-9	Chrysene	90	J
117-81-7	bis(2-Ethylhexyl)phthalate	80	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	150	J
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	82	J
193-39-5	Indeno(1,2,3-cd)pyrene	69	J
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	68	J

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS16

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	110	E
72-20-8	Endrin	11	
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	23	
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	86	E
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	87	U
	Surrogate amount spiked	6.98	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS16DL

.o Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17DL

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	14	U
319-85-7	beta-BHC	14	U
319-86-8	delta-BHC	14	U
58-89-9	gamma-BHC (Lindane)	14	U
76-44-8	Heptachlor	14	U
309-00-2	Aldrin	14	U
1024-57-3	Heptachlor epoxide	14	U
959-98-8	Endosulfan I	14	U
60-57-1	Dieldrin	26	U
72-55-9	4,4'-DDE	73	D
72-20-8	Endrin	26	U
33213-65-9	Endosulfan II	26	U
72-54-8	4,4'-DDD	26	U
1031-07-8	Endosulfan sulfate	26	U
50-29-3	4,4'-DDT	65	D
72-43-5	Methoxychlor	140	U
53494-70-5	Endrin ketone	26	U
7421-93-4	Endrin aldehyde	26	U
5103-71-9	alpha-Chlordane	14	U
5103-74-2	gamma-Chlordane	14	U
8001-35-2	Toxaphene	870	U
	Surrogate amount spiked	6.98	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS16

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.17

Sample wt/vol: 31.1 (g/mL) G Lab File ID:_____

% Moisture: 7 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.4 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	34	U
11104-28-2------	Aroclor-1221	34	U
11141-16-5------	Aroclor-1232	34	U
53469-21-9------	Aroclor-1242	34	U
12672-29-6------	Aroclor-1248	34	U
11097-69-1------	Aroclor-1254	34	U
11096-82-5------	Aroclor-1260	34	U
Surrogate amount spiked		6.91	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS16

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

Matrix (soil/water): SOIL Lab Sample ID: 40581.17

Level (low/med): LOW Date Received: 10/06/99

% Solids: 93.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5170			P
7440-36-0	Antimony	2.3	B	N	P
7440-38-2	Arsenic	2.5	B		P
7440-39-3	Barium	136			P
7440-41-7	Beryllium	0.12	B		P
7440-43-9	Cadmium	1.0	B		P
7440-70-2	Calcium	1150		N	P
7440-47-3	Chromium	8.9			P
7440-48-4	Cobalt	0.95	B		P
7440-50-8	Copper	195			P
7439-89-6	Iron	6960		*	P
7439-92-1	Lead	817			P
7439-95-4	Magnesium	181			P
7439-96-5	Manganese	146		N	P
7439-97-6	Mercury	0.22			AV
7440-02-0	Nickel	7.4			P
7440-09-7	Potassium	90.5	B		P
7782-49-2	Selenium	0.35	U		P
7440-22-4	Silver	0.95	B		P
7440-23-5	Sodium	248			P
7440-28-0	Thallium	0.36	U		P
7440-62-2	Vanadium	10.9			P
7440-66-6	Zinc	526			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SS17

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.16

Sample wt/vol: 4.2 (g/mL) G Lab File ID: R34938.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 4 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	4	JB
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS17

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.16

Sample wt/vol: 31.1 (g/mL) G Lab File ID: V9101832.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	840	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	330	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SS17

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.16

Sample wt/vol: 31.1 (g/mL) G Lab File ID: V9101832.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/19/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	67	J
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS17

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.16

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 4 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	5.2	
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	6.9	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	84	U
	Surrogate amount spiked	6.74	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SS17

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.16

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 4 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	34	U
11104-28-2------	Aroclor-1221	34	U
11141-16-5------	Aroclor-1232	34	U
53469-21-9------	Aroclor-1242	34	U
12672-29-6------	Aroclor-1248	34	U
11097-69-1------	Aroclor-1254	34	U
11096-82-5------	Aroclor-1260	34	U
Surrogate amount spiked		6.81	

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SS17

ab Name: SOUTHWEST_LAB_OF_OK_____ Contract:TETPITT___
ab Code: SWOK__ Case No.: 40581 SAS No.: _____ SDG No.: 40581_
atrix (soil/water): SOIL_ Lab Sample ID: 40581.16
evel (low/med): LOW__ Date Received: 10/06/99
Solids: _96.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	692			P
7440-36-0	Antimony_	0.27	U	N	P
7440-38-2	Arsenic__	0.29	U		P
7440-39-3	Barium___	3.0			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium__	0.13	B		P
7440-70-2	Calcium__	129	B	N	P
7440-47-3	Chromium_	1.5			P
7440-48-4	Cobalt___	0.11	U		P
7440-50-8	Copper___	2.0	B		P
7439-89-6	Iron_____	761		*	P
7439-92-1	Lead_____	30.4			P
7439-95-4	Magnesium	36.1			P
7439-96-5	Manganese	14.3		N	P
7439-97-6	Mercury__	0.02	U		AV
7440-02-0	Nickel___	0.44	B		P
7440-09-7	Potassium	32.9	U		P
7782-49-2	Selenium_	0.34	U		P
7440-22-4	Silver___	0.12	U		P
7440-23-5	Sodium___	176			P
7440-28-0	Thallium_	0.35	U		P
7440-62-2	Vanadium_	1.7	B		P
7440-66-6	Zinc_____	10.8			P

Color Before: BROWN____ Clarity Before: _____ Texture: MEDIUM
Color After: COLORLESS Clarity After: CLOUDY Artifacts: _____

Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43TB100599

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40581

Matrix: (soil/water) WATER Lab Sample ID: 40581.22

Sample wt/vol: 5 (g/mL) ML Lab File ID: K29487.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. _____ Date Analyzed: 10/10/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43TB100599RE

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40581

Matrix: (soil/water) WATER Lab Sample ID: 40581.22RA

Sample wt/vol: 5 (g/mL) ML Lab File ID: I53765.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. _____ Date Analyzed: 10/28/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SSDD01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.20

Sample wt/vol: 4.5 (g/mL) G Lab File ID: R34926.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 3 Date Analyzed: 10/13/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	7	B
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SSDD01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.20

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101931.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/20/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	840	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	340	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SSDD01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.20

Sample wt/vol: 30.5 (g/mL) G Lab File ID: V9101931.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/20/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	340	U
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SSDD01

ıb Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.20

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	6.8	P
72-20-8	Endrin	4.6	
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	11	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
	Surrogate amount spiked	6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SSDD01

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.20

Sample wt/vol: 30.7 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	33	U
11104-28-2	Aroclor-1221	33	U
11141-16-5	Aroclor-1232	33	U
53469-21-9	Aroclor-1242	33	U
12672-29-6	Aroclor-1248	33	U
11097-69-1	Aroclor-1254	33	U
11096-82-5	Aroclor-1260	33	U
Surrogate amount spiked		6.72	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SSDD01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

Lab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

Matrix (soil/water): SOIL Lab Sample ID: 40581.20

Level (low/med): LOW Date Received: 10/06/99

% Solids: 97.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1600			P
7440-36-0	Antimony	0.46	U	N	P
7440-38-2	Arsenic	0.72	B		P
7440-39-3	Barium	28.1			P
7440-41-7	Beryllium	0.08	B		P
7440-43-9	Cadmium	0.17	B		P
7440-70-2	Calcium	4550		N	P
7440-47-3	Chromium	2.0			P
7440-48-4	Cobalt	0.18	B		P
7440-50-8	Copper	21.2			P
7439-89-6	Iron	2190		*	P
7439-92-1	Lead	67.2			P
7439-95-4	Magnesium	291			P
7439-96-5	Manganese	29.3		N	P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	1.7	B		P
7440-09-7	Potassium	44.7	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.14	U		P
7440-23-5	Sodium	241			P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	3.7			P
7440-66-6	Zinc	64.7			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN-43SSDD02

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.21

Sample wt/vol: 4.4 (g/mL) G Lab File ID: R34939.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: not dec. 4 Date Analyzed: 10/14/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	6	JB
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	9	
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SSDD02

b Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.21

Sample wt/vol: 30.9 (g/mL) G Lab File ID: V9101932.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/20/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	840	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	340	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN43SSDD02

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.21

Sample wt/vol: 30.9 (g/mL) G Lab File ID: V9101932.D

Level: (low/med) LOW Date Received: 10/06/99

% Moisture: 4 decanted: (Y/N) N Date Extracted: 10/07/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 10/20/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	150	J
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SSDD02

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.21

Sample wt/vol: 31.2 (g/mL) G Lab File ID:_____

% Moisture: 4 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/28/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	11	
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	10	P
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
	Surrogate amount spiked	6.68	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SSDD02

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40581

Matrix: (soil/water) SOIL Lab Sample ID: 40581.21

Sample wt/vol: 31.3 (g/mL) G Lab File ID:_____

% Moisture: 4 decanted: (Y/N) __ Date Received: 10/06/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/07/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/12/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
11141-16-5------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U
Surrogate amount spiked		6.66	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN-43SSDD02

ab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT

ab Code: SWOK Case No.: 40581 SAS No.: SDG No.: 40581

atrix (soil/water): SOIL Lab Sample ID: 40581.21

evel (low/med): LOW Date Received: 10/06/99

Solids: 96.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	632			P
7440-36-0	Antimony	0.28	U	N	P
7440-38-2	Arsenic	0.24	B		P
7440-39-3	Barium	2.6			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.09	B		P
7440-70-2	Calcium	156	B	N	P
7440-47-3	Chromium	1.5			P
7440-48-4	Cobalt	0.09	B		P
7440-50-8	Copper	2.1	B		P
7439-89-6	Iron	604		*	P
7439-92-1	Lead	24.4			P
7439-95-4	Magnesium	41.8			P
7439-96-5	Manganese	10.1		N	P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.46	B		P
7440-09-7	Potassium	32.9	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	196	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	1.5	B		P
7440-66-6	Zinc	8.5			P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:

FORM I - IN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-1S-01

a. Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.01

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30089.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/05/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	19	B
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN431S01

ıb Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111312.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	0.80	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN431S01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111312.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	0.90	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN43-1S-01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.01
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.4	B		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	6.7	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	3590			P
7440-47-3	Chromium	1.7	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	1.0	U		P
7439-89-6	Iron	2980			P
7439-92-1	Lead	2.1	U		P
7439-95-4	Magnesium	687			P
7439-96-5	Manganese	18.3			P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	2.1	B		P
7440-09-7	Potassium	806	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	6180			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	2.9	U		P
	Cyanide	1.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=_PEN-43-1S-01

SOUTHWEST LABORATORY OF OKLAHOMA
GAS CHROMATOGRAPHY LABORATORY

REPORT DATE: 11/30/99

SAMPLE ID: PEN-43-1S-01
SWOK ID: 40903.01
DATE RECEIVED:
DATE ANALYZED: 11/09/99
BLANK ID: VBLK

SAMPLE MATRIX: WATER
METHOD REF. : RSK-175
PROJECT:
DILUTION: 1

RESULTS REPORTED IN UG/L OR PARTS PER BILLION (PPB)

PARAMETER	QUANTITATION LIMIT	RESULTS	Q
Methane	1	1	JB

Quantitation Report

Data File : J:\1\DATA\D991109A\D11860.D Vial: 15
Acq On : 9 Nov 1999 16:20 Operator:
Sample : PEN-43-1S-01 Inst : HPD
Misc : 40903.01*10ML*GC195 Multiplr: 1.0000
IntFile : EVENTS.E
Quant Time: Nov 10 11:11 1999 Quant Results File: C1C2HS-1.RES

Method : J:\1\DATA\D991109A\C1C2HS-1.M
Title-Path : iCAL - C:\HPCHEM\1\DATA\D990415A\
Last Update : Tue Nov 09 13:47:30 1999
Response via : Initial Calibration

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	ug/L	Curve
Target Compounds:				
1) Methane	0.82	12919	0.9721 m	L

Curve Types : A=Average L=Linear P=Power Q=Quadratic/
(f)=RT Delta > 1/2 Window (E)= > High cal. std. (m)=manual int.

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.01

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.01
SAMPLE #: PEN-43-1S-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	1.0	U	mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	1.0	U	mg/l	11/02/99	11/02/99	EPA 376.1
INORGANIC CHLORIDE	9.2		mg/l		10/28/99	EPA 300.0
NITRATE	0.22		mg/l		10/28/99	EPA 300.0
SULFATE	6.9		mg/l		10/28/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-2S-01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.02

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30113.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/08/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	6	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN432S01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111313.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN432S01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111313.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	0.80	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN43-2S-01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.02
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	970			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	18.0	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	7790			P
7440-47-3	Chromium	1.6	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	1.6	B		P
7439-89-6	Iron	1390			P
7439-92-1	Lead	2.7	B		P
7439-95-4	Magnesium	495			P
7439-96-5	Manganese	8.4	B		P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	2.0	B		P
7440-09-7	Potassium	1020	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	5470			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	1.8	B		P
7440-66-6	Zinc	5.6	B		P
	Cyanide	1.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID= PEN-43-2S-01

SOUTHWEST LABORATORY OF OKLAHOMA
GAS CHROMATOGRAPHY LABORATORY

REPORT DATE: 11/30/99

SAMPLE ID: PEN-43-2S-01
SWOK ID: 40903.02
DATE RECEIVED:
DATE ANALYZED: 11/09/99
BLANK ID: VBLK

SAMPLE MATRIX: WATER
METHOD REF. : RSK-175
PROJECT:
DILUTION: 1

RESULTS REPORTED IN UG/L OR PARTS PER BILLION (PPB)

PARAMETER	QUANTITATION LIMIT	RESULTS	Q
Methane	1	1	JB

Quantitation Report

Data File : J:\1\DATA\D991109A\D11861.D Vial: 16
Acq On : 9 Nov 1999 16:52 Operator:
Sample : PEN-43-2S-01 Inst : HPD
Misc : 40903.02*10ML*GC195 Multiplr: 1.0000
ItFile : EVENTS.E
Quant Time: Nov 10 11:12 1999 Quant Results File: C1C2HS-1.RES

Method : J:\1\DATA\D991109A\C1C2HS-1.M
Title-Path : iCAL - C:\HPCHEM\1\DATA\D990415A\
Last Update : Tue Nov 09 13:47:30 1999
Response via : Initial Calibration

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	ug/L	Curve
Target Compounds:				
1) Methane	0.80	12842	0.9662 m	L

Curve Types : A=Average L=Linear P=Power Q=Quadratic/
(f)=RT Delta > 1/2 Window (E)= > High cal. std. (m)=manual int.

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.02

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.02
SAMPLE #: PEN-43-2S-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	1.0	U	mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	1.0	U	mg/l	11/02/99	11/02/99	EPA 376.1
NORGANIC CHLORIDE	6.1		mg/l		10/28/99	EPA 300.0
ITRATE	1.1		mg/l		10/28/99	EPA 300.0
ULFATE	6.3		mg/l		10/28/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-3S-01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.03

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30084.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/05/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	18	B
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN433S01

lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111314.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	1	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN433S01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.03

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111314.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	0.60	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN43-3S-01

Lab Name: SOUTHWEST_LAB_OF_OK Contract:TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.03
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32.1	U		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	17.3	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.45	B		P
7440-70-2	Calcium	19300			P
7440-47-3	Chromium	0.52	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	1.4	B		P
7439-89-6	Iron	422			P
7439-92-1	Lead	3.7			P
7439-95-4	Magnesium	2640			P
7439-96-5	Manganese	6.3	B		P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium	1770	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	12000			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	2.9	U		P
	Cyanide	1.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=_PEN-43-3S-01

SOUTHWEST LABORATORY OF OKLAHOMA
GAS CHROMATOGRAPHY LABORATORY

REPORT DATE: 11/30/99

SAMPLE ID: PEN-43-3S-01
SWOK ID: 40903.03
DATE RECEIVED:
DATE ANALYZED: 11/09/99
BLANK ID: VBLK

SAMPLE MATRIX: WATER
METHOD REF. : RSK-175
PROJECT:
DILUTION: 1

RESULTS REPORTED IN UG/L OR PARTS PER BILLION (PPB)

PARAMETER	QUANTITATION LIMIT	RESULTS	Q
Methane	1	0.9	JB

11

Quantitation Report

Data File : J:\1\DATA\D991109A\D11862.D Vial: 17
Acq On : 9 Nov 1999 17:24 Operator:
Sample : PEN-43-3S-01 Inst : HPD
Misc : 40903.03*10ML*GC195 Multiplr: 1.0000
IntFile : EVENTS.E
Quant Time: Nov 10 11:12 1999 Quant Results File: C1C2HS-1.RES

Method : J:\1\DATA\D991109A\C1C2HS-1.M
Title-Path : iCAL - C:\HPCHEM\1\DATA\D990415A\
Last Update : Tue Nov 09 13:47:30 1999
Response via : Initial Calibration

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	ug/L	Curve
Target Compounds:				
1) Methane	0.82	12306	0.9259 m	L

Curve Types : A=Average L=Linear P=Power Q=Quadratic/
(f)=RT Delta > 1/2 Window (E)= > High cal. std. (m)=manual int.

SOUTHWEST LABORATORY OF OKLAHOMA
GAS CHROMATOGRAPHY LABORATORY

REPORT DATE: 11/30/99

CLIENT SAMPLE ID: PEN-43-3S-01
MS FILE ID: D11863.D
SAMPLE MATRIX: WATER
DATE ANALYZED: 11/09/99

LAB SAMPLE ID: 40903.03
MSD FILE ID: D11864.D
METHOD REFERENCE: RSK-175
PROJECT:

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

PARAMETER	SPIKE ADDED UG/L	SAMPLE CONC. UG/L	MS % REC.	MSD % REC.	RPD	QC LIMITS RPD	QC LIMITS RECOVERY
Methane	3	1	64	66	2	25	50-150

* = VALUE OUTSIDE OF QC LIMITS

14A

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.03

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.03
SAMPLE #: PEN-43-3S-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	1.0	U	mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	4.4		mg/l	11/02/99	11/02/99	EPA 376.1
ITRATE	1.8		mg/l		10/28/99	EPA 300.0
LFATE	17.7		mg/l		10/28/99	EPA 300.0
RGANIC CHLORIDE	22.1		mg/l		11/15/99	EPA 300.0

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.04

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.04 MS1
SAMPLE #: PEN-43-3S-01 MS1
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS	UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	25.5	mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	119.4	mg/l	11/02/99	11/02/99	EPA 376.1
N[illegible]RATE	11.5	mg/l		10/28/99	EPA 300.0
[illegible]GANIC CHLORIDE	31.8	mg/l		11/15/99	EPA 300.0
SULFATE	25.1	mg/l		11/15/99	EPA 300.0

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.05

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.05 SD1
SAMPLE #: PEN-43-3S-01 SD1
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS	UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	25.5	mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	121.1	mg/l	11/02/99	11/02/99	EPA 376.1
NITRATE	12.0	mg/l		10/28/99	EPA 300.0
INORGANIC CHLORIDE	31.7	mg/l		11/15/99	EPA 300.0
SULFATE	23.7	mg/l		11/15/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-4S-01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.06

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30139.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/09/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	6	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN434S01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111317.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN434S01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.06

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111317.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.1 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	0.70	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN43-4S-01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.06
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	310			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	16.2	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.43	B		P
7440-70-2	Calcium	8120			P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	5.1	B		P
7439-89-6	Iron	152			P
7439-92-1	Lead	2.5	B		P
7439-95-4	Magnesium	1220			P
7439-96-5	Manganese	4.7	B		P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	4.5	B		P
7440-09-7	Potassium	1140	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	9910			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	73.5			P
	Cyanide	1.0	U		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID= PEN-43-4S-01

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.06

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.06
SAMPLE #: PEN-43-4S-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	4.1		mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	1.0	U	mg/l	11/02/99	11/02/99	EPA 376.1
INORGANIC CHLORIDE	16.2		mg/l		10/28/99	EPA 300.0
NITRATE	1.3		mg/l		10/28/99	EPA 300.0
SULFATE	7.8		mg/l		10/28/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-5S-01

.b Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.07

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30092.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/05/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	17	B
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN435S01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111318.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN435S01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111318.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	0.70	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE ID

PEN43-5S-01

INORGANIC ANALYSES DATA SHEET

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.07
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	316			P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	18.7	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.31	B		P
7440-70-2	Calcium	6340			P
7440-47-3	Chromium	2.0	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	5.2	B		P
7439-89-6	Iron	2430			P
7439-92-1	Lead	7.5			P
7439-95-4	Magnesium	821			P
7439-96-5	Manganese	15.6			P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	2.6	B		P
7440-09-7	Potassium	1090	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	7510			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	44.0			P
	Cyanide	4.0	B		AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=_PEN-43-5S-01

SOUTHWEST LABORATORY OF OKLAHOMA, INC.
1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.07

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.07
SAMPLE #: PEN-43-5S-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	2.6		mg/l		11/14/99	EPA 415.1
TOTAL SULFIDE	1.0	U	mg/l	11/02/99	11/02/99	EPA 376.1
INORGANIC CHLORIDE	16.1		mg/l		10/28/99	EPA 300.0
NITRATE	0.98		mg/l		10/28/99	EPA 300.0
SULFATE	3.9		mg/l		10/28/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43-DD-01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.08

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30093.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/05/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	19	B
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43DD01

ıb Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111319.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	0.60	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

FORM I SV-1

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PEN43DD01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40903

Matrix: (soil/water) WATER Lab Sample ID: 40903.08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 09111319.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. 0 dec. Date Extracted: 10/29/99

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 11/13/99

Concentrated Extract Volume: 1000(uL)

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenylphenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
86-74-8	Carbazole	10	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

PEN43-DD-01

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40903 SAS No.: SDG No.: 40903
Matrix (soil/water): WATER Lab Sample ID: 40903.08
Level (low/med): LOW Date Received: 10/28/99
% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	37.4	B		P
7440-36-0	Antimony	5.0	U		P
7440-38-2	Arsenic	3.3	U		P
7440-39-3	Barium	17.6	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.30	U		P
7440-70-2	Calcium	19200			P
7440-47-3	Chromium	0.54	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	1.1	B		P
7439-89-6	Iron	364			P
7439-92-1	Lead	2.1	U		P
7439-95-4	Magnesium	2640			P
7439-96-5	Manganese	6.2	B		P
7439-97-6	Mercury	0.10	U		AV
7440-02-0	Nickel	1.2	B		P
7440-09-7	Potassium	1850	B		P
7782-49-2	Selenium	2.9	U		P
7440-22-4	Silver	2.0	U		P
7440-23-5	Sodium	12200			P
7440-28-0	Thallium	2.3	U		P
7440-62-2	Vanadium	0.90	U		P
7440-66-6	Zinc	2.9	U		P
	Cyanide	6.0			AS

Color Before: COLORLESS Clarity Before: CLOUDY Texture:
Color After: COLORLESS Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID= PEN-43-DD-01

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany Broken Arrow, Oklahoma 74012 Office (918) 251-2858 Fax (918) 251-2599

TETRA TECH NUS, INC.
FOSTER PLAZA 7
661 ANDERSEN DRIVE
PITTSBURGH, PA 15220-274
Attn: LEE LECK

REPORT : 40903.08

REPORTED : 11/30/99

PROJECT : PENSACOLA
LAB# : 40903.08
SAMPLE #: PEN-43-DD-01
LOCATION: SITE 43

SAMPLED : 10/27/99
SUBMITTED: 10/28/99

MATRIX : Water

MISCELLANEOUS

PARAMETER	RESULTS		UNITS	DATE PREPARED	DATE ANALYZED	REFERENCE METHOD
ORGANIC CARBON	1.0	U	mg/l		11/14/99	EPA 415.1
NITRATE	1.8		mg/l		10/28/99	EPA 300.0
SULFATE	17.7		mg/l		10/28/99	EPA 300.0
RGANIC CHLORIDE	22.1		mg/l		11/15/99	EPA 300.0

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB102799-01

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPI SAS No.: SDG No.: 40903A

Matrix: (soil/water) WATER Lab Sample ID: 40903.09

Sample wt/vol: 5 (g/mL) ML Lab File ID: K30094.D

Level: (low/med) LOW Date Received: 10/28/99

% Moisture: not dec. _____ Date Analyzed: 11/05/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	18	B
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

FORM I VOA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SB011415

b Name: SWL-TULSA Contract: PENSACOLA

ab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: R35097.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 3 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	2	J
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	6	U
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: F9110510.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	24	JB
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: F9110510.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	850	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	56	JB
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 30.4 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	2.5	U
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	2.5	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	84	U
Surrogate amount spiked		6.78	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 32.0 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/26/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	32	U
11104-28-2------	Aroclor-1221	32	U
11141-16-5------	Aroclor-1232	32	U
53469-21-9------	Aroclor-1242	32	U
12672-29-6------	Aroclor-1248	32	U
11097-69-1------	Aroclor-1254	32	U
11096-82-5------	Aroclor-1260	32	U
Surrogate amount spiked		6.44	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SB011415

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.01
Level (low/med): LOW Date Received: 10/20/99
% Solids: 97.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	104			P
7440-36-0	Antimony	0.28	U		P
7440-38-2	Arsenic	0.20	U		P
7440-39-3	Barium	0.38	B		P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.10	B		P
7440-70-2	Calcium	128	B		P
7440-47-3	Chromium	1.2			P
7440-48-4	Cobalt	0.09	B		P
7440-50-8	Copper	1.1	B		P
7439-89-6	Iron	160			P
7439-92-1	Lead	0.23	U		P
7439-95-4	Magnesium	10.6	B		P
7439-96-5	Manganese	1.1			P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.37	U		P
7440-09-7	Potassium	17.6	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	160	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	0.17	B		P
7440-66-6	Zinc	12.8			P
	Cyanide	0.15	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=PEN-43SB011415

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SB021415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.02

Sample wt/vol: 4.4 (g/mL) G Lab File ID: R35098.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 2 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	3	J
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	2	JB
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB021415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.02

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F9110511.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	22	JB
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB021415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.02

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F9110511.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	67	JB
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB021415

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.02

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	2.5	U
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	2.5	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
	Surrogate amount spiked	6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB021415

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.02

Sample wt/vol: 30.3 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
11141-16-5------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U
Surrogate amount spiked		6.74	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SB021415

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.02
Level (low/med): LOW Date Received: 10/20/99
% Solids: 98.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	223			P
7440-36-0	Antimony	0.27	U		P
7440-38-2	Arsenic	0.21	B		P
7440-39-3	Barium	0.46	B		P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.27	B		P
7440-70-2	Calcium	113	B		P
7440-47-3	Chromium	0.87	B		P
7440-48-4	Cobalt	0.08	U		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	226			P
7439-92-1	Lead	0.51			P
7439-95-4	Magnesium	11.2	B		P
7439-96-5	Manganese	2.3			P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.37	U		P
7440-09-7	Potassium	15.9	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	145	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	0.24	B		P
7440-66-6	Zinc	2.9			P
	Cyanide	0.15	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=PEN-43SB021415

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SB031415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: R35099.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 2 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	2	J
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	2	JB
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB031415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.03

Sample wt/vol: 30.9 (g/mL) G Lab File ID: F9110512.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	23	JB
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	820	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	820	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	820	U
83-32-9	Acenaphthene	330	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB031415

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.03

Sample wt/vol: 30.9 (g/mL) G Lab File ID: F9110512.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 6.8

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	820	U
100-02-7	4-Nitrophenol	820	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	820	U
534-52-1	4,6-Dinitro-2-methylphenol	820	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	820	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	350	B
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) Cannot be seperated from Diphenylamine

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB031415

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.03

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	2.6	U
72-20-8	Endrin	2.6	U
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	2.6	U
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	2.6	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	85	U
	Surrogate amount spiked	6.80	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB031415

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.03

Sample wt/vol: 32.1 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ . Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 6.8 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	31	U
11104-28-2------	Aroclor-1221	31	U
11141-16-5------	Aroclor-1232	31	U
53469-21-9------	Aroclor-1242	31	U
12672-29-6------	Aroclor-1248	31	U
11097-69-1------	Aroclor-1254	31	U
11096-82-5------	Aroclor-1260	31	U
Surrogate amount spiked		6.36	

FORM I PEST

1

INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SB031415

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.03
Level (low/med): LOW Date Received: 10/20/99
% Solids: 97.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	111			P
7440-36-0	Antimony	0.28	U		P
7440-38-2	Arsenic	0.19	U		P
7440-39-3	Barium	0.25	B		P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.03	U		P
7440-70-2	Calcium	103	B		P
7440-47-3	Chromium	0.29	B		P
7440-48-4	Cobalt	0.08	U		P
7440-50-8	Copper	1.0	B		P
7439-89-6	Iron	68.5			P
7439-92-1	Lead	0.29	B		P
7439-95-4	Magnesium	9.4	U		P
7439-96-5	Manganese	0.39	B		P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.37	U		P
7440-09-7	Potassium	15.6	U		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	161	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	0.07	U		P
7440-66-6	Zinc	8.4			P
	Cyanide	0.15	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=PEN-43SB031415

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SB040708

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: R35100.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 2 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	5	J
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	2	JB
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB040708

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.04

Sample wt/vol: 30.3 (g/mL) G Lab File ID: F9110513.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	25	JB
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	840	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	340	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB040708

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.04

Sample wt/vol: 30.3 (g/mL) G Lab File ID: F9110513.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 2 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	430	B
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB040708

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.04

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	2.5	U
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	2.5	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
Surrogate amount spiked		6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB040708

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.04

Sample wt/vol: 30.8 (g/mL) G Lab File ID:_____

% Moisture: 2 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
11141-16-5------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U
Surrogate amount spiked		6.63	

FORM I PEST

1
INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SB040708

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.04
Level (low/med): LOW Date Received: 10/20/99
% Solids: 97.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	296			P
7440-36-0	Antimony	0.28	U		P
7440-38-2	Arsenic	0.19	U		P
7440-39-3	Barium	1.0	B		P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.75	B		P
7440-70-2	Calcium	95.0	B		P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	0.08	U		P
7440-50-8	Copper	0.95	B		P
7439-89-6	Iron	195			P
7439-92-1	Lead	0.47			P
7439-95-4	Magnesium	20.4	B		P
7439-96-5	Manganese	0.87	B		P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.37	U		P
7440-09-7	Potassium	27.8	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	159	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	0.38	B		P
7440-66-6	Zinc	2.8			P
	Cyanide	0.15	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=PEN-43SB040708

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SB051415

b Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.05

Sample wt/vol: 4.8 (g/mL) G Lab File ID: R35101.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 5 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	5	U
74-83-9	BROMOMETHANE	5	U
75-01-4	VINYL CHLORIDE	5	U
75-00-3	CHLOROETHANE	5	U
75-09-2	METHYLENE CHLORIDE	3	J
67-64-1	ACETONE	5	U
75-15-0	CARBON DISULFIDE	5	U
75-35-4	1 1-DICHLOROETHENE	5	U
75-34-3	1 1-DICHLOROETHANE	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	CHLOROFORM	5	U
107-06-2	1 2-DICHLOROETHANE	5	U
78-93-3	2-BUTANONE	5	U
71-55-6	1 1 1-TRICHLOROETHANE	5	U
56-23-5	CARBON TETRACHLORIDE	5	U
75-27-4	BROMODICHLOROMETHANE	5	U
78-87-5	1 2-DICHLOROPROPANE	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	TRICHLOROETHENE	5	U
124-48-1	DIBROMOCHLOROMETHANE	5	U
79-00-5	1 1 2-TRICHLOROETHANE	5	U
71-43-2	BENZENE	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	BROMOFORM	5	U
108-10-1	4-METHYL-2-PENTANONE	5	U
591-78-6	2-HEXANONE	5	U
127-18-4	TETRACHLOROETHENE	5	U
108-88-3	TOLUENE	2	JB
79-34-5	1 1 2 2-TETRACHLOROETHANE	5	U
108-90-7	CHLOROBENZENE	5	U
100-41-4	ETHYL BENZENE	5	U
100-42-5	STYRENE	5	U
1330-20-7	Xylene (Total)	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB051415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F9110514.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	27	JB
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	350	U

FORM I SV

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB051415

ab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.05

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F9110514.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 5 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.9

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	68	JB
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenz(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB051415

Lab Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.05

Sample wt/vol: 30.0 (g/mL) G Lab File ID:_____

% Moisture: 5 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.4	U
319-85-7	beta-BHC	1.4	U
319-86-8	delta-BHC	1.4	U
58-89-9	gamma-BHC (Lindane)	1.4	U
76-44-8	Heptachlor	1.4	U
309-00-2	Aldrin	1.4	U
1024-57-3	Heptachlor epoxide	1.4	U
959-98-8	Endosulfan I	1.4	U
60-57-1	Dieldrin	2.6	U
72-55-9	4,4'-DDE	2.6	U
72-20-8	Endrin	2.6	U
33213-65-9	Endosulfan II	2.6	U
72-54-8	4,4'-DDD	2.6	U
1031-07-8	Endosulfan sulfate	2.6	U
50-29-3	4,4'-DDT	2.6	U
72-43-5	Methoxychlor	14	U
53494-70-5	Endrin ketone	2.6	U
7421-93-4	Endrin aldehyde	2.6	U
5103-71-9	alpha-Chlordane	1.4	U
5103-74-2	gamma-Chlordane	1.4	U
8001-35-2	Toxaphene	87	U
	Surrogate amount spiked	7.02	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB051415

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.05

Sample wt/vol: 30.6 (g/mL) G Lab File ID:_____

% Moisture: 5 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.9 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	34	U
11104-28-2------	Aroclor-1221	34	U
11141-16-5------	Aroclor-1232	34	U
53469-21-9------	Aroclor-1242	34	U
12672-29-6------	Aroclor-1248	34	U
11097-69-1------	Aroclor-1254	34	U
11096-82-5------	Aroclor-1260	34	U
Surrogate amount spiked		6.88	

FORM I PEST

1
INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SB051415

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.05
Level (low/med): LOW Date Received: 10/20/99
% Solids: 94.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	266			P
7440-36-0	Antimony	0.29	U		P
7440-38-2	Arsenic	0.29	B		P
7440-39-3	Barium	3.0			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.28	B		P
7440-70-2	Calcium	117	B		P
7440-47-3	Chromium	0.89	B		P
7440-48-4	Cobalt	0.82	B		P
7440-50-8	Copper	3.7	B		P
7439-89-6	Iron	352			P
7439-92-1	Lead	8.8			P
7439-95-4	Magnesium	19.5	B		P
7439-96-5	Manganese	3.1			P
7439-97-6	Mercury	0.02	U		AV
7440-02-0	Nickel	0.81	B		P
7440-09-7	Potassium	18.8	B		P
7782-49-2	Selenium	0.35	U		P
7440-22-4	Silver	0.13	U		P
7440-23-5	Sodium	129	B		P
7440-28-0	Thallium	0.36	U		P
7440-62-2	Vanadium	0.69	B		P
7440-66-6	Zinc	14.3			P
	Cyanide	0.16	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

C ments:
CLIENT_ID=PEN-43SB051415

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EN43SBDD03

b Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.06

Sample wt/vol: 4.2 (g/mL) G Lab File ID: R35102.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. 3 Date Analyzed: 10/22/99

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	CHLOROMETHANE	6	U
74-83-9	BROMOMETHANE	6	U
75-01-4	VINYL CHLORIDE	6	U
75-00-3	CHLOROETHANE	6	U
75-09-2	METHYLENE CHLORIDE	2	J
67-64-1	ACETONE	6	U
75-15-0	CARBON DISULFIDE	6	U
75-35-4	1 1-DICHLOROETHENE	6	U
75-34-3	1 1-DICHLOROETHANE	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	CHLOROFORM	6	U
107-06-2	1 2-DICHLOROETHANE	6	U
78-93-3	2-BUTANONE	6	U
71-55-6	1 1 1-TRICHLOROETHANE	6	U
56-23-5	CARBON TETRACHLORIDE	6	U
75-27-4	BROMODICHLOROMETHANE	6	U
78-87-5	1 2-DICHLOROPROPANE	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	TRICHLOROETHENE	6	U
124-48-1	DIBROMOCHLOROMETHANE	6	U
79-00-5	1 1 2-TRICHLOROETHANE	6	U
71-43-2	BENZENE	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
75-25-2	BROMOFORM	6	U
108-10-1	4-METHYL-2-PENTANONE	6	U
591-78-6	2-HEXANONE	6	U
127-18-4	TETRACHLOROETHENE	6	U
108-88-3	TOLUENE	1	JB
79-34-5	1 1 2 2-TETRACHLOROETHANE	6	U
108-90-7	CHLOROBENZENE	6	U
100-41-4	ETHYL BENZENE	6	U
100-42-5	STYRENE	6	U
1330-20-7	Xylene (Total)	6	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SBDD03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.06

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F9110515.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	23	JB
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	840	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	840	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	840	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SBDD03

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.06

Sample wt/vol: 30.7 (g/mL) G Lab File ID: F9110515.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	840	U
100-02-7	4-Nitrophenol	840	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	840	U
534-52-1	4,6-Dinitro-2-methylphenol	840	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	840	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	61	JB
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SBDD03

Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.06

Sample wt/vol: 30.9 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 5000(uL) Date Analyzed: 11/03/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.3	U
319-85-7	beta-BHC	1.3	U
319-86-8	delta-BHC	1.3	U
58-89-9	gamma-BHC (Lindane)	1.3	U
76-44-8	Heptachlor	1.3	U
309-00-2	Aldrin	1.3	U
1024-57-3	Heptachlor epoxide	1.3	U
959-98-8	Endosulfan I	1.3	U
60-57-1	Dieldrin	2.5	U
72-55-9	4,4'-DDE	2.5	U
72-20-8	Endrin	2.5	U
33213-65-9	Endosulfan II	2.5	U
72-54-8	4,4'-DDD	2.5	U
1031-07-8	Endosulfan sulfate	2.5	U
50-29-3	4,4'-DDT	2.5	U
72-43-5	Methoxychlor	13	U
53494-70-5	Endrin ketone	2.5	U
7421-93-4	Endrin aldehyde	2.5	U
5103-71-9	alpha-Chlordane	1.3	U
5103-74-2	gamma-Chlordane	1.3	U
8001-35-2	Toxaphene	83	U
	Surrogate amount spiked	6.67	

FORM I PEST

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SBDD03

b Name: SWL-TULSA

Lab Code: SWOK Case No.: TETPI SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.06

Sample wt/vol: 30.5 (g/mL) G Lab File ID:_____

% Moisture: 3 decanted: (Y/N) __ Date Received: 10/20/99

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:10/21/99

Concentrated Extract Volume: 10000(uL) Date Analyzed: 10/27/99

Injection Volume: 0.5(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2------	Aroclor-1016	33	U
11104-28-2------	Aroclor-1221	33	U
11141-16-5------	Aroclor-1232	33	U
53469-21-9------	Aroclor-1242	33	U
12672-29-6------	Aroclor-1248	33	U
11097-69-1------	Aroclor-1254	33	U
11096-82-5------	Aroclor-1260	33	U
Surrogate amount spiked		6.76	

FORM I PEST

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB101999-01

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) WATER Lab Sample ID: 40790.07

Sample wt/vol: 5 (g/mL) ML Lab File ID: K29953.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: not dec. _____ Date Analyzed: 10/28/99

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
78-93-3	2-Butanone	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-Pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

Lab Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: F9110510.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
108-60-1	bis(2-Chloroisopropyl)ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-di-n-propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
111-91-1	bis(2-Chloroethoxy)methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	24	JB
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	850	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	850	U
131-11-3	Dimethylphthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U
99-09-2	3-Nitroaniline	850	U
83-32-9	Acenaphthene	340	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

PEN-43SB011415

Name: SWL-TULSA Contract: PENSACOLA

Lab Code: SWOK Case No.: TETPITT SAS No.: SDG No.: 40790

Matrix: (soil/water) SOIL Lab Sample ID: 40790.01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: F9110510.D

Level: (low/med) LOW Date Received: 10/20/99

% Moisture: 3 decanted: (Y/N) N Date Extracted: 10/21/99

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/05/99

Injection Volume: 2 (uL) Dilution Factor: 1

GPC Cleanup: (Y/N) N pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	850	U
100-02-7	4-Nitrophenol	850	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	850	U
534-52-1	4,6-Dinitro-2-methylphenol	850	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	850	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
86-74-8	Carbazole	340	U
84-74-2	Di-n-butylphthalate	340	U
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	340	U
56-55-3	Benzo(a)anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)phthalate	56	JB
117-84-0	Di-n-octylphthalate	340	U
205-99-2	Benzo(b)fluoranthene	340	U
207-08-9	Benzo(k)fluoranthene	340	U
50-32-8	Benzo(a)pyrene	340	U
193-39-5	Indeno(1,2,3-cd)pyrene	340	U
53-70-3	Dibenz(a,h)anthracene	340	U
191-24-2	Benzo(g,h,i)perylene	340	U

(1) Cannot be seperated from Diphenylamine

FORM I SV

1
INORGANIC ANALYSES DATA SHEET

CLIENT SAMPLE ID

43SBDD03

Lab Name: SOUTHWEST_LAB_OF_OK Contract: TETPITT
Lab Code: SWOK Case No.: 40790 SAS No.: SDG No.: 40790
Matrix (soil/water): SOIL Lab Sample ID: 40790.06
Level (low/med): LOW Date Received: 10/20/99
% Solids: 96.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	221			P
7440-36-0	Antimony	0.28	U		P
7440-38-2	Arsenic	0.22	B		P
7440-39-3	Barium	5.7			P
7440-41-7	Beryllium	0.08	U		P
7440-43-9	Cadmium	0.33	B		P
7440-70-2	Calcium	145	B		P
7440-47-3	Chromium	1.2			P
7440-48-4	Cobalt	0.10	B		P
7440-50-8	Copper	7.3			P
7439-89-6	Iron	366			P
7439-92-1	Lead	19.4			P
7439-95-4	Magnesium	19.8	B		P
7439-96-5	Manganese	3.7			P
7439-97-6	Mercury	0.05			AV
7440-02-0	Nickel	0.65	B		P
7440-09-7	Potassium	18.9	B		P
7782-49-2	Selenium	0.34	U		P
7440-22-4	Silver	0.12	U		P
7440-23-5	Sodium	140	B		P
7440-28-0	Thallium	0.35	U		P
7440-62-2	Vanadium	0.69	B		P
7440-66-6	Zinc	32.9			P
	Cyanide	0.15	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM
Color After: YELLOW Clarity After: CLOUDY Artifacts:

Comments:
CLIENT_ID=PEN-43SBDD03

APPENDIX G

DRUM CHARACTERIZATION SHEETS

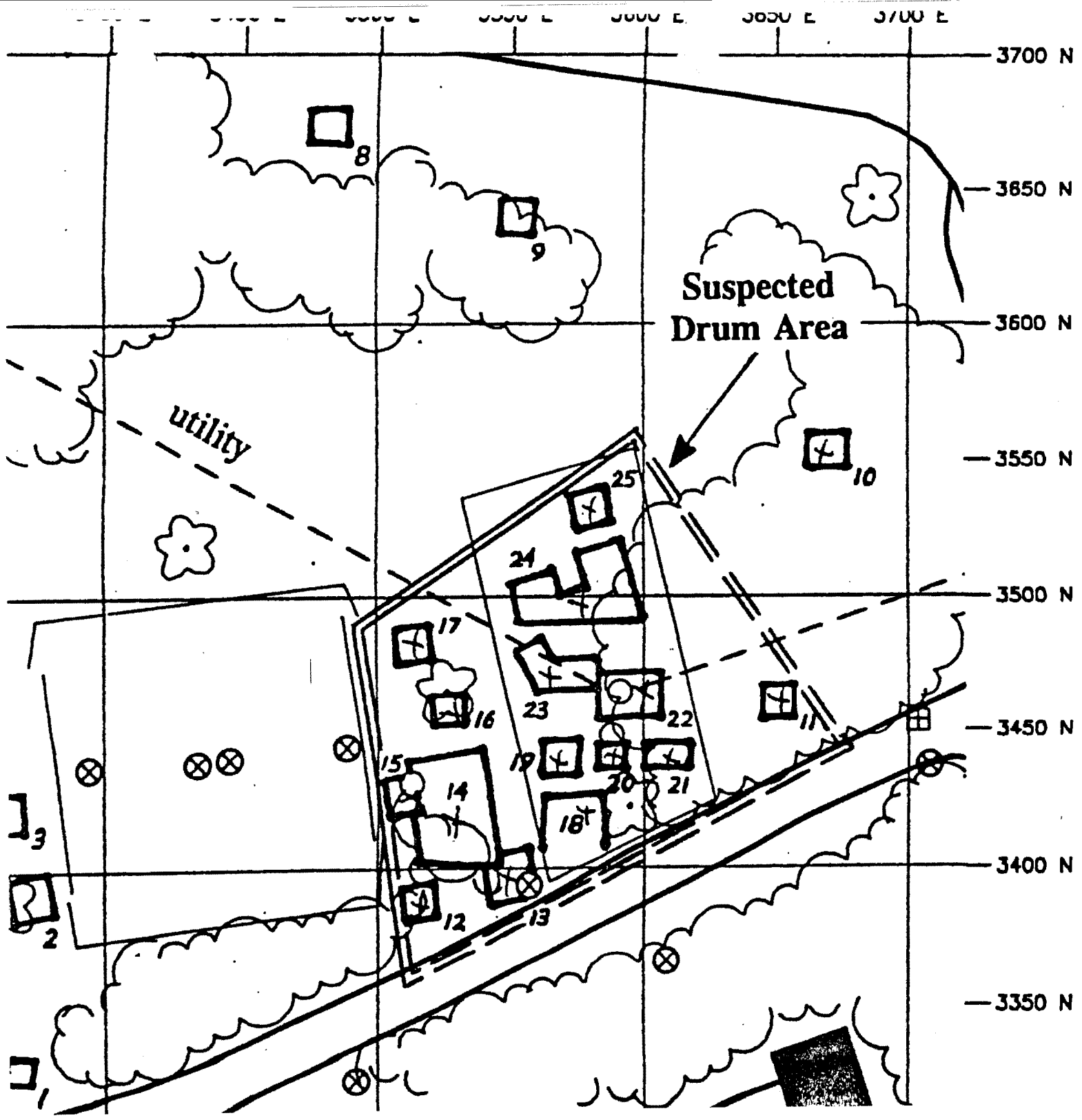


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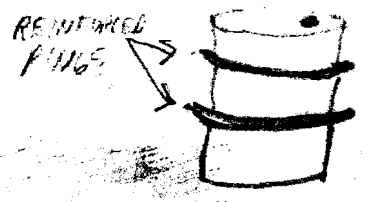
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: [illegible]	**Date:** [illegible]	**Project #:** [illegible]
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #** 1	**Field Crew/Role:** [illegible] UBELOS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify) OPEN HOLE [illegible]

Identifiable markings: PINE

Sketch drum/container position



Estimated Volume: <1 gal

General condition of the drum/container: INTACT

Can it be handled/moved and re-staged or over-packed? YES - OVERPACKED

Screening Data

Radioactivity 1 mR Background	_____ mR
PID 0 eV Lamp 0 ppm (background)	_____ ppm
FID ____ ppm (background)	_____ ppm
Combustibility NO	_____ %LEL _____ %O2
Draeger Multi-test NO	_____
Air Reactive NO	_____ Δ Temp
Water Reactive NO	_____ Δ Temp
Water solubility	_____ Yes _____ No _____ % Partial
Flammable NO	_____ Yes _____ No
pH NO	_____
Cyanide NO	_____ ppm (Draeger Tube over Water Bath)

Drum Contents (Indicate % if mixture of more than one media)

Solids Classification	Liquids Viscosity
Trash	Other

Drum Contents (Color)

Unknown	Red
Cream	Yellow
Clear	Amber
White	Brown
Gray	[illegible] LIKE
Orange	
Green	
Greenish Blue	<1 gal

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments: [illegible]

_____ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: [illegible]	**Date:** 10/6/00	**Project #:** N0189
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #** 2	**Field Crew/Role:** DE KUBELDIS

Drum Size	**Drum Type**	**Head Configuration**	**Identifiable markings:** NONE
Unknown	Steel ✓	Ring top (no bungs)	Sketch drum/container position
30 gallon	Aluminum	Ring top (bungs)	
55 gallon ✓	Plastic	Closed top	
80 Gallon	Glass	Unknown	
Other (Specify)	Metal/Other (Specify Type)	Other (Specify) [illegible]	

Estimated Volume:

General condition of the drum/container: INTACT

Can it be handled/moved and re-staged or over-packed? YES - OVERPACKED

Screening Data

Radioactivity -1 mR Background	-1 mR	**Drum Contents (Indicate % if mixture of more than one media):** Solids	Liquids
PID ____ eV Lamp 0 ppm (background)	30 ppm	Classification	Viscosity
FID ____ ppm (background)	____ ppm	Trash	Other
Combustibility	%LEL ____ %O2	**Drum Contents (Color):** Unknown	Red
Draeger Multi-test		Cream	Yellow
Air Reactive	Δ Temp	Clear	Amber
Water Reactive	Δ Temp	White	Purple
Water solubility	____ Yes ____ No ____ % Partial	Gray	Black
Flammable	____ Yes ____ No	Orange	Brown
pH		Green	Other:
Cyanide	____ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

✓ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

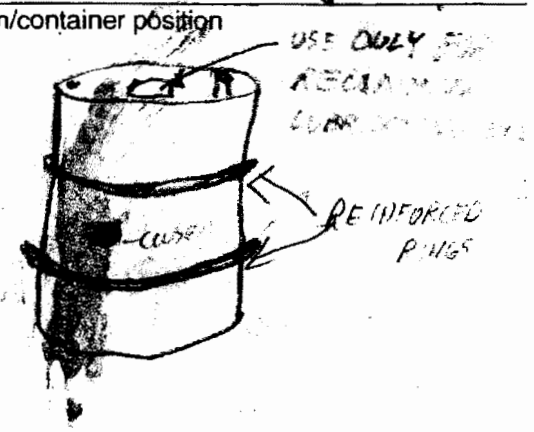
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: [illegible]	**Date:** [illegible]	**Project #:** NO [illegible]
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 30	**Drum #** 5	**Field Crew/Role:** DE RUBEIRIS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings: LABEL

Sketch drum/container position



Estimated Volume: 1/3 FULL

General condition of the drum/container: [illegible]

Can it be handled/moved and re-staged or over-packed? OVERPACKED

Screening Data		**Drum Contents (Indicate % if mixture of more tha one media)**	
Radioactivity 21 mR Background	21 mR	Solids Classification	Liquids ✓ Viscosity
PID ___ eV Lamp ___ ppm (background)	2 ppm	Trash	Other
FID ___ ppm (background)	___ ppm	**Drum Contents (Color)**	
Combustibility	%LEL ___ %O2	Unknown ✓	Red
Draeger Multi-test		Cream	Yellow
Air Reactive	Δ Temp	Clear	Amber
Water Reactive	Δ Temp	White	Purple
Water solubility	Yes ___ No ___ % Partial	Gray	Black
Flammable	Yes ___ No	Orange	Brown
pH		Green	Other:
Cyanide	___ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

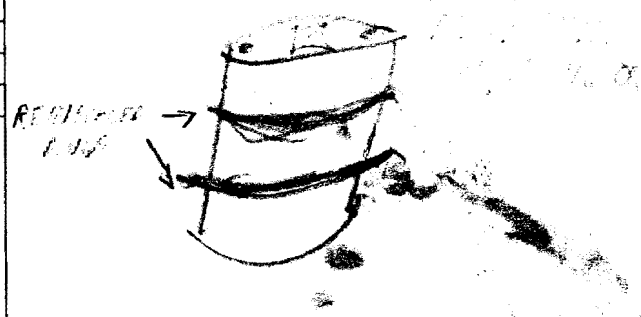
Comments: HEAVIER GAGE DRUM

___ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #**	**Field Crew/Role:** DE KUGELMAS

Drum Size	**Drum Type**	**Head Configuration**	**Identifiable markings:**
Unknown	Steel ✓	Ring top (no bungs)	Sketch drum/container position
30 gallon	Aluminum	Ring top (bungs)	
55 gallon	Plastic	Closed top	
80 Gallon	Glass	Unknown	
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)	



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? 5 OVERPACKED

Screening Data		**Drum Contents (Indicate % if mixture of more than one media)**	
Radioactivity _____mR Background	_____mR	Solids Classification	Liquids ✓ Viscosity
PID _____eV Lamp _____ ppm (background)	_____ppm	Trash	Other
FID____ ppm (background)	_____ppm	**Drum Contents (Color)**	
Combustibility	_____%LEL_____%O2	Unknown	Red
Draeger Multi-test	_____	Cream	Yellow
Air Reactive	_____Δ Temp	Clear	Amber
Water Reactive	_____Δ Temp	White	Purple
Water solubility	_____Yes _____ No _____ % Partial	Gray	Black
Flammable	_____Yes _____No	Orange	Brown
pH	_____	Green	Other:
Cyanide	_____ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

_____**See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

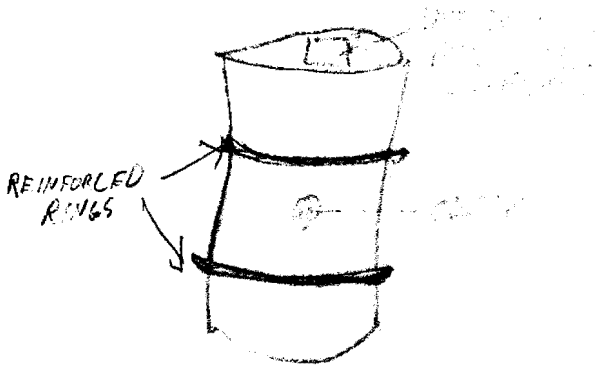
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #** 5	**Field Crew/Role:** D.E. KUBECKS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings:

Sketch drum/container position



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? OVERPACKED

Screening Data		**Drum Contents (Indicate % if mixture of more than one media)**	
Radioactivity ✓ mR Background	mR	Solids Classification	Liquids ✓ BASED ON Viscosity DRUM TYPE
PID eV Lamp ✓ ppm (background)	✓ ppm	Trash	Other
FID ppm (background)	ppm	**Drum Contents (Color)**	
Combustibility	%LEL %O2	Unknown ✓	Red
Draeger Multi-test		Cream	Yellow
Air Reactive	Δ Temp	Clear	Amber
Water Reactive	Δ Temp	White	Purple
Water solubility	Yes No % Partial	Gray	Black
Flammable	Yes No	Orange	Brown
pH		Green	Other:
Cyanide	ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

See Attached Safe Work Permit for Protective/Hazard Control Measures
✓ **See Attached Drum/Container Inventory**

Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #**	**Field Crew/Role:** DE KUBENIS

Drum Size	**Drum Type**	**Head Configuration**	**Identifiable markings:**
Unknown	Steel	Ring top (no bungs)	Sketch drum/container position
30 gallon	Aluminum	Ring top (bungs)	
55 gallon	Plastic	Closed top	
80 Gallon	Glass	Unknown	
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)	

Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? OVER PACKED

Screening Data		**Drum Contents (Indicate % if mixture of more tha one media)**	
Radioactivity 4 mR Background	<1 mR	Solids Classification	Liquids Viscosity
PID ___ eV Lamp 0 ppm (background)	0 ppm	Trash	Other
FID ___ ppm (background)	ppm	**Drum Contents (Color)**	
Combustibility	%LEL %O2	Unknown	Red
Draeger Multi-test		Cream	Yellow
Air Reactive	Δ Temp	Clear	Amber
Water Reactive	Δ Temp	White	Purple
Water solubility	Yes No % Partial	Gray	Black
Flammable	Yes No	Orange	Brown
pH		Green	Other:
Cyanide	ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

___ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

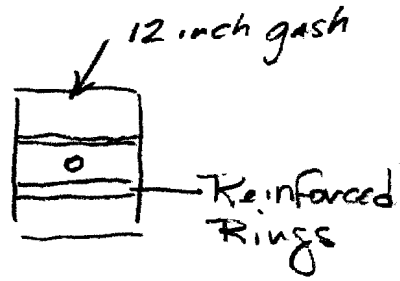
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: Site 43	**Date:** 10/07/99	**Project #:** N0189
Project Description: Buried Anomaly Investigation - Anomaly 20	**Drum #** 7	**Field Crew/Role:** T. Dickson / D. Kubeldis

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify) Center Bung

Identifiable markings: None

Sketch drum/container position



Estimated Volume: 50% Rainwater

Filled w/ Rainwater

General condition of the drum/container: Poor

Can it be handled/moved and re-staged or over-packed? Yes was Overpacked

Screening Data

Radioactivity 1 mR mR Background	NT mR		
PID ____ eV Lamp ____ ppm (background)	NT ppm		
FID ____ ppm (background)	____ ppm		
Combustibility NT	____ %LEL ____ %O2		
Draeger Multi-test NT	____		
Air Reactive NT	____ Δ Temp		
Water Reactive NT	____ Δ Temp		
Water solubility N/A	____ Yes ____ No ____ % Partial		
Flammable NT	____ Yes ____ No		
pH NT	____		
Cyanide NT	____ ppm (Draeger Tube over Water Bath)		

Drum Contents (Indicate % if mixture of more than one media)

Solids Classification	Liquids Rainwater Viscosity
Trash	Other

Drum Contents (Color)

Unknown	Red
Cream	Yellow
Clear ✓	Amber
White	Purple
Gray	Black
Orange	Brown
Green	Other:
Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways): Slightly stressed - Landfill - Limited top cover over Metal debris

Comments: Frogs were living in the drum

____ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

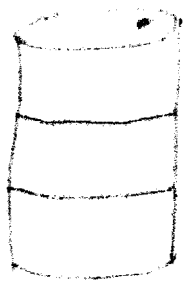
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 30	**Drum #**	**Field Crew/Role:** DB KUGELLS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings: NONE

Sketch drum/container position



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? YES – OVER PACKED

Screening Data		**Drum Contents (Indicate % if mixture of more than one media)**	
Radioactivity NT mR Background	NT mR	Solids Classification	Liquids Viscosity
PID NT eV Lamp ____ ppm (background)	NT ppm	Trash	Other
FID ____ ppm (background)	____ ppm	**Drum Contents (Color)**	
Combustibility	____%LEL ____%O2	Unknown	Red
Draeger Multi-test	____	Cream	Yellow
Air Reactive	____ Δ Temp	Clear	Amber
Water Reactive	____ Δ Temp	White	Purple
Water solubility	____Yes ____ No ____ % Partial	Gray	Black
Flammable	____Yes ____No	Orange	Brown
pH	____	Green	Other:
Cyanide	____ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

✓ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: Site 43	**Date:** 10/07/99	**Project #:** N 0189
Project Description: Buried anomaly Investigation - Anomaly 20	**Drum #** 9	**Field Crew/Role:** T. Dickson / D. Kubaldis

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top ✓ 101 Type
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings: None

Sketch drum/container position

Residual Oil Leak

Estimated Volume: 3-5 Gallons

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? Drum Over packed pending sampling & analysis ✓

Screening Data

Radioactivity <1 mR Background	NT mR	Solids Classification	Liquids Viscosity ✓
PID ____ eV Lamp ____ ppm (background)	NT ppm	Trash	Other
FID ____ ppm (background)	____ ppm	**Drum Contents (Color)**	
Combustibility	____ %LEL ____ %O2	Unknown	Red
Draeger Multi-test	____	Cream	Yellow
Air Reactive	____ Δ Temp	Clear	Amber
Water Reactive	____ Δ Temp	White	Purple
Water solubility	____ Yes ____ No ____ % Partial	Gray	Black
Flammable	____ Yes ____ No	Orange	Brown
pH	____	Green	Other: Blackish brown liquid leaking out bung opening
Cyanide	____ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Drum Contents (Indicate % if mixture of more than one media) Drum Not opened - Evaluation based on residue

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments: Other drums found in the area were labeled Reclamation lubrication oil

____ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

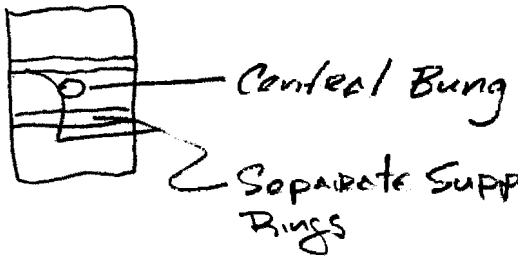
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: Site 43; CTO 0096	**Date:** 10/07/99	**Project #:** N0189
Project Description: Buried Anomaly Investigation - Anomaly 20	**Drum #** 10	**Field Crew/Role:** T. Dickson / D. Kubeldis Drum Characterization

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify) Central Bung

Identifiable markings: Tag - Use only for Reclaiming Lubricating Oil

Sketch drum/container position



Estimated Volume: Potentially 1/4 to 1/3 Full - Based on weight

General condition of the drum/container: Fair to poor

Can it be handled/moved and re-staged or over-packed? Yes - Overpacked pending Sampling & Analysis

Screening Data

Radioactivity	<1 mR Background	NT mR	
PID	eV Lamp ppm (background)	NT ppm	
FID	ppm (background)	ppm	
Combustibility	NT	%LEL %O2	
Draeger Multi-test	NT		
Air Reactive	NT	Δ Temp	
Water Reactive	NT	Δ Temp	
Water solubility	NT	Yes No % Partial	
Flammable	NT	Yes No	
pH	NT		
Cyanide	NT	ppm (Draeger Tube over Water Bath)	

Drum Contents (Indicate % if mixture of more than one media)

Solids Classification		Liquids Viscosity	✓ Based on drum type
Trash		Other	However no sloshing detected - possible sediment
Drum Contents (Color)			
Unknown		Red	
Cream		Yellow	
Clear		Amber	
White		Purple	
Gray		Black	
Orange		Brown	
Green		Other:	
Greenish Blue			

Area surrounding drums/containers (stressed vegetation, distribution pathways): Areas surrounding drum burial area was also the site of extensive metallic debris burial activity, possibly accounting for reduced grow

Comments:

✓ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

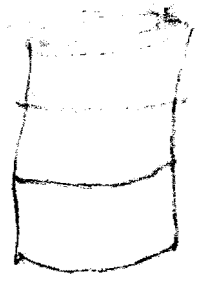
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #**	**Field Crew/Role:** PE SURVEYS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon ✓	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings:

Sketch drum/container position



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? (Y) - OVERPACKED

Screening Data

Radioactivity NT mR Background	NT mR
PID ____ eV Lamp NT ppm (background)	NT ppm
FID ____ ppm (background)	____ ppm
Combustibility	____ %LEL ____ %O2
Draeger Multi-test	____
Air Reactive	____ Δ Temp
Water Reactive	____ Δ Temp
Water solubility	____ Yes ____ No ____ % Partial
Flammable	____ Yes ____ No
pH	____
Cyanide	____ ppm (Draeger Tube over Water Bath)

Drum Contents (Indicate % if mixture of more than one media)

Solids Classification	Liquids Viscosity
Trash	Other

Drum Contents (Color)

Unknown	Red
Cream	Yellow
Clear	Amber
White	Purple
Gray	Black
Orange	Brown
Green	Other:
Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

____ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

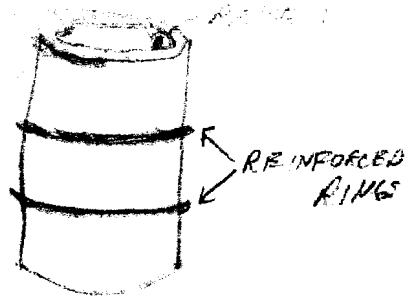
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #** 12	**Field Crew/Role:** DE KUBELUS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings: NONE

Sketch drum/container position



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? YES - OVERPACKED

Screening Data		**Drum Contents (Indicate % if mixture of more than one media)**	
Radioactivity NT mR Background	NT mR	Solids Classification	Liquids Viscosity
PID NT eV Lamp NT ppm (background)	NT ppm	Trash	Other
FID ___ ppm (background)	___ ppm	**Drum Contents (Color)**	
Combustibility	___ %LEL ___ %O2	Unknown	Red
Draeger Multi-test		Cream	Yellow
Air Reactive	___ Δ Temp	Clear	Amber
Water Reactive	___ Δ Temp	White	Purple
Water solubility	___ Yes ___ No ___ % Partial	Gray	Black
Flammable	___ Yes ___ No	Orange	Brown
pH		Green	Other:
Cyanide	___ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

✓ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
___ **See Attached Drum/Container Inventory**

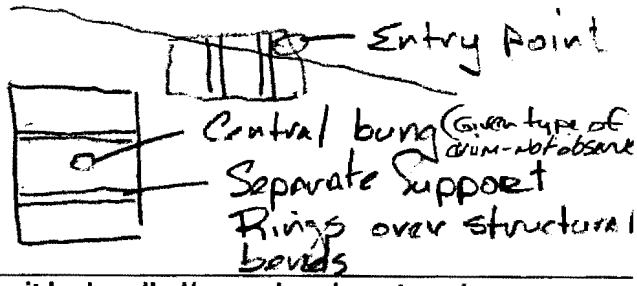
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name: Site 43; CTO 0096	**Date:** 10/07/99	**Project #:** N 0181
Project Description: Buried Anomaly Investigation - Anomaly 15	**Drum #** 13	**Field Crew/Role:** T. Dickson / D. Kubeldis

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel ✓	Ring top (no bungs)
30 gallon ✓	Aluminum	Ring top (bungs)
55 gallon	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify) Approximate 30-35gal.	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings:

Sketch drum/container position



Estimated Volume: Crushed - Full of dirt & Cock Roaches

General condition of the drum/container: POOR - Crushed, Several points of Entry

Can it be handled/moved and re-staged or over-packed? Overpacked - Pending Sampling & Analysis

Screening Data

Radioactivity <1 mR Background	<1 mR	
PID 10.6 eV Lamp 3.3 ppm (background)	14.6 ppm	
FID ___ ppm (background) NT	___ ppm	
Combustibility NT	%LEL ___ %O2	
Draeger Multi-test NT	___	
Air Reactive NT	___ Δ Temp	
Water Reactive NT	___ Δ Temp	
Water solubility NT	___ Yes ___ No ___ % Partial	
Flammable NT	___ Yes ___ No	
pH NT	___	
Cyanide NT	___ ppm (Draeger Tube over Water Bath)	

Drum Contents (Indicate % if mixture of more than one media)

Solids	Liquids
Classification Soils/Sediment	Viscosity
Trash Brown humic material	Other

Drum Contents (Color)

Unknown	Red
Cream	Yellow
Clear	Amber
White	Purple
Gray	Black
Orange	Brown
Green	Other:
Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways): Grassy Area - Area Well maintained - No Stressed appearance

Comments: Heavy cock roach population

___ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

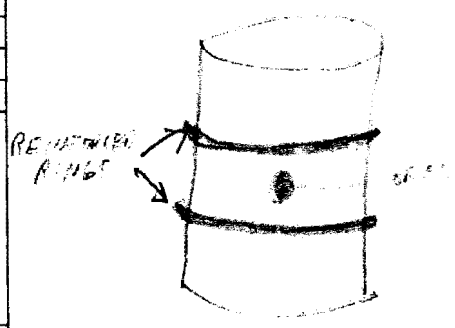
Figure 1
DRUM/CONTAINER CHARACTERIZATION SHEET

Site Name:	**Date:**	**Project #:**
Project Description: BURIED ANOMALY INVESTIGATION ANOMALY 20	**Drum #**	**Field Crew/Role:** DE RUBELLIS

Drum Size	**Drum Type**	**Head Configuration**
Unknown	Steel	Ring top (no bungs)
30 gallon	Aluminum	Ring top (bungs)
55 gallon	Plastic	Closed top
80 Gallon	Glass	Unknown
Other (Specify)	Metal/Other (Specify Type)	Other (Specify)

Identifiable markings:

Sketch drum/container position



Estimated Volume:

General condition of the drum/container: FAIR

Can it be handled/moved and re-staged or over-packed? OVERPACKED

Screening Data		**Drum Contents (Indicate % if mixture of more than one media)**	
Radioactivity ___ mR Background	___ mR	Solids Classification	Liquids Viscosity
PID ___ eV Lamp ___ ppm (background)	___ ppm	Trash	Other
FID ___ ppm (background)	___ ppm	**Drum Contents (Color)**	
Combustibility	___ %LEL ___ %O2	Unknown	Red
Draeger Multi-test	___	Cream	Yellow
Air Reactive	___ Δ Temp	Clear	Amber
Water Reactive	___ Δ Temp	White	Purple
Water solubility	___ Yes ___ No ___ % Partial	Gray	Black
Flammable	___ Yes ___ No	Orange	Brown
pH	___	Green	Other:
Cyanide	___ ppm (Draeger Tube over Water Bath)	Greenish Blue	

Area surrounding drums/containers (stressed vegetation, distribution pathways):

Comments:

✓ **See Attached Safe Work Permit for Protective/Hazard Control Measures**
✓ **See Attached Drum/Container Inventory**

Figure 2
DRUM INVENTORY LOG

Drum Number #	Drum/Container Type	Media (Contents)	Estimated Volume	Date - Contents Characterized Sampled	Recommended Sample Analyses	Comments
1	55 GAL	<1G THICK LIQUID	<1 GAL	10/6/99		
2		—	EMPTY	10/6/99		
3		LIQUID BASED DRUM TYPE.	1/3 FULL (18 GAL)	10/6/99		
4		LIQUID BASED ON DRUM TYPE	1/3 FULL (18 GAL)	10/6/99		
5		LIQUID BASED ON DRUM TYPE	1/3 FULL (18 GAL)	10/6/99		
6		—	EMPTY (?)	10/6/99		
7		RAINWATER (?)	1/2 FULL	10/7/99		
8		—	EMPTY (?)	10/7/99		
9		LIQUID BLACK BROWN LEACHING ATS MALLOW DRUM TYPE	3-5 GAL	10/7/99		
10		liquid based on drum type, however no sloshing detected so possibly sed	1/4 - 1/3 FULL	10/7/99		
11			EMPTY (?)	10/7/99		
12			EMPTY (?)	10/7/99		
13	30 GAL	SOLIDS/SOILS	FULL	10/7/99		
14		rusty water	<1	10/7/99		
5 DRUMS IN DETERIORATED & EMPTY CONDITION WERE CRUSHED & OVERPACKED						

APPENDIX H

EXCAVATION PHOTOGRAPHS